The realities of the novel coronavirus pandemic are accelerating the adoption of telemedicine around the country. Many institutions are either trying telemedicine for the first time or rapidly expanding their telemedicine programs. In this environment, MDA Care Center Directors and clinicians have expressed significant interest in learning about telemedicine experiences and best practices. On April 27, 2020, MDA held a webinar called “Ask the Experts — Telemedicine Best Practices” to address this need.

In the live virtual session, Kristin Stephenson, Chief Advocacy & Care Services Officer at MDA, moderated a panel of seven clinicians who have been involved in establishing or expanding the use of telemedicine at their institutions. Panelists shared how they’re delivering care through telemedicine, as well how they’re performing evaluations and assessments virtually, and they answered questions from the audience.

“Ask the Experts — Telemedicine Best Practices” Panelists:
• Barry Byrne, MD, PhD, University of Florida Health
• Kara Godwin, MSN, ARNP, CPNP-PC, University of Florida Health
• Ali Habib, MD, University of California, Irvine Health
• Matthew Harms, MD, Columbia University Medical Center
• Catherine Lomen-Hoerth, MD, PhD, University of California San Francisco
• Rabia Malik, MD, Rush University Medical Center
• Tahsee Mozaffar, MD, University of California, Irvine Health

Key Takeaway #1: Set up a HIPAA-compliant telemedicine practice.

Our current situation presents an incredible opportunity to practice telemedicine. Because restrictions have been relaxed, providers can consult with patients across state lines on common video platforms like Zoom, Skype, WhatsApp, and FaceTime. Providers can even conduct visits virtually that formerly had to be face to face, such as evaluations for power wheelchairs.

However, the panelists cautioned that while restrictions are currently lax, once the public health emergency passes, many of the HIPAA and other requirements may return, so it makes sense to establish telemedicine practices that can be sustained beyond the crisis. Dr. Malik cautioned that scheduling a visit as a telemedicine visit does not qualify as consent. She urged providers to use two factors to identify a patient’s identity — their name and date of birth, for instance — and to document consent in the notes for each visit.

While most panelists reported that their institutions use Zoom as their video platform, there were two different HIPAA-compliant approaches to setting up Zoom: within the patient medical records system and outside of it.

Using Zoom within the patient medical records system: Dr. Mozaffar reported that at UC Irvine Health, Zoom operates within Epic. Patients must be registered with MyChart to access telemedicine. This was a limiting factor in the beginning, because only about 60% of patients were registered with MyChart, so the institution
made a push to get more patients registered. One advantage of operating Zoom through Epic is that the consent process and some of the questions that are specific to telemedicine visits are automatically covered. Also, appointment reminders and information about preparing for and accessing a telemedicine visit can be delivered to patients automatically through the system.

Using Zoom outside of the patient medical records system: Dr. Lomen-Hoerth and Dr. Harms both reported that their institutions operate Zoom outside of the medical records system. They reported that this allows a great deal of flexibility, and they have achieved HIPAA compliance by using certain features in Zoom that allow them to control when patients are admitted to virtual exam rooms and restrict patients from accessing other virtual rooms. Their support staff devotes some time to contacting patients to make sure they have the correct link for their visit and troubleshooting any problems with logging on.

Regardless of the video platform used, panelists reported similar methods of conducting multidisciplinary clinic visits:

- Each patient is assigned a unique videoconference. This videoconference serves as a virtual exam room, where the patient can stay and providers can circulate through, as they would in an in-person multidisciplinary clinic visit.
- In some cases, the patient is provided with a direct link to their virtual exam room, while in others, patients log into a virtual waiting room, then a staff member uses a breakout room feature to admit them to a virtual exam room.
- A nurse coordinator or other staff member maintains a shared spreadsheet, such as a Google sheet, which tracks in real time patients' virtual exam rooms and the flow of providers through them.
- Providers and staff members must use multiple devices at once to keep track of everything. Often, they use their computers for videoconferences, while accessing the tracking spreadsheet and messaging team members on a smartphone or tablet.

Dr. Lomen-Hoerth emphasized the importance of holding team meetings to discuss cases and coordinate care, especially now that medical teams are scattered, mostly working out of their own homes. On multidisciplinary clinic days, her team meets three times — at the start of clinic, midday, and end of day — in a separate virtual meeting room that is set up exclusively for team huddles.

Key Takeaway #2: Many exams and assessments can be conducted virtually.
While panelists acknowledged the challenges of learning new ways to perform physical examinations without physical contact, some panelists were pleasantly surprised by how well virtual examinations and assessments can work.

Dr. Habib noted that his clinic’s physical therapist has been especially pleased with virtual visits, because seeing patients in their home environments enables him to see another side of the patients’ lives and potentially provide better advice.

Dr. Harms noted that to date, his team has not received any pushback from insurance companies on starting noninvasive ventilation, getting qualification for cough assist, or evaluations for power wheelchairs and augmentative communication devices when assessments and exams are performed virtually.

Dr. Malik provided specific tips for performing virtual neuromuscular exams, culled from her experience and research:

- It’s helpful to have a caregiver or loved one with the patient to help operate the camera or position the patient. Certain parts of an exam are best noted either zoomed out to see the whole patient or zoomed in on a specific body part.
- You can complete all the components of the mental status assessment virtually: orientation, comprehension, memory, and language.
- The MoCA BLIND test for cognitive health assessment eliminates the visual elements of the full test.
- For a cranial nerve exam, you’ll want to zoom in and look at the eyes more carefully.
- When assessing for facial movements, there are some subtleties that you cannot perform with facial strength, but large movements are easy to assess.
- For the motor component of the exam, you can comment on presence or absence of tremor.
- Muscle bulk can be assessed to some extent. Tone is difficult to assess virtually, but one tip is to have the patient flick their wrist as if they’re shaking water off.
- For the strength exam, check for pronator drift. You can do forearm rolling. Try slow finger taps to assess for finger flexor weakness.
For the leg strength assessment, have the patient try to pull themselves up in bed or stand from a chair with arms crossed. Have them stand on one leg. You can also check for lower extremity drift.

A sensory exam is possible to some extent by asking the patient to draw a line around the area of numbness.

Bradykinesia is easy to check virtually. You can check pronating supination of the hands, and you can check heel or toe taps.

For the cerebellar exam, one strategy is to have the patient extend their arm back and forth between their own nose and their contralateral finger. That can be helpful to assess for dysmetria, but it may not work for patients with arm weakness.

For gait testing, see if patients can stand on their toes and heels, tandem walk, and perform the Romberg test.

Dr. Malik notes that if after performing a virtual exam, you don’t think you can make an accurate assessment or diagnosis, then you should recognize this limitation and document it as such.

Key Takeaway #3: There are advantages and drawbacks to telemedicine.

From the patient perspective, telemedicine offers a distinct advantage in terms of convenience. According to panelists, many patients have asked if they can continue virtual visits to avoid the stress involved with coming to clinic, including travel and parking expenses. At some clinics, patients may have to travel two hours or more for a multidisciplinary clinic visit that can last hours. Dr. Byrne pointed out that for this mobility-challenged patient population, that represents a significant burden.

The panelists all found that telemedicine clinic days move more quickly than in-person clinic days. On average, patients waited less time between providers and total visit time decreased, allowing providers to see more patients in the same amount of time.

Dr. Harms’ team has been taking advantage of this efficiency to offer more in-depth genetic counseling. They give patients the option to stay in their virtual exam room after the multidisciplinary visit is complete, and a genetic counselor circles back with them, either to offer genetic counseling on the spot or to schedule another virtual appointment for genetic counseling.

Dr. Harms has also seen advantages in the ease of involving interpreters in patient visits. His team provides the interpreter with the patient’s unique Zoom link, and the interpreter logs into the patient’s virtual exam room. This has been a smoother process than calling phone interpreters or scheduling in-person interpreters, and it has led to better care for patients whose first language is not English.

Panelists have found that telemedicine allows them to get trainees, including medical students and residents, more involved in patient visits. Dr. Lomen-Hoerth’s team is assigning one trainee to each patient, and that trainee participates in the whole multidisciplinary team visit and does their part in between providers.

Of course, there are challenges and limitations to telemedicine. Technical issues can make virtual visits difficult. If a patient has insufficient bandwidth or poor video or audio quality, it can create frustration on both ends. Some patients have trouble logging into the system, and panelists noted that in some cases, support staff have spent a significant amount of time working with patients to prepare them for the virtual visit or resolve technical issues. Having clinical coordinators reach out in advance to troubleshoot potential technical difficulties is one way to mitigate such occurrences.

In addition, there currently is no way to perform respiratory assessments via video.

Key Takeaway #4: Telemedicine is here to stay.

Many institutions were moving toward telehealth even before the pandemic started, and the necessities of staying at home and social distancing greatly accelerated that trend.

All panelists agreed that telemedicine will continue being practiced after the pandemic passes. Regulations that are currently relaxed may be reinstated once the national emergency is over, but many institutions are beginning to see that they can make telehealth work even with HIPAA and other regulations in place.

Many institutions are looking into the possibility of colicensing in adjacent states and pushing for reciprocal agreements, so telehealth can continue to be an option for patients looking for specialty care across state lines.

Access the telemedicine resources page on mda.org for additional resources and information.