Virtual Visits for Care of Patients with Heart Failure in the Era of COVID-19: A Statement from the Heart Failure Society of America

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Introduction

Coronavirus disease 2019 (COVID-19) is a highly contagious disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The COVID-19 pandemic presents an unprecedented crisis for patients, clinicians, and healthcare systems in the United States (US). In response, US Federal and State governments have implemented wide-ranging stay-at-home recommendations as a means to reduce spread, and have ordered non-essential businesses to temporarily close. At the time of this writing, social distancing is the only known way to mitigate the continued spread of COVID-19, as there is currently no proven vaccine or treatment. In an effort to reduce patient exposure and transmission of disease, to conserve supplies, and to maximize personnel that are needed to provide care to the large number of severe COVID-19 cases requiring hospitalization, many US healthcare systems have reduced ambulatory outpatient clinics—pillars of the longitudinal care of patients with chronic illnesses such as heart failure (HF). In this context, synchronous audio/video interactions, also known as virtual visits (VVs), have been suggested as innovative and necessary alternatives to in-person care.

VVs provide a platform for real-time interactive telehealth interactions between patients and clinicians using commonly-available home-consumer devices. Early adopters of VVs have described their feasibility, potential to save time and cost, and patient satisfaction related to increased access to care and the convenience of avoiding a trip to the office.[1-5] The US Department of Veteran's Affairs (VA) has been a leader in the use of telehealth. In FY 2019, more than 99,000 Veterans used the VA Video Connect app at their home resulting in 294,000 virtual appointments.[6] Although the majority of these visits were for mental health, the VA experience demonstrates the feasibility of broadly utilizing VVs to provide care for chronic illness.

The value of VVs was recently demonstrated in a randomized clinical trial evaluating VVs versus in-person ambulatory visits in the post-discharge care of patients with HF (Virtual Visits in

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Heart Failure Care Transitions (VIV-HF); NCT03675828; Late Breaking Clinical Trial presentation at the Heart Failure of Society of America's Annual Scientific Meeting 2019 in Philadelphia, PA). The aims of this pilot study were to test the feasibility and safety of substituting in-person visits with VVs for patients (n=108) transitioning from hospital-to-home after hospitalization for HF, and to assess to what degree VVs can reduce appointment no-show rates. The no-show rate in the VV arm trended lower than observed rate in the in-person arm (VV 34.6% versus IPV 50%; RR 0.69; 95% CI 0.44 to 1.09; P=0.12), without any signal of harm—no significant differences in hospital readmission, emergency room visit, or death between the study arms.[7] Yet, despite its promise, wide utilization of VVs in the US healthcare environment prior to the COVID-19 pandemic has been limited due to lack of familiarity with technologies among both clinicians and patients, concerns about the safety of substituting in-person visits with VVs, lack of integration into clinicians' established workflows, perceived and actual legal barriers, and limited payer reimbursement.[8]

In the setting of the COVID-19 pandemic, many of these barriers have now disappeared given the importance of social distancing. The purpose of this statement is to provide a pragmatic guide to HF clinicians about provision of VVs in the era of the COVID-19 pandemic. First, we will outline benefits and value of VVs, some of the clinical challenges, and the recent COVID-19-related changes in policy and reimbursement that have facilitated the uptake of VVs. Then, we will outline some of the VV platforms that currently exist and describe models of care using VVs. Finally, we will describe the short-term and long-term future implications of VVs.

Benefits and value of virtual visits

During the current public health emergency, VVs have multiple potential benefits (**Table 1**). From a patient standpoint, VVs provide access to care where it has been significantly curtailed or entirely disappeared. By providing a platform for patients to continue to receive medical advice and instruction regarding their medical conditions, VVs have become integral to optimizing health

for patients and reducing related distress while reducing in-person exposure. Given current restrictions on accompaniment during visits to medical facilities, VVs have additionally facilitated involvement by patient caregivers, who are often so critical in many of the self-care practices necessary for adults with HF.[9] Some patients may find it easier to discuss difficult topics while in the comfort of their homes, and with family members who may not otherwise be present for in-person visits. From a clinician standpoint, VVs permit clinicians to continue to serve their patients from the safety of their own homes, through provision of care to their medically complex patients. The ability for a face-to-face encounter may be especially valuable in preserving patient-physician trust in the absence of in-person visits. From a healthcare systems standpoint, provision of services remotely has allowed re-allocation of resources to focus on inpatient services, which are at risk of becoming overwhelmed and saturated given the rapidity and volume of severe COVID-19 cases requiring acute inpatient care. Additionally, VVs allow continued delivery of services with reimbursement that can contribute to ensuring the financial sustainability of hospitals, practices, and the US healthcare system as a whole. Finally, VVs can be leveraged towards ensuring continuation of research studies, where patient contact is necessary for data collection, as well as ensuring safety of human subjects.

Challenges to virtual care

To successfully conduct a VV, patients must be willing and able, and the technology must be available and effective. Accordingly, VVs may present some challenges in selected circumstances. Some patients may be reluctant to participate in VVs because they feel uncomfortable with technology, or feel self-conscious about interacting on video. These feelings may become less common as VVs enter the mainstream. VVs present a barrier to performing a full physical exam, though many components of a partial exam can be completed, and existing and emerging diagnostic technologies and wearables may fill in the gaps. This is discussed further below. Some clinicians and patients may feel that even with the use of video, VVs are not the

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same as in-person visits with respect to patient-physician interactions—something is lost without close proximity and the "laying on of hand." Some patients may have limited access to the internet, and/or may not have a computer or smart device to engage in VVs, including the poor or elderly in inner city or rural areas. Although there may be geographic and financial challenges to obtaining WiFi for some patients, we anticipate that future technology will provide "hotspots" via ubiquitous cellular networks alleviating most barriers to internet access. Some health care systems are investing in these technologies and providing equipment and connectivity to ensure that telehealth does not widen health disparities.[10, 11]

Older adults may be viewed as a subpopulation where these challenges are common. This is particularly important because over half of patients currently living with HF in the US is older than 70 years.[12] However, recent data show that an increasing number of older adults possess smartphones, and that some guidance to using newer technology can be taught, possibly by hospital/clinic support teams.[13] Integration of the VVs technology platform within an institution's electronic portal or app, which is already familiar to patients, may be another approach to overcoming these challenges.

Patients and clinicians may occasionally encounter technical difficulties when conducting VVs. These may include an inability to initiate the VV, connectivity issues, and/or audio/video problems. Some of this may be a direct result of larger than anticipated volume of users concurrently attempting to use a platform in the setting of the COVID-19 crisis. Over time, the hope is that software upgrades will address these issues, and that platforms will be able to accommodate a greater number and capacity of users. Of note, if/when these technical issues arise, switching to a telephone visit is a reasonable solution and remains reimbursable.

Policy changes that increase feasibility of virtual visits in the era of COVID-19

Several governing bodies, including the US Executive Branch, US Congress, US Department of Health and Human Services (HHS), and State governments, have relaxed rules

and regulations that have subsequently increased the feasibility of VVs. In response to the ongoing COVID-19 public health emergency the "Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020", was passed with near unanimous support by the US Congress and was signed into law by the President on March 6, 2020.[14] This bill allowed HHS to "temporarily waive certain Medicare restrictions and requirements regarding telehealth services during the coronavirus public health emergency." Then on March 13, 2020, the President proclaimed the COVID-19 outbreak a US national emergency, which allowed HHS to exercise its authority under section 1135 of the Social Security Act to temporarily waive certain requirements of Medicare, Medicaid, and the Health Insurance Portability and Accountability Act of 1996 (HIPAA).[15] Specific steps taken by HHS and States are described below, and a summary of key policy changes are shown in **Table 2**.

HHS has eased a variety of rules that relate to medical licensing and privacy, which directly affect telehealth practice. First, the requirements that both physicians and other health care professionals hold licenses in the State in which they provide services were waived by the Federal government.[16] Second, HIPAA privacy rules were suspended. Specifically, HHS indicated that it will "exercise its enforcement discretion and will not impose penalties for noncompliance" with HIPAA rules as they relate both to telehealth technologies, and the manner in which they are used.[17] This is important because clinicians are now allowed to deliver medical care via any non-public facing VV platform, even if not previously deemed HIPAA compliant. In the short-term, this increased flexibility may lead to increased uptake of VVs. In the long-term, we recommend that HF clinicians use HIPAA compliant platforms whenever possible, both for extra security and to develop practices and habits that will be relevant in post-pandemic settings.

States have individually taken a variety of steps to remove barriers to VVs in the setting of the COVID-19 pandemic. These relate to Medicaid reimbursement, licensing, and home eligibility site. The Center for Connected Health Policy is maintaining a comprehensive State-

specific summary of these, which can be found on its website (https://www.cchpca.org/resources/covid-19-related-state-actions).

Recent changes in reimbursement for virtual visits

Reimbursement for VVs was limited prior to the COVID-19 public health emergency. With just a few exceptions, CMS reimbursed for telehealth visits only in specific circumstances: patients had to have an established relationship with their physician, had to live in a rural area, and had to be located in a medical facility at the time of the VV ("originating site"). Many commercial insurance providers reimbursed urgent care VVs (i.e., substitution of in-person emergency room or urgent care visits), with only a small number reimbursing for primary care or specialty care VVs. Meanwhile, some hospitals have started offering VVs in selected settings for certain high-risk conditions (including HF), spending institutional resources in hopes that long-term savings through bundled payment models would ultimately compensate for the associated costs of VVs, while others have offered VVs in exchange for direct cash payment from patients.

In March 2020, following announcement of the COVID-19 public health emergency and the 1135 Waiver, several important telehealth-related reimbursement changes occurred. CMS announced that VVs, referred to as "telehealth visits" in CMS documents, would be reimbursed at the same rate as in-person visits during the COVID-19 crisis, without limits on the purpose of the visits, the geographical location of patients, and whether or not there was a previously established relationship with the provider. Multiple commercial insurance providers including Aetna, Cigna, Humana, and Blue Cross Blue Shield among others have followed suit. Waivers of beneficiary co-pays for these telehealth services vary among these providers.

To secure reimbursement at the current time, documentation for VVs should approximate documentation for in-person ambulatory clinic visits. We recommend that clinicians explicitly document that a virtual (audio/video) visit was completed, with the patient's consent. Clinicians should document the amount of time it took to conduct the visit in minutes. Specific CPT billing

codes and relevant modifiers are shown in **Table 3**. The future state of EHR documentation for VVs may include capture of images or streaming clips of video interactions, automated transcription of key components of the conversation, and use of natural language processing to determine meaning and summarize information.

Virtual visit platforms

According to HHS, "a covered health care provider that wants to use audio or video communication technology to provide telehealth to patients during the COVID-19 nationwide public health emergency can use any non-public facing remote communication product that is available to communicate with patients." Non-public facing products are typically platforms that employ end-to-end encryption, and which allows only an individual and the person with whom the individual is communicating to see what is transmitted. On the other hand, public facing platforms (i.e., Facebook Live, Twitch, and TikTok) are designed to be open to the public or allow wide or indiscriminate access to the communication. **Table 4** outlines and describes some common platforms that may be used for VVs.

Virtual visit models of care

Which patients should be seen by virtual visits?

VVs can be used to evaluate the full range of patients with HF, including those with HFpEF and HFrEF, across all Stages of HF (A-D), and including those with left ventricular assist devices (LVADs) and heart transplant recipients. Clinical assessment provided over VVs can include evaluation of clinical status, medication review and management, screening for adverse events, up-titration of guideline-directed therapy, and counseling about topics related to medication adherence, diet, and exercise.

In general, outpatient visits may be classified as urgent or routine. The urgent classification includes visits for new or worsening HF symptoms, or are applicable to patients with recent LVAD

implantation or heart transplantation. Using VVs to manage and triage complaints of dyspnea may be especially important during the COVID-19 crisis, given the importance of differentiating worsening HF from acute COVID-19 that could very rapidly deteriorate to respiratory failure. Individuals who are nearing Stage D HF and/or those requiring inotropes may also be important priorities due to their potential to decompensate. Routine visits could include those focused on medication titration, new test results, or time-interval associated visits. Many HF programs across the country have already converted in-person visits into VVs, keeping patients in the same previously scheduled date and time slots.

Both urgent and routine visits may be conducted via VVs, depending on resource availability. An algorithm that clearly differentiates urgent from routine visits may be helpful for allocating resources. Administrative personnel and/or nurses should be trained to triage effectively according to each practice's preferences. Clinicians may also use VVs to screen urgent complaints, and decide which patients need to be seen in-person.

Importantly, a variety of HF clinicians including physicians, advanced practice providers, and licensed social workers, can perform and be reimbursed for VVs.[18] Pharmacists can provide VVs as well, but billing would have to occur through their supervising physician.[19] Clinicians who require quarantine, but are well enough to practice, may provide an additional workforce to conduct VVs while their in-person contributions are limited. Although it is preferred that VVs occur between the patient and their usual HF clinician and team, it may be necessary in some cases for clinicians to conduct VVs with colleagues' patients; this will likely vary across healthcare systems.

What is the clinical workflow of a clinic/office practice performing telehealth virtual visits?

VVs can be engineered to approximate traditional in-person visits (**Table 5**). During these visits, various personnel can obtain a history, conduct a medication reconciliation, review allergies, perform a review of systems, and subsequently document patient-reported vital signs. Leveraging VVs toward medication review by video (**Figure 1**) is particularly appealing given the

number of medications that patients with HF take and the associated risk for medication errors and adverse drug events.[20] To do this, clinicians can ask patients to hold pill bottles up to the camera for the clinician to visualize and review. VVs might actually be superior to a usual in-person clinic visit in this regard, since pill bottles are infrequently brought to in-person appointments.

Basic components of the physical exam can be performed via telehealth, especially when patients use high-quality video equipment available on contemporary smartphones and tablets (**Figure 1**). These components may include general appearance, including alertness and orientation, as well as an assessment of volume status by looking for signs of peripheral edema such as leg swelling, and/or remote evaluation of neck veins. Assessment of neck veins is best done with a second person moving the camera position relative to the patient's neck in order to obtain the appropriate angle and lighting. Recent data have demonstrated that assessment of neck veins with video magnification technology correlates with invasively measured right atrial pressure.[21] Assessment of orthopnea and bendopnea may also be done remotely, both of which are associated with elevated ventricular filling pressures.[22, 23] VVs may also permit an assessment of exercise intolerance, for example by asking the patient to walk from room to room or up a flight of stairs. Finally, it is possible to use VVs to examine peripherally inserted central catheter line sites and other cannulae, as well as healing surgical incisions such as pacemaker or ICD implantation sites.

Adjuncts to virtual visits

Several remote monitoring capabilities are already in use for the care of patients with HF and can complement data collected during VVs.[24] The most basic is remote monitoring of weight and blood pressure via electronic scales and blood pressure cuffs. CardioMEMS, a hemodynamic monitor implanted into the pulmonary artery that remotely transmits pulmonary artery pressures, has been shown to reduce hospital readmissions and improve quality of life, and thus may be

used in addition to telehealth visits to guide therapy.[25, 26] Similarly, remote ICD interrogation to assess arrhythmia burden can provide additional information. Whether wearable devices for ambulatory cardiac monitoring such as wristwatches, smartphones, patches, headbands, eye-glasses, necklaces, or vests can be integrated into clinical management provided through VVs is unknown, and warrants future investigation.[27-29]

Advance care planning

VVs provide a unique opportunity to engage patients and caregivers on topics related to advance care planning, which are of heightened importance during the COVID-19 pandemic, especially among higher risk populations. Conducting these conversations while the patient (and their caregivers) are in the comfort of their own homes may provide the optimal setting for these discussions. As the COVID-19 crisis unfolds, issues related to becoming acutely ill may very well be on the minds of many patients with HF. Accordingly, it may be appropriate to discuss care preferences during VVs. Questions that may be routinely incorporated into the discussion include:

- "Have you appointed a health care proxy?—this is a person who would make decisions on your behalf if you were unable to make decisions."
- "Have you completed an advance directive form?"
- "Does your health care proxy and/or family know what your care preferences would be if you were to get sick and could not make decisions for yourself?"
- "Do you have a healthcare power of attorney form?—this is a legal document that gives one person the authority to make health care decisions for you if you are unable to do so."

Pharmacy considerations following a virtual visit

One of the major goals of VVs is to reduce exposure to others who could be potentially infected by the SARS-CoV-2 virus. Consistent with this goal, it is equally important to consider patient strategies for obtaining medications that permit social distancing. Delivery of medications to the patient's home is one method to reduce exposure. Approximately 20% of patients historically use mail delivery pharmacy services, which means the majority of the population will need to navigate this process for the first time during the current public health crisis.[30] National mail-delivery pharmacies may be a long-term solution for many patients, but new patients and/or prescriptions will typically experience a 1-2 week delay before delivery. It may thus be prudent to use independent and chain pharmacies, many of which can deliver medications within their communities on the same or next day. Of note, various pharmacy chains have waived delivery fees during the COVID-19 crisis. For patients unwilling or unable to use these services, selecting a pharmacy location with a drive-up window may provide an alternative solution that permits some degree of social distancing.

Clinicians should consider prescribing a 90-day supply when appropriate and helping patients synchronize all medication refills to a common schedule to reduce the number of trips to a pharmacy; especially now that many of the traditional legal and administrative barriers to these efforts have been removed for COVID-19. Both CMS Part D sponsors and commercial pharmacy benefit managers have relaxed restrictions on early refills and now allow the maximum day supply (most commonly 90 days) for medications to be filled. Additionally, many States have instituted emergency actions to facilitate medication access such as allowing pharmacies to dispense an emergency 30-day supply of chronic, non-controlled medications when patients are awaiting refill authorization from providers. A continually updated list of pharmacy-related state actions impacting medication access sorted by State is available at the National Alliance of State Pharmacy Associations website (https://naspa.us/resource/covid-19-information-from-the-states).

Inpatient use of telehealth

While this statement is primarily focused on leveraging VVs for continued ambulatory care of adults with HF, these principles also apply to the inpatient setting. Given concerns about shortages in personal protective equipment, VVs may be beneficial to clinicians working in the inpatient setting, and have already been implemented by some healthcare systems across the US. Approaches vary but most commonly involve the use of either hospital-provided or the patient's own smartphone or tablet. Software platforms reportedly being used include Apple FaceTime, Cisco Jabber, and Microsoft Team among others, some of which allow multiple team members to connect and conduct virtual rounds together. These visits may be enriched by the use of Bluetooth stethoscopes and/or point-of-care ultrasound technology that can provide valuable information about the physical exam while limiting exposure. Of note, VVs for inpatient care are reimbursable (**Table 3**) and equivalent to in-person hospital service. If the consultant is outside of the hospital and the patient is in the hospital, these inpatient encounters can be billed as an ambulatory telehealth visit.

Future of virtual visits after resolution of the COVID-19 pandemic

COVID-19 has saturated some hospitals with high volumes of patients with respiratory syndromes and respiratory failure, and subsequently forced the medical community to rely on VVs to provide routine care to many patients with chronic medical illnesses like HF. Importantly, survivors will likely require prolonged time for recovery, and it remains unclear where these patients will recover and rehabilitate. At the present time, many rehabilititation and long-term care facilities do not accept patients who were COVID-19 positive, due to concerns about disease transmission. It is therefore possible that some US hospitals will remain at capacity well-beyond the time period of the COVID-19 surge. Additionally, emerging data suggest that at least 20% of COVID-19 positive patients are health care providers, which will stretch the active work force even

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further. Thus, continuing resource-efficient strategies like VVs may be necessary for the near and intermediate future.

It is unclear what the psychological impact of COVID-19 will be on providers and patients, especially among those patients who are at highest risk—which include those with chronic conditions like HF. An important consideration is that, even after the COVID-19 crisis ends, patients may continue to have concerns about in-person office visits and travel, and prefer to continue with a degree of social distancing. As a result, many patients with HF may continue to prefer VVs. Prior to the COVID-19 pandemic, there was little impetus for clinicians to learn or embrace VVs. In the current era, many clinicians have been forced to learn and use VVs. Consequently, as we move beyond the COVID-19 pandemic, clinicians may be more amenable to VVs; in fact, some may even prefer them.

With these expectations in mind we believe that VV models of care will become the norm in the US healthcare system moving forward, especially for patients with HF. Many patients with HF, especially older adults with disabilities, and those living in rural communities often have difficulty attending in-person visits due to very poor exercise tolerance, inadquate transportation, and difficulty transporting oxgyen among other barriers. For these patients VVs are certainly more convenient, and likewise for their caregivers, who sometimes have to take off work to bring their family member to the appointment.

Policy and reimbursement practices developed in response to the COVID-19 public health emergency and discussed in this document may remain and further evolve to accommodate continued use of VVs. We suspect that it is possible if not likely that CMS will continue incenting VVs, though likely at lower reimbursement rates than in-person visits. Distance health technologies that align with VVs, including biosensing wearables[28, 31] and other diagnostic tools, may be increasingly adopted. Whether the use of VVs can improve adherence, decrease no-show rates, decrease office overhead, improve transitions of care from the inpatient to outpatient setting, or prevent ER visits and hospital admissions/readmissions for patients with HF is yet

unknown. This underscores the need to collect outcomes data. While frightening to consider, we will be better able to pivot when the next pandemic comes along with VV systems in place. Regardless, the COVID-19 pandemic has generated an important opportunity to learn about delivering HF care in a different way that should be fully embraced well beyond the current crisis.

Disclosures

No relevant conflicts of interest.

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Figure 1. Screen shots from video virtual visits between a HF cardiologist (right lower hand corner) and a patient. (A.) Medication review by video. (B.) Examination of ankles showing sock markings without edema, and (C.) neck examination.
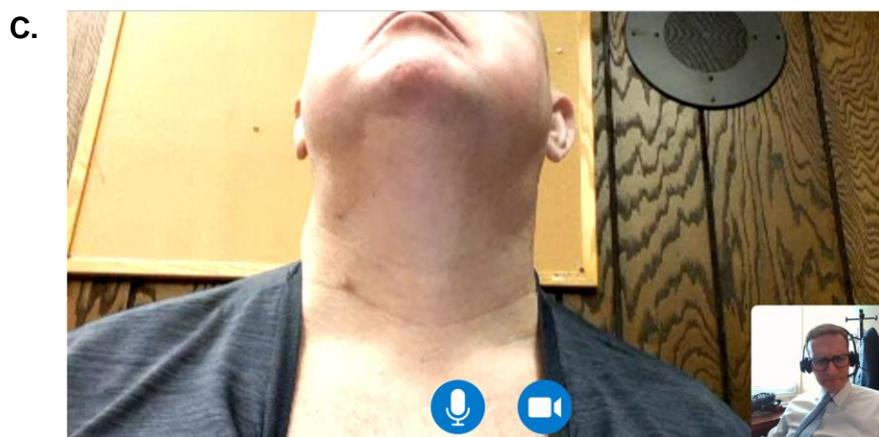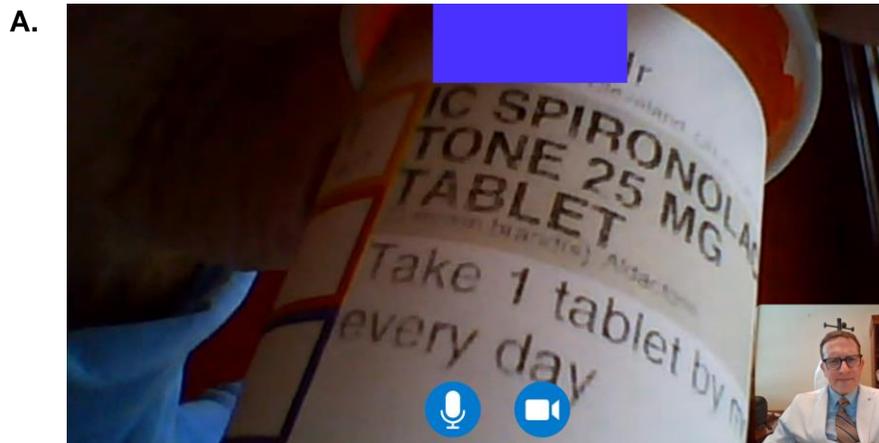
A.

B.

C.

Table 1. Benefits and value of virtual visits.

Group	Potential benefits
Patient	• Provide access • Receive medical advice • Reduce in-person exposure to SARS-CoV-2 • Reduce distress • Involve caregivers
Clinician	• Serve patients • Reduce in-person exposure to SARS-CoV-2 • Maintain connection between patient and provider
Healthcare systems	• Re-allocate resources • Generate revenue • Support research efforts

Table 2. Telehealth-related policy changes in the era of COVID-19.

Topic	Key policy changes: COVID-19 pandemic	Implications for virtual visits
Licensing	HHS waived requirement for health care professionals to hold license in State which they provide services if they have an equivalent license from another state. HHS asked States to waive local licensing requirements, with final decision made at State level.	Potentially allows to practice medicine via virtual visits across State lines.
Privacy	HHS suspended HIPAA rules.	Allows use of virtual visit platforms previously deemed not HIPAA compliant.
Location of patient	CMS waived rural and site limitations for telehealth interactions.	Allows clinicians to be reimbursed for telehealth services regardless of patient's location.
Prior existing relationship	CMS waived requirement that telehealth services can only be provided to a clinician's established patients.	Clinicians can see new patients by telehealth.
Prescription	DEA relaxed rules related to prescription of controlled-substances by telehealth.	Clinicians can prescribe controlled-substances in setting of a virtual visit.

CMS, Centers for Medicare & Medicaid Services; DEA, Drug Enforcement Administration; HHS, US Department of Health & Human Services; HIPPA, Health Insurance Portability and Accountability Act

Table 3. Billing codes for virtual visits (also called "Telehealth visits" by the Centers for Medicare & Medicaid Services).

Description	Code and Modifier
Office or other outpatient visit for the evaluation and management of a new patient	CPT Code 99201-99205* Place of service 02 for Telehealth (Medicare), or, Modifier GT (Medicare/Medicaid) Modifier 95 (Commercial payers)
Office or other outpatient visit for the evaluation and management of an established patient	CPT Code 99211-99215* Place of service 02 for Telehealth (Medicare), or, Modifier GT (Medicare/Medicaid) Modifier 95 (Commercial payers)
Telehealth consultations, emergency department or initial inpatient	G0425 – G0427
Follow-up inpatient telehealth consultations furnished to beneficiaries in hospitals or skilled nursing facilities	G0406 – G0408

*Choice of CPT code depends on whether the provider elects to use time-based coding versus component-based coding. For example, a provider using time-based coding for a Medicare beneficiary seen by VV for 15 minutes would document the time spent in their note, and then may choose CPT code 99213 with modifier GT, if otherwise appropriate to that encounter.

Table 4. Virtual visit platforms utilized during COVID-19 public health emergency.

	Name	Notes
Consumer apps	Apple FaceTime Facebook Messenger video chat Google Hangouts video Zoom Skype	• Popular applications that allow video chats • Allowed during COVID-19 crisis, but less secure • Providers are encouraged to notify patients that these third-party applications may introduce privacy risks • Providers should enable all available encryption and privacy modes when using • Use may expose provider's personal information (email account, telephone number, etc.)
Specialized technology platforms	Skype for Business / Microsoft Teams Updox VSee Zoom for Healthcare Doxy.me Google G Suite Hangouts Meet Cisco Webex Meetings / Webex Teams Amazon Chime GoToMeeting Spruce Health Care Messenger American Well MDLive BlueJeans for Healthcare Doximity	• Partial list of HIPAA compliant technology platforms • Under normal conditions HIPAA business associate agreements for provision of telehealth services are required, but this was waved as part of COVID-19 crisis • Variability in cost and functionality

HIPAA, Health Insurance Portability and Accountability Act

Table 5. Preparations for a successful virtual visit.

Before the VV	• Determine which platform and technology will be used for the VV, and ensure that your patient can engage. • Ensure that the patient has consented for VV (verbal or written). • Position yourself centered in front of your webcam, smartphone or tablet. Adjust lighting in the room. • Confirm that video and audio are functioning appropriately. • Consider having your EHR open for live review during the VV, either on another screen or using split screen configuration. • Follow VV etiquette: conduct visit in a private professional appearing space, make sure there is no background noise or distractions, mute your audio connection when not speaking. • Collaborate with support staff who may contact patients in advance to obtain vital signs, perform medication review, and confirm time the clinician will call. This will vary by practice.
During the VV	• Confirm that patient's audio and video connection is established. • Maintain visual eye contact. • Ensure patient's readiness to begin. If distractions are noted, ask to minimize them. • Determine if this is their first experience with VV and acknowledge uneasiness if any. Let the patient know they can interrupt at any time, if they have issues with the platform, or the visit in any way • Guide the patient through maneuvering the camera for a physical examination. • Address need for laboratory studies. • Use teach-back and ask the patient to write down important instructions, medication changes, and their follow up plan. Reinforce usual self-care. • End the visit with asking the patient how the experience was for them, what worked well, what could be better and use this for planning future visits.
After the VV	• Document in the EHR: VV performed with a VV attestation and time spent, nature of the visit and who was present. Consider a specific designation for the note (e.g., Heart Failure Virtual Visit). • Email, mail, or message patient any medication updates or specific instructions for care. • Arrange for laboratory testing, if needed. • Bill for the encounter. • Plan for the next visit.