Tackling Telehealth: Improving Quality and Access by Integrating Virtual Care in Urology

Proceedings of the 2023 Quality Improvement Summit

American Urological Association

Background and Context

Telehealth, an array of methods of healthcare delivery in which the patient and healthcare provider engage via a virtual platform, became an integral and necessary component of most urologic practices during the COVID-19 pandemic. Telehealth comprises both synchronous and asynchronous forms of interaction, including video visits, interprofessional consultations, e-Visits, and remote monitoring.[1] Telemedicine refers specifically to remote clinical services whereas telehealth refers to a broader scope of remote healthcare services.[2] The rapid transition to telehealth at the start of the pandemic offered urologists an opportunity to provide care to their patients while maintaining social distancing and avoiding unnecessary exposures. Comparing data from the 2019 and 2020 American Urological Association (AUA) Annual Census, the percent of United States urologists utilizing telehealth in their practice rose dramatically from 11.9% to 71.5%.[3]

The COVID-19 pandemic facilitated telehealth's critical role, as numerous studies have shown benefits for both patients and providers, including improved efficiency, decreased costs, increased flexibility, and significant satisfaction for both groups.[4-6] Furthermore, telehealth addresses a critical national access issue by providing urologic care to patients from the more than 60% of U.S. counties that lack a urologist.[7]

Despite high levels of both patient and provider satisfaction with telehealth, numerous barriers and challenges to continued and widespread adoption exist, including concerns over data protection and security.[8-10] In addition, urologists and investigators have often cited challenges with proper training and technological infrastructure to successfully and efficiently engage in telehealth panels and integrate into their practices.[10-12] Furthermore, various studies report urologists' concerns about lower efficiency of telehealth visits in comparison to face-to-face visits.[12] Numerous studies also have reported barriers to broader patient acceptance and utilization of telehealth, including older age, limited access to technological devices, and limited technological comprehension.[13,14] Lastly, waivers that have extended the use and reimbursement for telehealth visits under the public health emergency (PHE) are potentially set to end December 31, 2024, although advocacy efforts on the part of the AUA and others to expand and continue coverage are ongoing.

The aim of AUA's Quality Improvement (QI) Summit, *Tackling Telehealth: Improving Quality and Access by Integrating Virtual Care in Urology*, was to provide attendees with tools, evidence, and guidance to safely and effectively integrate or expand telehealth into their practice, with the ultimate goal of improving access and quality of care for all urologic patients. Co-chaired by Dr. Jennifer Robles and Dr. Kara Watts, the summit brought together clinicians from various urological subspecialties, researchers, and policy experts. The QI Summit was held at AUA headquarters in Linthicum, Maryland on December 2, 2023.

Conference Proceedings

The QI Summit addressed four crucial topics, including *practical implementation* of telehealth, telehealth *policy*, *medico-legal considerations* in telehealth, and *coding and reimbursement* in telehealth.

Practical Implementation of Telehealth

How to Effectively Incorporate Telehealth into Your Practice

Helen Bernie, DO, MPH, Julia Finkelstein, MD, MPH, Adam Gadzinski, MD, MS, Jonathan Rubenstein, MD, Aaron Spitz, MD, Jennifer Robles, MD, MPH (Moderator), Kara Watts, MD (Moderator)

Conditions Appropriate for Virtual vs. In-person Appointments

Panel members discussed conditions within their respective subspecialties suitable for virtual and in-person visits. The AUA recommends adhering to institutional protocols concerning suitable candidates for telemedicine. If there is doubt whether the patient is an appropriate candidate for telemedicine, the overall recommendation is to schedule the patient for an in-person visit. In addition, providers should ensure patients and caregivers are aware of the necessity to seek in-person clinician assistance during emergencies.

Condition	Virtual	In-person
Erectile Dysfunction	• New patient or follow-up • Pre-operative (pre-op) visit • Penile rehab • Lab reviews • Device training • Intracavernosal injections re-teaching • Counseling • Education • Referrals	• Intracavernosal injections training • Penile duplex doppler ultrasound • Inflatable penile prosthesis
Peyronie's Disease	• Follow-up • History of present illness • Review treatment options • Pre-op visit	• New patient visit (need exam/curvature assessment for treatment) • Physical exam to palpate plaque • Curvature assessment for treatment • Collagenase clostridium histolyticum injections
Hypogonadism	• New patient or follow-up • Review labs • Annual follow-ups	• New patient visit, especially if the patient also has fertility issues (for the physical exam)
Ejaculatory Dysfunctions	• Delayed ejaculation -New patient or follow-up -Work up or treatment • Premature ejaculation -New patient or follow-up -Work up or treatment • Hematospermia	• New patient visit • Cystoscopy • Transrectal ultrasound (TRUS) • Imaging
Infertility	• Follow-up • Review labs • Review semen analysis • Check-in • Discuss next steps • Post operative (post-op) varicoceles patients	• New patient (need genitourinary exam) • Follow-up • Vasectomy consultation • Post-op if vasovasotomy (VV), vasectomy reversal, or Microdissection Testicular Sperm Extraction (mTESE) patient • TRUS to evaluate ejaculatory duct obstruction • Post vasectomy semen analysis drop off
Orchialgia	• Follow-up • Post-op • Refer to pelvic floor physical therapy	• New patient (need genitourinary exam) • Follow-up • Cord block • Imaging
Pediatric	• Prenatal consultations • Kidney stone management • Voiding dysfunction management	• Any patient with testicular chief complaints (undescended, missing/vanishing, retractile testes) • Any patient with penile chief complaints
Oncology	• Review pathology results (let patient choose in-person or virtual) • Review prostate cancer screening results • Post-op nephrectomy, partial nephrectomy, prostatectomy if no issues at discharge	• Review pathology results (let patient choose in-person or virtual) • Intrauterine catheter (IUC) removal • Post-op cystectomy (need labs, imaging, exams)

Barriers and Challenges of Effectively Implementing Telemedicine

Telemedicine presents several barriers and challenges for both patients and healthcare providers.

Barriers and Challenges of Effectively Implementing Telemedicine	
• Addressing issues such as patients logging in to virtual appointments **late** or **patients not showing up** to appointments is essential; staff should contact the patient the day of the missed appointment to reschedule. Removing no-shows from the calendar prevents the provider from being penalized for incomplete notes. • The **absence of necessary lab or imaging results** for virtual visits requires proactive measures, such as reviewing patient charts and contacting the patient in advance of the appointment to obtain results. • **Limitations** in conducting **non-tactile genitourinary exams** emphasize the need for scheduling in-person visits when physical examinations are necessary. • For patients requiring an **interpreter**, arranging an in-person visit ensures a secure connection and allows for a better assessment of understanding between the patient, caregiver, and interpreter. • Addressing **gaps in formal clinical telemedicine training** for the entire care team is crucial to ensuring effective telehealth appointments.	• Establishing a meaningful rapport with patients virtually can be difficult; however, initiating casual conversation before delving into sensitive health matters can help. Effective virtual communication skills, known as **"webside" manner**, are crucial for building patient relationships from a distance, as highlighted by the Institute for Healthcare Improvement's (IHI) resource, Good "Webside" Manner: Recommendations for Effective Virtual Care. • For **pediatric patients**, especially, **sensitive examinations** are vital in urological assessments, requiring reassurance and communication strategies to mitigate discomfort and ensure cooperation during examinations. "This is OK because I am a doctor, and your parents are here." • Patients and families may face obstacles related to **technology availability**, **unreliable internet coverage**, and **low digital literacy**, affecting their access to telemedicine services. Patients experiencing connectivity issues or lacking internet proficiency can be reached via phone call.

Benefits of Telemedicine

The benefits of telemedicine include convenience for patients and families, as they do not have to travel, miss work, or wait in waiting rooms, which is particularly helpful for those with mobility issues, transportation constraints, or compromised immune systems. In addition, telemedicine provides convenience for healthcare providers.

Helpful Tips for a Successful Telehealth Program

The following suggestions are beneficial for establishing and sustaining a successful telemedicine program:

Helpful Tips for a Successful Telehealth Program	
• Implementing telemedicine effectively requires careful planning and organization. **Scheduling telemedicine appointments in dedicated blocks** separate from in-person visits, either at the beginning or end of the day, ensures efficient workflow. **Staggering more complex visits** and **selectively offering virtual visits** can optimize clinic time. • **Developing templates** and **dot phrases** for virtual visits and utilizing **virtual scribes** streamlines the documentation and billing processes. • **Setting clear boundaries** and informing patients about **privacy considerations** are essential to ensuring confidentiality and security. • **Managing telemedicine clinic flow upfront** enhances practice efficiency. • Regularly **reviewing and updating practice policies and procedures** provides guidance regarding scheduling, documentation, and patient consent requirements.	• If responding to **patient portal messages** will be time-consuming, scheduling virtual visits may be more effective. • Utilizing user-friendly telemedicine platforms like **Doximity** simplifies the process of contacting patients. • Understanding and adhering to telehealth **regulations, licensure requirements, reimbursement policies**, and **privacy laws** are imperative. • **Training staff** on telehealth platform usage and ensuring comfort with technology and patient confidentiality is essential. • Providing patients with **clear instructions** for preparing for telehealth appointments, including technology requirements and creating a quiet, private space, enhances the telehealth experience. • Regular **assessment of telehealth program** effectiveness through data collection on patient experience, appointment outcomes, and challenges faced facilitates ongoing improvement.

Lessons Learned from Telehealth Adoption in the National VHA Healthcare System

Jeremy Shelton, MD

Telehealth Adoption in the VHA

The Veterans Health Administration (VHA or VA) has been involved in telehealth practices for more than two decades, implementing its "Home Telehealth" remote monitoring program in 2003. Since 2003, the VA has made strategic investments to expand and consolidate its telehealth services. The VA MISSION Act of 2018 drove the adoption of virtual care within the VA prior to the PHE. This legislation enables eligible veterans to access healthcare services through non-VA providers, introducing competition for VA patients. Veterans are eligible to seek care from non-VA providers if they reside a certain distance away from VA facilities or face extended wait times for appointments. Following the COVID-19 pandemic, the VA experienced a 15x increase in telehealth usage, with approximately 30% of veterans receiving some of their care through telehealth in their homes over the past two fiscal years.

Several barriers hinder the implementation of virtual surgical care within the VA system, including bureaucratic challenges, a lack of individual profit motives for innovation, historical models of part-time VA surgical workforce, understaffing of surgical clinics, difficulties integrating virtual and in-person clinics, incorporating technology into the electronic health record (EHR), and financial silos at regional and national levels.

Routine Use of Telehealth in the Clinic

In 2013, the Greater Los Angeles VA initiated a urology telehealth clinic comprising of one medical doctor (MD) and one nurse practitioner (NP). Most visits were conducted via a video from a urology clinic at a VA medical center to a remote primary care clinic. Between 2013 and 2018, data showed that:

- 36% of patients were managed by telehealth alone.
- 64% of patients were managed by a combination of telehealth and face-to-face care.
- The top five conditions treated were sexual dysfunction, lower urinary tract symptoms (LUTS), hematuria, prostate cancer, and elevated prostate-specific antigen (PSA).
- The clinic showed complete virtual management for patients with elevated PSA, microscopic hematuria, and LUTS.[15]

Clinical Resource Hubs

Established in 2018, Clinical Resource Hubs (CRHs) are programs owned and governed by VISNs (Veterans Integrated Services Network). These CRHs aim to enhance access to VA clinical services for veterans in instances where local facilities encounter gaps in care or service capabilities. They were developed to facilitate regional and national resource sharing among localities. Initially focusing on mental health and primary care, each VISN was given the option to include surgical and specialty care CRHs in 2020. Presently, five out of eighteen VISNs have surgical CRHs, while three out of eighteen have urology CRHs.

A variety of virtual care methods are utilized in CRHs, including video consultations conducted at home, telephone appointments, and some video consultations conducted at primary care clinics. Additionally, home-based uroflowmetry and semen analysis are offered as part of virtual care services. Diagnostic procedures and treatments are provided through both VA facilities and community healthcare providers. For major procedures, patients may need to travel to Veterans Affairs Medical Centers (VAMCs). An Office of Rural Health grant has been allocated to expand coverage and improve processes, facilitating providers' travel to remote sites every other month for office procedures and outpatient surgeries.

CRHs offer various benefits aimed at enhancing access to care; they:

- Serve as an additional clinical resource, which is particularly beneficial for non-surgical care and some procedural care.
- Offer coverage of gaps in services due to staff turnover or delays in hiring, which ensures continuity of patient care within the VA system.

- Provide longer-term touchpoints for VA clinicians to engage with patients receiving care in the community.
- Contribute to improved patient satisfaction, especially for those facing long travel times.
- Facilitate initial patient triage visits and increase the utilization of Community-Based Outpatient Clinics for specialty care.
- Enable second opinions or co-management of patients with community providers.

Telehealth & Expanding Access to Rural Urologic Care

Adam Gadzinski, MD, MS

The AUA's 2022 State of Workforce report highlights concerning trends in access to urologic care. It reveals that 62% of counties (primarily rural) lack urologists, affecting approximately 40-50 million individuals, or 14-15% of the U.S. population. Only 10% of urologists practice in rural settings. [16] Compounding this issue, technology disparities persist, with 22% of rural areas lacking broadband internet access [17] and 23% and 15% of U.S. adults lacking broadband at home and smartphones, respectively. [18]

Despite these challenges, innovative programs such as tele-stroke initiatives have demonstrated success in enhancing stroke outcomes in rural areas. [19] In urology, novel approaches like tele-cystoscopy, [20] telesurgery including robotic nephrectomy and cystectomy, [21] and tele-mentoring/tele-proctoring during robotic surgery[22] have emerged.

Addressing these disparities in rural communities requires creative solutions, such as incentivizing urologists to offer dedicated video visit slots for rural and underserved patients, utilizing advanced practice providers (APPs) and NPs to bridge the gap in rural areas, and encouraging urologists to conduct procedures and surgeries in rural regions while conducting post-operative appointments virtually, when suitable.

Telehealth and Trainees

Juan Andino, MD, MBA

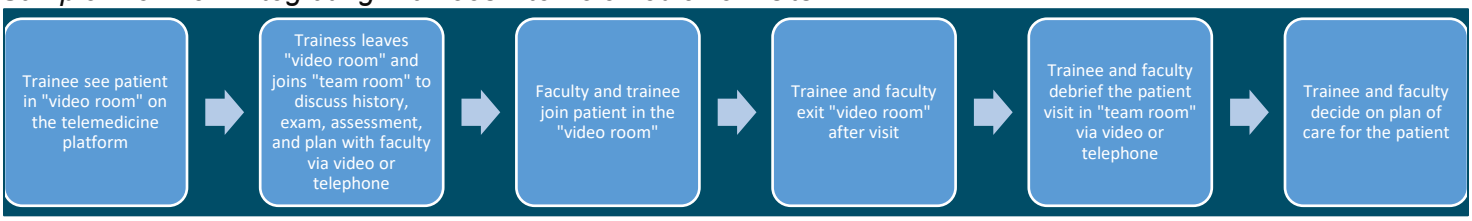
Challenges in Incorporating Trainees into Telemedicine Visits

Incorporating trainees into telemedicine visits presents challenges, including poor internet connectivity for students. Solutions include using medical school facilities with reliable internet and ensuring access to necessary computer software. Balancing trainee involvement across different settings requires strategic planning, such as introducing rotations with urologists experienced in telehealth. It is crucial for the trainee to have the correct computer and software; therefore, discussing specific software requirements with a larger stakeholder group, including doctors, trainees, telemedicine teams, and information technology (IT) teams, is vital for appropriate planning and implementation.

Workflow to Integrate Trainees into the Telemedicine Process

Developing a workflow that seamlessly integrates trainees into telemedicine processes requires careful planning and consideration of various factors. It is essential to provide multiple options for debriefing, such as video and phone calls, to facilitate effective communication between faculty and trainees. Furthermore, the telehealth process should mirror in-person visits. Implementation should be viewed as an iterative process, with a focus on identifying frustration points and addressing issues through continuous improvement. Leveraging the experience of clinical champions and disseminating best practices can enhance the effectiveness of the workflow. Additionally, establishing institutional pathways and workflows for determining who is seen in-person versus via telehealth is crucial, with leadership involvement being key in this process.

Sample Workflow Integrating Trainees into Telemedicine Visits



Virtual Direct Supervision

Virtual direct supervision, extended by the Centers for Medicare and Medicaid Services (CMS) through December 31, 2024, presents both opportunities and challenges for healthcare systems. While it allows health systems to obtain reimbursement for tasks such as reviewing medical decision-making prior to discharge from the emergency department or within 24 hours of inpatient consultation, certain drawbacks exist. Communication must occur via video, as audio-only options are not compliant with Health Insurance Portability and Accountability Act (HIPAA) regulations; however, platforms like Doximity offer suitable solutions. Moreover, adopting virtual supervision requires a shift from traditional practices, which is often challenging.

However, virtual direct supervision offers numerous benefits, including the ability to receive reimbursement for work already being performed and aiding programs covering multiple sites, enabling supervision regardless of physical location.

To encourage uptake of virtual direct supervision, strategies such as using reimbursement funds to support resident activities like conferences, wellness initiatives, and research endeavors can be used. Providing incentives like iPads, laptops, or textbooks for residents and recognizing faculty efforts with rewards for academic development, research, or administrative assistance can further promote engagement with virtual supervision practices.

Telehealth Surgical Training

Barriers to surgical training via telehealth include the limited availability of realistic simulation models or cadavers and the limited availability of expert proctors and trainees due to their demanding schedules. However, innovative teaching methods are emerging to address these obstacles. **Hydrogel simulation models** offer a promising solution by replicating various tissue consistencies, such as those found in prostate or peri-prostate tissue, through injections of different hydrogel levels. These models are utilized for procedures like transurethral resection of bladder tumor (TURBT), inflatable penile prosthesis (IPP), artificial urinary sphincter (AUS), and percutaneous nephrolithotomy (PCNL), with notable application at institutions like the Johns Hopkins Brady Urological Institute.

Additionally, **smart glasses and mixed reality technologies** enable remote proctoring, allowing mentors to guide trainees from any location. With the ability to provide visual cues and haptic feedback, these advancements overcome barriers of distance and resource limitations, enhancing the effectiveness of surgical training through telehealth platforms.

Innovative Telehealth Practices Beyond Urology

Lisa Finkelstein, DO

Innovative telehealth practices are revolutionizing healthcare delivery, offering advanced solutions for remote patient care. **Remote patient monitoring** utilizes digital medical devices, enabling providers to monitor patients' health conditions virtually. **Digital stethoscopes** record echocardiograms and sounds, facilitating data upload to patient charts and collaboration with other clinicians. **Remote bladder monitoring** provides urologists with data on voiding metrics and symptoms, either through Bluetooth-enabled devices or data retrieval upon device return. Virtual otoscopes enable providers to examine the inner ear remotely. **Wearable devices** enable remote vital sign monitoring. The **virtualist model** connects specialists with rural clinics or

emergency rooms, offering medical expertise remotely. **Portable handheld ultrasounds** extend diagnostic capabilities beyond traditional settings. **Tele-emergency medical services** allow for patient assessment en route to the hospital, improving preparedness for incoming cases. **Direct-to-consumer** urology services increase accessibility to specialist care. **Ambient dictation** solutions powered by artificial intelligence (AI) streamline documentation, coding, and integration with EHRs. **Virtual, augmented, and mixed reality** technologies enhance patient education, operating room guidance, and medical training. **Workstations on wheels and tele-operated robots** enable remote supervision of medical students, fostering learning opportunities irrespective of location. These innovative practices are transforming healthcare delivery and making quality care more accessible.

Telehealth Policy

Telehealth Policy: History and Current Controversies

Chad Ellimoottil, MD, MS

History and Future of Telehealth Policy

Before March 2020, telehealth was utilized by less than 1% of patients and healthcare providers in the U.S. However, with the onset of the COVID-19 PHE, telehealth coverage underwent significant expansion, with concomitant expansion in telehealth use. Although the PHE has ended, the majority of major coverage flexibilities have been extended until December 31, 2024. The AUA continues to advocate for permanent telehealth flexibilities.

Policy Issue	Before PHE	During PHE	After December 31, 2024
Originating site/geographic restrictions	Patients were required to be in pre-specified sites (e.g., certain medical facilities or within a rural area) to participate in telehealth	Patients were allowed to connect from home	Return to before PHE
Audio-only coverage (phone call as a substitute for an office visit, not a way to bill patients for quick follow ups)	Medicare did not cover phone calls with patients (audio-only telehealth), some commercial payers did	Phone calls were universally covered for practical reasons	Audio-only telehealth will not be covered by Medicare
Payment parity (insurers pay for telehealth and in-person services at equal rates)	Some insurers paid the same for telehealth as in-person visits, Medicare paid the facility-based rate (lower) instead of the non-facility rate (higher) for telehealth visits	Most insurers recognized payment parity	Unclear
In-person requirements for mental health/controlled substances	No in-person requirements for mental health. In-person requirement for prescribing controlled substances	No in-person requirements for mental health or prescribing controlled substances	In-person requirement returns for Medicare
Interstate telehealth	Medical licensure rules require patients to be in a state where the clinician is licensed	All 50 states and the District of Columbia (DC) relaxed licensure rules to allow interstate telehealth	Nearly all states have brought licensure rules back (since about October 2020)

Impact of Telehealth Services on Access, Quality, and Cost

The Medicare Payment Advisory Commission's (MedPAC) report on Telehealth in Medicare covered the relationship between expanded telehealth coverage and access, quality, and cost during the PHE.[23]

Access	Quality	Cost
• Telehealth enhances access to expert consultations, clinical trials, and providers; often available 24/7. • Telehealth reduces or eliminates travel requirements and enhances patient choice. • The demographics of telehealth users vs. non-users are comparable, except for differences in age, rural residence, and dual-eligible status. • Factors such as older age, African American race, the need for interpreters, Medicaid coverage, and low broadband access influence video visit utilization.[24] • Interstate telehealth is crucial for those near state borders, notably benefiting rural areas. • Telehealth, particularly in behavioral health, addresses access gaps in counties with specialist shortages.[25] • Further research is necessary to assess the impact of telehealth on specific clinical outcomes and its effect on areas with provider shortages. Further research should distinguish between the expansion of care access through telehealth and the replacement of in-person care with telehealth—will individuals who were previously not seeking care initiate treatment?	• Telehealth does not compromise quality of care for patients. • The association between telehealth and quality depends on the condition, modality of telehealth delivery, and the quality measure used to measure performance. • Across a variety of conditions, telehealth produced similar clinical outcomes as compared with in-person care; differences in clinical outcomes, when seen, were generally small and not clinically meaningful when comparing in-person with telehealth care.[26] • Further research is needed on appropriate claims-based measures of quality.	• The expansion of telehealth has not resulted in excessive healthcare spending or utilization. • Patients experience savings in travel, parking, and opportunity costs, as evidenced by multiple studies. • A very low percentage of healthcare providers exhibit patterns of fraud and abuse, estimated at 0.2%.[27] • Telehealth contributes an average increase of $165 per beneficiary in total healthcare spending over six months, roughly 2%. • Further research is needed to determine the best cost measures for telehealth, considering factors such as total cost and related expenses.

Telehealth Policy: Current Landscape & Challenges Q&A

Maureen Cones, Esq, Lisa Finkelstein, DO, Eugene Rhee, MD, MBA, Raymond L. Wezik, JD, Chad Ellimoottil, MD, MS (Moderator)

Top Issues Urologists are Facing in Relation to Telehealth Policy

Coverage, Payment, and Reimbursement	It is unclear if insurers are going to continue to pay for telehealth and in-person services at equal rates (payment parity); if telehealth services are not going to be paid for, providers will likely not offer those services
Digital Divide and Health Inequities/ Disparities	Concern that telemedicine exacerbates the digital divide, further contributing to health inequities and disparities
Technology and AI	Telemedicine technology and the use of AI in telemedicine raises concerns about patient privacy, data security, and compliance with regulations; AI is already under-regulated
Gaps in Data	Data can help demonstrate to lawmakers that telehealth increases access and does not dramatically increase cost; those practicing telehealth should be intentional about collecting and publishing data on various aspects of telehealth
Workforce Issues	Workforce issues and provider retention are going to continue to be a challenge. Urologists should be incentivized to provide telemedicine to patients in rural areas. Direct-to-consumer groups (e.g. Hims or Roman) can help to manage certain patients (e.g. patients with erectile dysfunction) amidst a urologist shortage.

Misunderstanding, Fear, and Apathy	There is *misunderstanding* about how telehealth is being utilized by the agencies regulating telemedicine; due to the misunderstanding, there is *fear* around the utilization of telehealth; there is *apathy* due to the uncertainty about the future of telehealth, which is a barrier to telehealth adoption

Proposed Bills Related to Telehealth

- The Reforming Broadband Connectivity Act of 2023 has been introduced to the Senate and referred to the Committee on Commerce, Science, and Transportation in an attempt to expand rural access to reliable broadband services
- The CONNECT for Health Act of 2023 has been introduced to the House of Representatives and has been referred to the Subcommittee on Health. This will expand coverage of telehealth services through Medicare and make the telehealth flexibilities implemented during the PHE permanent.

Medico-Legal Considerations in Telehealth

Maureen Cones, Esq & Eugene Rhee, MD, MBA

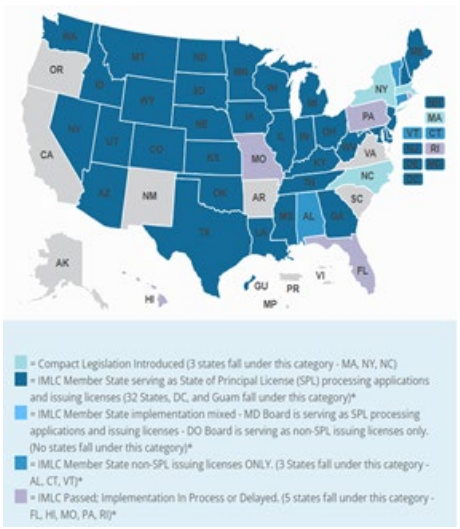
Location of Practice

Physicians are mandated to report their primary practice location. This reporting determines the jurisdiction of the medical board responsible for disciplinary actions. Additionally, insurance carriers require practitioners to ensure that their coverage extends to all practice locations, including those where telehealth services are provided. Physicians are no longer required to report their home address as a practice location.

Interstate Medical Licensure Compact

The Interstate Medical Licensure Compact (IMLC) is a pathway to expedite licensing for physicians seeking to practice medicine in multiple IMLC states. At present, the IMLC comprises of 40 states and two U.S. territories. Approximately 80% of physicians in the U.S. are eligible for licensure under this compact. However, it is important to note that physicians must still comply with the laws of the states where they are licensed.

While the IMLC has contributed to improved patient access, it has also led to an unintended consequence: a significant increase in locum tenens work. This phenomenon allows physicians to work in different states temporarily, often resulting in higher earnings through part-time locum tenens contracts compared to full-time positions. It may lead to a practice environment lacking in continuity of care, as healthcare professionals frequently move between locations for temporary assignments.



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Informed Consent

Telehealth requirements vary across states. Informed consent for telehealth visits is mandatory in most U.S. jurisdictions. The specific requirements for informed consent may vary from state to state. Best practices to obtain informed consent include ensuring uniformity in the consent process, utilizing forms or checklists, employing interpreters or the "teach-back" method as needed, and documenting the consent process thoroughly. It is crucial to remember that if consent is not documented, it is considered as not having occurred; therefore, obtaining written consent in advance is recommended.

The Agency for Healthcare Research and Quality (AHRQ) serves as a valuable resource for information on informed consent:

AHRQ's Easy-to-Understand Telehealth Consent Form

How to Obtain Consent for Telehealth

AHRQ's Making Informed Consent an Informed Choice: Training Modules for Health Care Leaders and Professionals

AHRQ's Telehealth Consent Teach-back Documentation

Patient-Physician Relationship in Telemedicine

According to the American Medical Association (AMA), "a patient-physician relationship exists when a physician serves a patient's medical needs. Generally, the relationship is entered into by mutual consent between physician and patient (or surrogate)."[28] In the emerging landscape of virtual healthcare, the question of whether a patient-physician relationship truly exists without direct physical interaction remains unresolved. In the virtualist model - where patient care is facilitated remotely - legal frameworks have yet to definitively determine the nature of this relationship. Moreover, as AI increasingly plays a role in medical decision-making and triaging, the conversation surrounding the patient-physician relationship becomes even more complex.

Documentation Requirements

Documentation of telemedicine visits is essential for ensuring continuity of care, supporting reimbursement, and mitigating legal risks. The documentation should be sufficient to demonstrate the medical necessity of the intervention or treatment. When documenting telemedicine visits, it is crucial to ensure compliance with state requirements. The following documentation components may be required, depending on state regulations:

Documentation Components	
• Date of the visit • Consent for visit from patient or patient representative (verbal or written) • Category for office visit—real-time audio with video or audio/telephone only • Start time and end time for telehealth encounter	• Patient location for the visit • Provider location for the visit • Names and roles of all participants • Date the patient was last seen or was billed for correspondence to avoid date overlap with other billable services

Fraud in Telemedicine

While there have been no reported cases of telehealth-specific professional negligence in the past decade, recent developments highlight potential fraud risks within the telemedicine landscape. In July 2022, the Office of Inspector General issued a fraud alert,[29] shedding light on fraudulent schemes such as "Operation Rubber Stamp," "Operation Double Helix," and "Operation Brace Yourself." These operations uncovered instances of healthcare fraud involving telemedicine services, including billing for services that were not provided or were medically unnecessary.

Elements of Fraud Suspicion	
• Informality • Telemarketing • Solicitation • Payment Model • Pay Per Click	• Incentive Models (per patient) • Access to Patient Records • Insufficient Documentation

Privacy and Security Considerations
Privacy and security considerations are critical in telemedicine to safeguard patient information and ensure compliance with regulatory standards. Some key considerations include:

- **Data Security**: Implement robust encryption protocols and secure transmission channels to protect patient data from unauthorized access or breaches. Ensure secure storage and handling of patient information, both during transmission and storage.
- **HIPAA Compliance**: Telemedicine platforms and processes must comply with HIPAA requirements, including secure data transmission, access controls, and patient consent for information disclosure.
- **ADA Compliance**: Ensure accessibility for individuals with disabilities in telemedicine services by complying with the Americans with Disabilities Act (ADA).
- **Smart Devices**: Ensure that devices are properly configured and updated with the latest security update to minimize the risk of unauthorized access.
- **Automated Decision-Making**: Maintain transparency and accountability in automated decision-making processes used in telemedicine platforms. Implement mechanisms to mitigate risks associated with automated decision-making.

Protection from Medical Malpractice Claims
To prevent medical malpractice claims, healthcare providers should adhere to the following essential guidelines:

- **Follow State Requirements**:
  - Ensure compliance with state **licensure** requirements for physicians and APPs.
  - Adhere to state-specific **documentation** standards in both form and substance, including requirements for telemedicine encounters.
  - Stay informed about state regulations regarding **payment and reimbursement** for telemedicine services.
  - Be aware of any **state-specific mandates**, such as requirements for in-person visits after a certain number of consecutive telehealth appointments.
- **Review Your Technology**:
  - Confirm that your EHR and telemedicine platforms are **HIPAA-compliant**, safeguarding patient data privacy and security.
  - Ensure accessibility for individuals with disabilities by adhering to **ADA compliance** standards in your technology platforms.
  - Conduct **vendor audits** and verify **HITECH** (Health Information Technology for Economic and Clinical Health) **certification** to ensure that your technology providers meet stringent security and privacy standards.
- **Review Your Insurance Coverage**:
  - Assess your **cybersecurity insurance** to protect against data breaches and cyber threats.
  - Verify that your **malpractice or professional liability insurance** covers telemedicine activities in every state where you practice, as coverage requirements may vary.
  - Consider **business interruption insurance** to mitigate financial losses in the event of disruptions to telemedicine operations.
  - Review insurance policy **exclusions** to understand any limitations or gaps in coverage related to telemedicine services.

Coding and Reimbursement in Telehealth

Jonathan Rubenstein, MD

Prior to the COVID-19 pandemic, CMS imposed geographic location and originating site requirements for Medicare telehealth services. However, temporary waivers were implemented during the pandemic, expanding coverage to include previously excluded services. The Coronavirus Aid, Relief, and Economic Security

(CARES) Act, enacted in March 2020, facilitated this temporary expansion of telehealth coverage under Medicare.

Current Procedural Terminology (CPT) Codes for Telehealth

Codes	Description	Details
99202-99205	Outpatient E/M, New Patient	*Level of service can be based on total time of the encounter or Medical Decision Making (MDM) (see Medical Decision Making Chart below)* 99202: 15-29 minutes/straightforward MDM 99203: 30-44 minutes/low level of MDM 99204: 45-59 minutes/moderate level of MDM 99205: 60-74 minutes/high level of MDM
99211-99215	Outpatient Evaluation and Management (E/M), Established Patient	99211: visit did not require the presence of a physician/other qualified health care professional (supervision) *Level of service can be based on total time of the encounter or MDM* 99212: 10-19 minutes/straightforward MDM 99213: 20-29 minutes/low level of MDM 99214: 30-39 minutes/ moderate level of MDM 99215: 40-54 minutes/high level of MDM
99421-99423	Online digital E/M service, established patient, for up to 7 days, cumulative time	99441: 5-10 minutes 99442: 11-20 minutes 99443: >21 minutes
99441-99443	Telephone E/M services by a physician/qualified health care professional to *established* patient, parent, or guardian not originating from a related E/M service provided within previous 7 days nor leading to an E/M service or procedure within the next 24 hours or soonest available appointment	99441: 5-10 minutes 99442: 11-20 minutes 99443: >21 minutes
99446-99449, 99451, 99452	Interprofessional telephone/internet/electronic health record assessment and management service provided by a consultative physician or other qualified health care professional, including a verbal and written report to the patient's treating/requesting physician or other qualified health care professional (written only for 99451-99452)	99446: 5-10 minutes 99447: 11-20 minutes 99448: 21-30 minutes 99449: 30+ minutes 99451: 5+ minutes 99452: 30 minutes

Medical Decision Making (MDM) Chart

	Problems Addressed	Data to Review			Risk of Complications/ Morbidity/ Mortality
2	**Straightforward** ○ 1 self-limited/minor	Minimal or none			Minimal
3	**Low Complexity** ○ 2+ self-limited/minor ○ 1 stable chronic illness ○ 1 acute, uncomplicated illness or injury	1. Two points from: ○ Review prior external note(s) ○ Review the result(s) of each unique test ○ Ordering of each unique test	2. Assessment requiring an independent historian(s)		Low
4	**Moderate Complexity** One of the following: ○ 1+chronic illness/worse ○ 2+stable chronic ○ Undiagnosed/uncertain	1. Three from: ○ Review external note(s) ○ Review of the result(s)	2. Independent interpretation of test performed by another physician/QHCP	3. Discuss management or test interpretation with external physician/other QHCP/appropriate source (not	Moderate Examples only: ○ Prescription drug management ○ Minor surgery w/identified

	○ Acute/systemic symptoms ○ Acute complicated injury	○ Ordering each unique test ○ Independent historian(s)		separately reported)	patient/procedure risk ○ Elective major surgery ○ Diagnosis or treatment significantly limited by social determinants of health
5	**High Complexity** ○ 1+ chronic illnesses/severe exacerbation ○ 1+ acute or chronic illness/threat to life or bodily function	2 of the 3 categories from level 4			High Examples only: ○ Drug /intensive monitoring for toxicity ○ Major surgery w/ identified patient/procedure risks ○ Decision regarding emergency major surgery ○ Decision regarding hospitalization, DNR/de-escalate

Healthcare Common Procedure Coding System (HCPCS) G-Codes for Telehealth

Codes	Description	Details
G0406-G0408	Follow-up inpatient consultation, communicating with the patient via telehealth	G0406: 15 minutes G0407: 25 minutes G0408: 35 minutes
G0425-G0427	Telehealth consultation, emergency department or initial inpatient, communicating with the patient via telehealth	G0425: 30 minutes G0426: 50 minutes G0427: 70 minutes
G2012, G2252, G2251	Brief communication technology-based service, e.g. virtual check-in, provided to an established patient, not originating from a related E/M service provided within the previous 7 days nor leading to an E/M service or procedure within the next 24 hours or soonest available appointment	G2012: 5-10 minutes G2252: 11-20 minutes G2251: 5-10 minutes (non-E/M provider)
G2061-G2063	Qualified non-physician health care professional online assessment and management, for an established patient, for up to 7 days, cumulative time during the 7 days (i.e. physical therapist, occupational therapist, speech language pathologists, clinical psychologists)	G2061: 5-10 minutes G2062: 11-20 minutes G2063: >21 minutes
G2212	Prolonged office or other outpatient evaluation and management service(s) beyond the maximum required time of the primary procedure which has been selected using total time on the date of the primary service	G2212: >89 minutes for new patients; >69 minutes for established patients

Codes Related to Remote Patient Monitoring

Codes	Description	Details
0811T-0812T	- Remote multi-day complex uroflowmetry (e.g., calibrated electronic equipment); set-up and patient education on use of equipment -device supply with automated report generation, up to 10 days	

98975-98978	Remote therapeutic monitoring (e.g., therapy adherence, therapy response)	
99091	Collection and interpretation of physiologic data (e.g., electrocardiogram, blood pressure, glucose monitoring) digitally stored and/or transmitted by the patient and/or caregiver to the physician/qualified health care professional, minimum of 30 minutes, each 30 days	
99453 99454	- Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; set-up and patient education - device(s) supply with daily recording(s) or programmed alert(s) transmission, each 30 days	Minimum 16 days
99457-99458	Remote physiologic monitoring treatment management services, clinical staff/physician/other qualified health care professional time in a calendar month requiring interactive communication with the patient/caregiver during the month	99457: 20 minutes 99458: additional 20 minutes

Code Modifiers for Type of Telemedicine Service and Place of Service Description

Modifiers	Place of Service
95: Synchronous telemedicine service rendered via real-time interactive audio and video telecommunications system 93: Synchronous telemedicine service rendered via telephone or other real-time interactive audio-only telecommunications system GT: via interactive audio and visual telecommunications systems (CMS: patient at originating site) GQ: Asynchronous telemedicine service	02: Telehealth provided other than in patient's home 10: Telehealth provided in patient's home 21: Inpatient hospital 23: Emergency room hospital

Additional Considerations

- It is crucial to inform patients of billable services before providing and billing for them, documenting both the service and the patient's consent, in order to mitigate medico-legal risks.
- Despite the potential for interprofessional consults to optimize urology care delivery outside of in-person visits, they are often underutilized.
- This coding information was accurate at the time of the presentation (December 2, 2023).

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References

[1] Gadzinski AJ, Gore JL, Ellimoottil C et al. Implementing telemedicine in response to the COVID-19 pandemic. J Urol 2020; **204**(1):14-16. doi:10.1097/JU.0000000000001033
[2] American Academy of Family Physicians. Telehealth and telemedicine. 2022. Accessed March 15, 2024. https://www.aafp.org/about/policies/all/telehealth-telemedicine.html#:~:text=While%20telemedicine%20refers%20specifically%20to,facilitate%20and%20support%20assessment%2C%20diagnosis%2C
[3] American Urological Association. The state of the urology workforce and practice in the United States (2020). Accessed March 22, 2023. https://www.auanet.org/documents/research/census/2020-State-of-Urology-Workforce-Census-Book.pdf
[4] Butaney M, Rambhatla A. The impact of COVID-19 on urology office visits and adoption of telemedicine services. Curr Opin Urol 2022; **32**(2):152-157. doi:10.1097/MOU.0000000000000957
[5] Rodriguez Socarrás M, Loeb S, Teoh JYC et al. Telemedicine and smart working: recommendations of the European Association of Urology. Eur Urol 2020; **78**(6):812-819. doi:10.1016/j.eururo.2020.06.031
[6] Allen AZ, Zhu D, Shin C et al. Patient satisfaction with telephone versus video-televisits: a cross-sectional survey of an urban, multiethnic population. Urology 2021; **156**:110-116. doi:10.1016/j.urology.2021.05.096
[7] American Urological Association. The state of the urology workforce and practice in the United States (2021). Accessed March 22, 2023. https://www.auanet.org/documents/research/census/2021%20Census%20Report.pdf
[8] Luciani LG, Mattevi D, Cai T et al. Teleurology in the time of COVID-19 pandemic: here to stay? Urology 2020; **140**:4-6. doi:10.1016/j.urology.2020.04.004
[9] Rabinowitz MJ, Kohn TP, Ellimoottil C et al. The impact of telemedicine on sexual medicine at a major academic center during the COVID-19 pandemic. Sex Med 2021; **9**(3):100366-100366. doi:10.1016/j.esxm.2021.100366
[10] Connor J, Zheng Y, Houle K and Cox L. Adopting telehealth during the COVID-19 era: the urologist's perspective. Urology 2021; **156**:289-295. doi:10.1016/j.urology.2021.03.051
[11] Margolin EJ, Pina Martina LA, Miles CH et al. telemedicine in management of genitourinary malignancies: patient and physician perspectives. J Urol Onc 2021; **39**(8):480-486. doi:10.1016/j.urolonc.2021.04.003
[12] Croghan SM, Rohan P, Considine S et al. Time, cost and carbon-efficiency: a silver lining of COVID era virtual urology clinics? Ann R Coll Surg Engl 2021; **103**(8):599-603. doi:10.1308/rcsann.2021.0097
[13] Andino JJ, Lingaya MA, Daignault-Newton S et al. Video visits as a substitute for urological clinic visits. Urology. 2020; **144**:46-51. doi:10.1016/j.urology.2020.05.080
[14] Watts KL and Abraham N. "Virtually perfect" for some but perhaps not for all: launching telemedicine in the bronx during the COVID-19 pandemic. J Urol 2020; **204**(5):903-904. doi:10.1097/JU.0000000000001185
[15] Nourian A, Smith N, Kleinman L et al. A 5-year single-institution experience integrating telehealth into urologic care delivery. Telemed J E Health 2021; **27**(9):997-1002. doi: 10.1089/tmj.2020.0267
[16] American Urological Association. The state of urology workforce and practice in the United States (2022). Accessed May 2, 2024. https://www.AUAnet.org/common/pdf/research/census/State-Urology-Workforce-Practice-US.pdf
[17] Federal Communications Commission. 2020 broadband deployment report. Accessed March 22, 2024. https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2020-broadband-deployment-report
[18] Pew Research Center. Mobile technology and home broadband 2021. Accessed March 22, 2024. https://www.pewresearch.org/internet/2021/06/03/mobile-technology-and-home-broadband-2021/
[19] Demaerschalk BM, Aguilar MI, Ingall TJ et al. Stroke telemedicine for Arizona rural residents, the legacy telestroke study. Telemed Rep 2022; **3**(1):67-78. doi: 10.1089/tmr.2022.0002

[20] Beller HL, Corey T, Horton BJ et al. Optimizing telemedicine technologic infrastructure with animal models: a case in telecystoscopy. Telemed J E Health 2021; **27**(5):568-574. doi: 10.1089/tmj.2020.0188
[21] Li J, Yang X, Chu G et al. Application of improved robot-assisted laparoscopic telesurgery with 5G technology in urology. Eur Urol 2023; **83**(1):41-44. doi: 10.1016/j.eururo.2022.06.018
[22] Faris H, Harfouche C, Bandle J and Wisbach G. Surgical tele-mentoring using a robotic platform: initial experience in a military institution. Surg Endosc 2023; **37**(12):9159-9166. doi: 10.1007/s00464-023-10484-1
[23] Medicare Payment Advisory Commission. Report to the Congress: Medicare and the health care delivery system. 2023. Accessed May 13, 2024. https://www.medpac.gov/wp-content/uploads/2023/06/Jun23_MedPAC_Report_To_Congress_SEC.pdf
[24] Chen J, Li KY, Andino J et al. Predictors of audio-only versus video telehealth visits during the COVID-19 pandemic. J Gen Intern Med 2022; **37**(5):1138-1144. doi: 10.1007/s11606-021-07172-y
[25] Instityte for Healthcare Policy & Innovation: University of Michigan. Telehealth in Michigan. Accessed March 23, 2024. https://mihealthfund.org/wp-content/uploads/2023/06/Telehealth-in-Michigan_Insights-and-Data-for-Effective-Policymaking.pdf
[26] Hatef E, Wilson RF, Hannum SM et al. Use of telehealth during the COVID-19 era. 2023. Accessed March 23, 2024. https://www.ncbi.nlm.nih.gov/books/NBK590499
[27] Department of Health and Human Services, Office of Inspector General. Telehealth program integrity risks data brief. 2022. Accessed March 23, 2024. https://oig.hhs.gov/oei/reports/OEI-02-20-00720.pdf
[28] American Medical Association. Patient physician relationships. Accessed March 23, 2024. https://code-medical-ethics.ama-assn.org/ethics-opinions/patient-physician-relationships
[29] Department of Health and Human Services, Office of Inspector General. Special fraud alert: OIG alerts practitioners to exercise caution when entering into arrangements with purported telemedicine companies. 2022. Accessed May 13, 2024 https://oig.hhs.gov/documents/root/1045/sfa-telefraud.pdf