



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

HERE AND NOW: CLINICAL PRACTICE

Charles J. Kahi, Section Editor

The Virtual Gastroenterology Clinic

Toyia James-Stevenson



Division of Gastroenterology and Hepatology, Indiana University School of Medicine, Carmel, Indiana

Before the COVID-19 outbreak, telehealth incorporation into medical practices varied widely across specialties. Several factors limited broad acceptance of telehealth including regulatory limitations, platform challenges, and perceived low demand. Centers for Medicare & Medicaid Services has rapidly expanded telehealth provisions under the public health emergency declared on January 31, 2020.¹ Effective March 6, 2020, the 1135 waiver allows for expansion of outpatient video visits to include patients outside of rural areas and those located in their homes. In most states and territories, providers can now deliver services across state lines and from their homes without having to update their addresses with Medicare.^{2,3} For the duration of the public health emergency, telehealth visits are reimbursed equivalent to in-person visits for new and return encounters. Many gastroenterology (GI) practices already implement tele-education through preprocedural telephone teaching on bowel preparation and dietary modifications, and these have been shown to improve quality, efficiency, and value through improved polyp detection and bowel preparation quality.⁴ With restrictions on nonurgent in-person visits and endoscopic procedures, gastroenterologists who incorporate or expand telehealth in their practices may reduce the risk of COVID-19 exposure for patients and providers while maintaining patient access and revenue streams.

How to Optimize the Virtual Gastroenterology Clinic

Updated Clinic Workflows

As practices begin to ramp-up visits that were halted during the initial COVID-19 outbreak, in-person visit capacities may be limited because of social distancing requirements, personal protective equipment shortages, and other safety concerns. Some providers may develop hybrid clinics where in-person and virtual visits are conducted within the same session or during separate sessions within the work week. Others may even schedule virtual visits during endoscopy sessions if increased wait-times are required between procedures. Clinical space and technology may need to be updated to allow for greater privacy for physicians to perform virtual visits, including

adding cameras to hardware and flexible use of patient rooms for virtual visits. Large waiting areas and physician work areas may need to be reconfigured for safety and privacy reasons. Updated scheduling algorithms that define appropriate indications for in-person, virtual, and telephone visits could improve patient satisfaction and safety, and reduce cost.

Choosing a User-friendly HIPAA-Compliant Video Visit Platform

The most effective systems often integrate seamlessly with patient portals and electronic medical records. Unfortunately, integrated systems may stymie the entire video visit if 1 component malfunctions. Telehealth platforms that require downloads and additional registrations may not be widely accepted by patients who prefer simpler access. Patients at the highest risk for severe outcomes from COVID-19, including the elderly, may have lower telehealth use particularly if modalities are too complex. Conversely, platforms that have easily accessible links for patients often have the disadvantage of requiring health care providers to document separately into electronic medical records and patient telehealth portals, which may reduce efficiency. Video visit platforms that allow providers to easily integrate others into the visit (eg, interpreters, remote family members, and learners) may add functionality. Unfortunately, even the most functional video visit platform cannot solve the common limitations of patient-owned devices. Back-up systems should be available when connectivity issues or technology failures occur to minimize disruptions in the appointment. Health care systems, therefore, must promote comprehensive platforms with proven reliability, simplicity, and high patient/provider uptake.

Before the Visit

Rapid expansion of telehealth because of the COVID-19 pandemic has required the swift implementation of

Abbreviation used in this paper: GI, gastroenterology.

Most current article

© 2020 by the AGA Institute
1542-3565/\$36.00

<https://doi.org/10.1016/j.cgh.2020.06.012>

Code	Description	2020 Work RVUs	National Payment
	New In-Person & Virtual Visits		
99201	10 minute outpatient/office new visit	0.48	\$47
99202	20 minute	0.93	\$77
99203	30 minute	1.42	\$109
99204	45 minute	2.43	\$167
99205	60 minute	3.17	\$211
	Established In-Person & Virtual Visits / Phone Visit		
99211	5 minute outpatient/office return visit	0.18	\$23
99212	10 minute outpatient/office return visit	0.48	\$46
99441	5-10 minute phone visit		
99213	15 minute outpatient/office return visit	0.97	\$76
99442	11-20 minute phone visit		
99214	25 min outpatient/office return visit	1.50	\$110
99443	21-30 min phone visit		
99215	40 min outpatient/office return visit	2.11	\$148
	Patient-Initiated Portal Communications (E-Visit) Up to 7 days, Cumulative Time		
99421	Physician and APP: 5-10 minutes for new and established patients	0.25	\$15
99422	11-20 minutes	0.50	\$31
99423	21 or more minutes	0.80	\$50
G2061	Qualified non-physician health care professional: 5-10 minutes for new and established	0.25	\$12
G2062	11-20 minutes	0.44	\$21
G2063	21 or more minutes	0.69	\$33
	Virtual Check-Ins		
G2012	5-10 minute check-in by phone or other telecommunication device to determine if office visit or other service warranted	0.18	\$12
G2020	Remote evaluation of images or video stored and forwarded by a patient	0.25	\$15

Figure 1. Updated outpatient Centers for Medicare & Medicaid Services coding and billing commonly used by GI practices.⁸ Recent updates allow billing for new patients for virtual visits, telephone visits, and virtual check-ins. Most virtual and telephone visits also have expanded reimbursements. A modifier may be needed for some services. Some states and insurers do not allow for reimbursement for certain services.

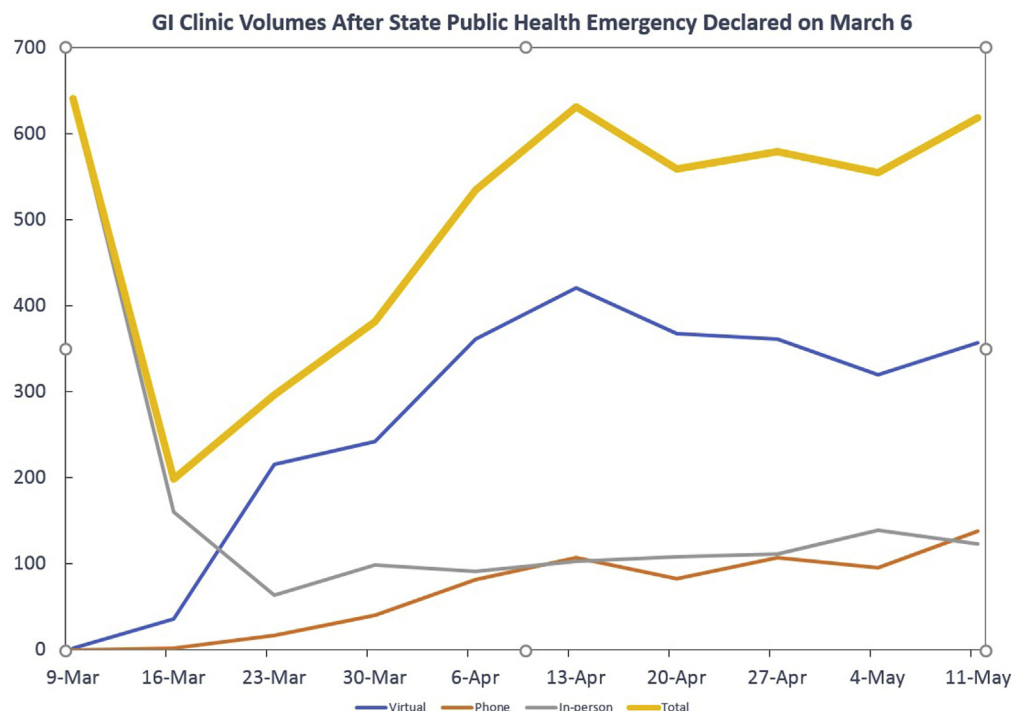
virtual visits with minimal time to properly train staff and troubleshoot potential issues. GI practices must educate the entire health care team to optimize virtual clinics. Standardization of the scheduling process helps ensure patient privacy while protecting confidential medical information. When scheduling the visit, patients should be allowed to opt-in, and offered telephone or in-person visits when appropriate to maintain autonomy. Developing appropriate indications for virtual visits versus telephone and in-person visits can improve safety and access.

Health care team members should acknowledge their own biases toward technology and patients. Hesitance to incorporate virtual technology into one's practice could hinder one's ability to provide high-quality care. Some patients may prefer the efficiency of virtual visits if such barriers as long drives, parking frustrations, long registration processes, and long wait times are removed. Automatically assuming that certain populations, such as the mentally disabled or socially disadvantaged, are not appropriate for virtual visits could worsen disparities in access to health care.

Furthermore, providers must not push a patient to conduct a virtual visit when the patient is more comfortable with a telephone or in-person visit. GI practices should anticipate that populations who are more vulnerable to COVID-19 may have higher demand for virtual visits. Prioritizing the patient's preferences could lead to greater satisfaction with patient safety as a key driver.

Immediately before the visit, patient training by staff including medical assistants or other staff may help ensure a seamless patient visit. Clearly redefining team member roles and responsibilities early can better redistribute work. Underestimating the time staff need to appropriately register, educate, and check-in virtual patients can lead to staff burnout if they are simultaneously providing in-person visit care. One model may expand the roles of medical assistants who previously took vitals, roomed patients, and updated medications for in-person visits. Depending on daily demands, some of these staff members could focus on pre-virtual visit calls intended to update histories, medications, and allergies and train the patient on accessing the platform while

Figure 2. Indiana University GI and Hepatology moved early to incorporate virtual visits during the public health emergency. Before the pandemic, the group minimally used virtual visits. As in-person visits quickly declined, Centers for Medicare & Medicaid Services released telehealth waivers expanding access first for virtual visits and then for telephone visits. Within 5 weeks of the onset of the public health emergency, the GI group expanded total patient volumes to prepandemic levels using a combination of virtual, telephone, and in-person visits.



confirming adequate technology needed for the visit. Previsit platform testing by the provider may also reduce frustrations.

The Visit

Providers should conduct the visit in a private location; wear professional attire; and have adequate lighting, sound, connectivity, and eye contact. Patients may be more open to discussing health concerns with an attentive provider. Patients should be greeted initially and thanked before signing-off of the virtual visit. Providers must learn to bond with patients virtually through trust-building activities, such as acknowledging family members who are present, asking about visible artwork in the background, and using positive vocal tone and body language. Leveraging the ability to see into a patient's home environment may allow a physician to discern important factors and readily access information, such as active medications. Providers should become comfortable with doing a remote physical examination, which may involve eliciting help from a family member to perform a virtual abdominal examination after obtaining patient consent. The patient can be asked to lie on the couch while the family member palpates and describes what they are feeling. Providers should understand the limitations of the remote physical examination and escalate care when appropriate. For instance, the provider could request the assistance of a local or referring provider to perform a rectal examination or to conduct an urgent in-person visit when

warranted. Online continuing medical education resources may help providers improve their virtual physical examination skills.⁵

After the Visit

Appropriate follow-up may include virtual patient education by nursing staff or asynchronous education and communication through the patient portal to reinforce important recommendations. Acknowledging who may benefit from more frequent virtual visit follow-up and other telehealth monitoring may reduce hospitalizations and improve satisfaction in GI patients with chronic condition.^{6,7} The practice should stay current on proper documentation, visit follow-up, and billing requirements to ensure compliance with federal, state, local, and organizational requirements. The most common billing consideration is the 1135 waiver that includes the ability to seek Medicare reimbursement for new and return virtual visits at the same level as in-person visits. Medical decision making or time can be used to determine appropriate billing levels. Time now includes all time spent the day of the visit including non-face-to-face time and counseling that does not need to dominate the visit. Providers who supervise residents can supervise telehealth visits virtually. Direct supervision means "immediately available" virtually in case contacted by the resident.³

Providers should clarify with their state Medicaid program and other commercial insurers whether similar provisions exist for CPT codes 99201-99214 for using real-time interactive audio and visual communication.

Centers for Medicare & Medicaid Services updates to telephone codes 99441-99443 now increases reimbursement to the rates of 99212-99214 for audio-only patient communications.⁸ Health care providers can also now waive all or a portion of the 20% fee-for-service cost-sharing Medicare B requirement.³

Telehealth provisions have not changed substantially for virtual check-in services that allow for billing with patient consent.² Providers may use HCPCS telephone code G2012 for 5- to 10-minute telecommunications to determine the need for an office visit. Currently, however, a provider is reimbursed better through billing for a 5- to 10-minute telephone visit with code 99441 (Figure 1). Virtual check-in code G2010 allows for billing for patient-initiated store and forwarded images, which is not reimbursable by some states and commercial payers.

Telehealth Ramp-in Outpatient Gastroenterology Practice at Indiana University During COVID-19 Emergency

Take-Home Points

Implementing a GI virtual clinic during the public health emergency can help practices protect the safety of patients and staff, while expanding access points for care (Figure 2). Modernized GI clinic workflows with efficient telehealth platforms used by appropriately trained health care members is optimal. Staying current with billing and coding is challenging but worthwhile. Ultimately, the patient may expect providers and payors to deliver high-quality telehealth services long-term.

References

1. Available at: <https://www.cms.gov/files/document/medicare-telehealth-frequently-asked-questions-faqs-31720.pdf>. Accessed April 8, 2020.
2. Available at: <https://www.cms.gov/files/document/covid-19-physicians-and-practitioners.pdf>. Accessed April 8, 2020.
3. Orłowski J, Lee G, Rheuban K, et al. Rapidly scaling telehealth in response to COVID-19. Resources from your courses [Webinar, 8 April 2020]. Association of American Medical Colleges.
4. Liu X, Luo H, Zhang L, et al. Telephone-based re-education on the day before colonoscopy improves the quality of bowel preparation and the polyp detection rate: a prospective, colonoscopist-blinded, randomised, controlled study. *Gut* 2014; 63:125–130.
5. Sidney Kimmel Medical College Institute of Emerging Health Professions. Telemedicine: conducting an effective physical exam [Video File, 2019 Jan 17]. Available at: <https://cme.jefferson.edu/content/telemedicine-providers-conducting-effective-telehealth-physical-exam>. Accessed April 8, 2020.
6. Siegel C. Transforming gastroenterology care with telemedicine. *Gastroenterology* 2017;152:958–963.
7. De Jong MJ, van der Meulen-de Jong AE, Romberg-Camps MJ, et al. Telemedicine for management of inflammatory bowel disease (my IBDcoach): a pragmatic, multicentre, randomized controlled trial. *Lancet* 2017;390:959–968.
8. Available at: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeeSched>. Accessed April 8, 2020.

Reprint requests

Address requests for reprints to: Toyia James-Stevenson, MD, MBA, Digestive and Liver Disorders, 11590 North Meridian Street, Suite 615, Carmel, Indiana. e-mail: tjames@iu.edu; fax: (317) 688-2985.

Conflicts of interest

The authors disclose no conflicts.