Telemedicine Implementation during COVID-19: Experience and Recommendations

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The SARS Coronavirus-2 viral pandemic is sweeping through our communities in California, and the worst is yet to come. Mandatory social distancing and an acute shortage of personal protective equipment have led many medical providers to close clinics and to curtail necessary but non-emergency surgical and interventional procedures, which will create collateral morbidity to be added to the unprecedented numbers of victims of this pandemic. Telemedicine offers both clinics and inpatient physicians a method to continue to "see" patients and provide some degree of ongoing management of new and existing problems, which, while not ideal in scope and comprehensiveness, is still substantially better than no care at all. I hope in this column to describe the process of how this was instituted in our practice and my institution, and to offer a few commonsense tips for success.

The Pediatric Pain Management Clinic at Stanford Children's Health has been making use of telemedicine or telehealth for more than 2 years in order to provide both medical and mental health follow-up care to patients living at distance from Palo Alto. Approximately 10% of our visits were via telemedicine prior to March 2020.

On March 6, 2020 Stanford Healthcare announced that the first Stanford physician tested positive for COVID-19, an outpatient clinic physician. It became clear to me that it was imperative to immediately move our clinic to a 100% telemedicine basis in order to protect not only our providers and staff but also our patients from possible exposure to COVID-19 in our small waiting room and

examination rooms. Further, many of our pediatric patients travel to our pain clinic with a grandparent who accompanies them in order to allow the child's working parents to remain at their places of employment. Thus, it was also imperative not to expose these older and high-risk caretakers to this potentially life-threatening infection.

Twenty-four hours after making this decision and notifying our clinic administration, clinic staff worked all weekend telephoning the next week's patients to notify them of this change, which was almost unanimously met with relief and gratitude.

Because our staff and providers were previously trained and approved for telemedicine by the institution, this transition was as smooth and efficient as flipping a switch.

Telemedicine from Home. Additionally, our providers preferred to conduct their clinics from home offices rather than travel to the physical clinic to limit their exposure, and it was necessary for our hospital IT department to conduct a video conference with each provider to confirm their home had adequate bandwidth and security. That task was accomplished the very next business day with remarkable alacrity - because we were the first at the well.

The remainder of the institutions, Stanford Children's Health and Stanford Healthcare, soon came to the same realization but because this represented moving dozens of clinics and hundreds of providers to the telemedicine platform, the transition took time. IT specialists worked around the clock and through the weekends to transform clinics, train providers, and certify home networks. The transformation was enormous: in the 29 days of February there were a total of 1,000 telemedicine visits at Stanford, but in the first week of April there were 3,000 per day, which equates to around 60,000 per month.

Telemedicine New Patient Evaluations: Our first challenge was to have a method for a multidisciplinary evaluation with as many as three providers, one parent and one patient to interact simultaneously, and Zoom was the only platform suitable for this. Stanford EPIC has a Telehealth video function, but one that only allows for a 1:1 interaction between one provider and one patient. Therefore, for every new patient appointment our clinic staff created three Zoom meetings: one for all participants to use for obtaining the history as a group, one for the providers alone to use to huddle before and after the evaluation, and one for our psychologist to use privately with the patient for a mental health assessment.

Obviously, a full physical examination (PE) is impossible on video, but it is surprising what one can accomplish. For example, a PE for a typical new headache patient consultation at LPCH is usually redundant. Headache patients are generally

referred to us by a neurologist who has performed several examinations and has already obtained imaging. Nevertheless, it is still possible to evaluate cranial nerve function, rule out pronator drift and involuntary movements, observe muscle bulk and range of motion, assess cerebellar function and gait, and test lower extremity strength with floor squats and heel walks! The PE for CRPS is similarly feasible by observing the color of the affected limb on video, gait if it is the lower extremity, muscle bulk, and to ask a parent to demonstrate the presence of allodynia by touching the limb. It takes some creativity and flexibility on the part of the provider and acceptance and consent on the part of the patient but in many if not most cases, an adequate physical examination may be obtained.

Telemedicine Follow-up Appointments: Providing follow-up pain management visits by telemedicine is not a difficult task. The majority of our follow-up care involves medication management and psychotherapy, and both can be achieved by telemedicine.

For both new and follow-up patients, there are going to be occasions in which there is no substitute for a hands-on physical examination, and if a provider believes that such is indicated and is sufficiently urgent, we will of course see the patient in the clinic. After one month of providing telemedicine appointments, this has not yet been necessary.

Inpatient Evaluations: Our service also provides inpatient consultations and pain management to hospitalized children and young adults. We are adhering to hospital guidelines that limit team visits in patient rooms to one person/team/day. We next invite the parent of our patient to step out of the patient's room to allow the entire team to speak with the parent. If it is desirable for another team member to speak personally with the patient, we use telemedicine from a device outside the room to a device inside the room.

Technology and HIPAA: The EPIC electronic medical record currently in use at Stanford had a Telehealth module built in and is both secure and HIPAA compliant. This was usually used by us prior to the COVID-19 pandemic. However, we have found that its bandwidth is inadequate, especially when multiple clinics use EPIC telehealth simultaneously; and as mentioned above EPIC does not allow a multi-user experience. We have therefore turned to Zoom, using a secure Stanford server and end-to-end encryption to maintain HIPAA compliance.

You may then ask how one can initiate telehealth if one does not have IT support and university infrastructure for secure encrypted internet video. The answer is, the Department of Health and Human Services (HHS) announced that in order to facilitate wide use of telemedicine during the pandemic, all HIPAA enforcement is waived indefinitely, and that almost any video platform would be acceptable including FaceTime, Skype, Zoom, WebEx, Facebook Messenger video

chat, and Google Hangouts video. Doximity Dialer has also created encrypted and HIPAA compliant video platform especially for clinicians. This Notice, reminds practitioners that some video links such as Facebook Live, Twitch, TikTok, and similar video communication applications are public facing, and should not be used in the provision of telemedicine by covered health care providers.[1]

Billing and Reimbursement: In California, both Medi-Cal and private insurers must reimburse for telemedicine care provided by live video. In October 2019 Governor Newsom signed into law AB 744, which mandates that payers reimburse healthcare providers for telehealth services "on the same basis and to the same extent" as they cover in-person services, making California one of roughly a dozen states to require payment parity. As of January 2020 Aetna became the last holdout insurer to come into compliance with this law.

Conventional E&M billing codes are based upon completing key elements of the medical history, physical examination and case planning, and appropriate documentation of the same. Because any telemedicine visit cannot check the boxes of a thorough physical examination, one may still bill the usual codes based upon face to face time spent with the patient (and their parent). There are no special codes for

[1] https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html

telemedicine but place a GT modifier in front of the CPT codes you typically use for in person services.

Telemedicine sessions may be originated from any site including the home of the provider to any site including the home of the patient according to California law. However, Medicaid places geographic restrictions on the origin of the telehealth session, which is to say the provider's location. For details see http://caltrc.org/wp-content/uploads/2019/04/Reimbursement-Guide-May-2019.pdf.

Consent: California law states that the provider at the originating site must obtain and document oral or written consent before performing any telemedicine services (California Health & Safety Code Sec. 2290.5). The following is the text that I place at the top of every clinic note in which services are provided by telemedicine:

> "This consultation was performed with the use of secure and encrypted videoconferencing equipment with a trained telehealth presenter. The participating parent understands that the reason for the telehealth evaluation was to protect patients, families and staff during the SARS-Coronavirus-2 epidemic and that the evaluation precluded a personal physical examination; this might be recommended at the discretion of the provider. The alternative to a telehealth evaluation at this time would be a personal conventional evaluation weeks or months from now. The potential risks and benefits of the telehealth session were

discussed with the patient and/or family, who then verbally consented to participate."

Tips, Do's and Don'ts:

- Remember that even though you may be initiating the telemedicine session from your home, you should appear professional. Athletic clothes, unshaven faces, unkempt hair, etc. are no more appropriate on video with a patient than in the clinic.

- Conduct your video session in a quiet space away from loud housemates and barking dogs. Keep the windows closed to block the noise of traffic, sirens, leaf blowers, and neighborhood children playing Marco Polo.

- Think about the background the patient will see behind you. A bedroom, kitchen or untidy space is also unprofessional. Best is a neutrally colored wall, perhaps with a floor plant or drapery. If you don't have such a background, resist the temptation to use a Zoom virtual background - save those for family and friend Zoom meetings. Instead, one can purchase neutral or color video backdrops and stands for about $50 from a photo supplier or Amazon.

- Doximity Dialer Video allows you to call or conduct video interviews from your phone, using your office or other preset number. Encrypted and private:

https://support.doximity.com/hc/en-us/sections/360008137653-Doximity-Dialer-Video-and-other-features

- On the other hand, your patient will probably not think about their background and you will likely have the opportunity to peer into your patient's home, which may provide some useful social information to add to your database.

- Think about lighting and camera angles. Your computer or phone camera should be higher than your eyes and pointed down - nobody wants to look into your nostrils. If you are using a laptop or iPad, place it upon a stack of books. Similarly, lighting should come from in front of and from below your face. Lighting from above, such as a ceiling fixture, will cast unattractive shadows on your face. One trick is to place a lamp adjacent to your computer screen, and white paper on the table in front of you to reflect its light upward.

- If using Zoom, go into Settings and switch on "Touch Up My Appearance."

- If your patient's bandwidth is not optimal and they are using a smart phone or pad, ask them to switch to cellular communication instead of Wi-Fi. As a last resort you can switch audio to phones while you use the computer only for video.

- Mute your computer's microphone while you are not talking. On Zoom, if you mute the microphone you need only press and hold the space bar while you talk to unmute it, rather than continually turning mute on and off.

Telemedicine offers providers and patients a method for continuing medical care in this unprecedented age. Whether it will remain an alternative for routine new patient and follow-up care is to be seen, but I suspect that both physicians and patients, once familiar with the technology, will opt to use it more in the future than it has been utilized in the past.