Please stand by for realtime captions.

Good morning everyone will be starting in just a minute. Okay, Dr. Robeck would you like to start your WebCam?

Okay. Good morning everyone welcome to Covid-19 Pain and Telehealth. First, I like to mention a couple of housekeeping items. This session is being recorded. If you have not already done so, please mute your microphone until the Q&A portion of the workshop. We have recorded the session and posted them on the Pain Care Skills Training website, along with the questions that must be completed and returned to receive credit. This workshop agenda and presentation as well as the sign in sheet are located in the files pod. Please remember to download, sign, and return them no later than September 9th. I have placed the emails in the chat pod, where you are to return the sign in sheet. In addition, screenshots of your names will be taken throughout the workshop to confirm your attendance is documentation for CME/CNE. For the Q&A portion, your microphones and WebCams will be enabled, this may just take a moment. If you have questions during Q&A, please place them in the chat box. The week following the training you will receive an email survey evaluation. Your answers are valuable to the future funding and planning of the Pain Care Skills Training. In addition to serving you will also receive a CME survey to complete within the website. The survey from our program and the survey from CME are two different things. For CME/CNE, it can take anywhere from 2 to 4 weeks. You will receive an email for the system to complete the survey. You'll need to complete the survey and CME, in order to receive your certificate, please make sure you do this. At any time if you're having trouble viewing the slide presentations, please exit out and come back in. Worst-case you can always download the presentations from the files pod and follow along on your computer. Now, I would like to turn it over to Dr. Ilene Robeck.

Welcome everybody! we certainly are in an unprecedented situation, where pain skills training is not completely virtual. Likewise, we have seen many clinical situations that we are used to working with face-to-face, converted to virtual options. Clearly over the next year or two, we will wind up seeing Covid-19 being increasingly more manageable, but we may find ourselves in situations in which the virtual visit actually is being utilized more and more often, so let's talk a little bit about that. I want this workshop to be more innovative and communicative than just a deck, I'm going to keep an eye on the chat and as I am presenting, if there is something you want to talk about, a topic you want to talk about, please let me know. I will try to incorporate that in the presentation. I am going to try to give everyone a 15 minute break at the hour on every hour, and we will resume at half past the hour for each section.

Let's just get started and see how we can work this. We want to really be able to understand throughout this entire presentation how we can maximize the experience of telehealth for our patient's best interest. When it comes to pain, I like the expression, Einstein was right if you always do what you always did, you always get what you always got, and certainly has a long way to go in terms of understanding the basics of pain care in how that is an improvement for our patients when we get to

non-opioid formulas logical and not from logical approaches, and pain care has changed dramatically over the years.

To me, effective pain care equals movement and cognitive approaches squared. The positive approaches are not only changes in lifestyle, but changes in brain or plasticity and we will talk about that. We will talk about medical problems and lifestyles and counseling, TLC. Telehealth medicine is the use of medical information that is exchanged from one site to another through electronic communications to improve patient health. Light and simple, there are a lot of different ways we can do that. It also turns out that sitting at computers all day is probably not the best thing for pain and we have not gotten to a period of real passivity in terms of getting out and doing things, walking around, keeping physically active. We need to incorporate some of that exacerbation related to Covid-19, into our discussions with patients. And look for safe but innovative ways for people to get off the couch or chairs. We need to have continuous innovation related to pain care. We are seeing increasing advancement of clinical records and a variety of things. We also know that we have challenges in terms of our workforce during this epidemic and we need to be able to possibly shift areas were the need is greater amount relative to the ratio of healthcare professionals, to patients who need care and to be able to see people in various places throughout the country, and of course, the VOD has that problem throughout the world. We can have a lot of different ways that we can communicate, clinician to clinician, clinician to patient, and also the ability to use our personal devices, our phones and even our smart watches in order to be able to help patients. So, what are our options is clinician to clinician? Webinars, monthly case webinars, one on addiction and one on pain, where everyone is welcome to bring their cases to discussion, secure email, Econsults, where the consult is sent to a particular specialist with a menu of options. Video discussions, phone communications, there is a variety of them. We also need to intersect the public and private sector needs, where we have combining these that we may see patients sometimes seen in the private sectors, as well as the public sector and we want to be able to provide leadership, understand what those reimbursement challenges are in the private sector, so we can incorporate gaps for that.

We have license issues, state to state him a liability and just a learning curve for us that we need to be able to adapt to and accommodate to. The other thing that has happened, people feel like the world is temporarily closed and the stressors related to that closure, albeit now seeming to decrease a little bit, but for many of our higher risk patients, that closure is quite real for many of our patients who have high risk relatives, that risk is quite real and the extra stress that is related to that, are also going to exacerbate our ability to take care of patients with chronic pain. Even acute pain. We do have a lot of advantages of telehealth and virtual pain care options. It is easier to access treat mint, because people can access treatment in real-time wherever they happen to be. We know from even before the pandemic that patients really like telehealth, the like the ability to be able to get care from the confines of their home or their workplace, or place that is convenient for them. There is much data that shows, there is improved treatment effectiveness, and that we are seeing many, many studies that

demonstrate that telehealth has been as effective or more effective than virtual options. We have also seen telehealth options that have remarkably decreased opioid use.

When I was working for the VA, I did telehealth throughout the country for patients at high risk of an opioid event, and enabled us to work with patients who otherwise could not get to the clinic and it increased our ability to have more frequent follow-up we also see that the ability to follow-up more easily, is more longer-lasting of results and better compliance and adherence to treatment plans. There is also mental health benefits to be able to have that ease of communications about the changes in how people are doing, in day-to-day lives. There is a better understanding of the patient environment. We can hear what is going on, we can see what options they have to be able to communicate. We have the ability to be able to better communicate with families, significant others and caregivers. This ability to follow-up more easily, cannot be overstated. It means that subtle changes, or even big changes in a patient experienced day-to-day life, stressors, reaction to changes in therapy, are just an email, a phone call, a quick video visit away. We can also hear from the patient, about feedback related to very, very, day-to-day things that may have a great impact on their pain care. So, we need to think a little outside the box. Here is a situation in which looking at back pain, we can make a big difference in terms of back pain. We know it is a very common problem. Engagement and leisure of physical activity, associated with lower recurrence and the prognosis and how potentially reducing clears, care seeking, we now see how much people are seated at home during the endemic, and in this particular study the plan was to be able to look at better options in terms of intervening in that number in the intervention group we received physical activity booklet, and 12 telephone-based health coaching sessions.

The intervention was supported by an Internet-based application and activity tracker, with a Fitbit and the control group received the physical activity information booklet and advised to stay active. We saw that the intervention group did substantially better than the control group did so adding different innovative ways to work with patients from, with a virtual perspective, it makes a big difference. This is an education and home exercise supported behavior change through SMS on people with arthritis. This was a, looking at once again, exercise program and Internet delivered intervention had the potential to prove access to evidence-based exercise treatment short messaging, SMS, also made a big difference, texting. So clearly, we now can start to look at more and more, where these advantages are starting to impact us in terms of our day-to-day life right now. We are going to wind up seeing hybrid approaches, where we may see one face-to-face visit but then multiple follow-up visits virtually. There are some patients that make it exclusive virtual follow-up visits. We will have a better understanding of what works best as we study this overtime. So, this is a work in progress, looking at me education, a control website containing exercise information, or a combined impact and we are looking at for measures, so these are studies that are ongoing. This is an app based self-acupuncture for women with menstrual pain, compared with usual care. Demonstrating that there are ways that you could use acupressure and other impacts of these complementary approaches, related to better pain care. Getting

telemedicine set up is really in involving resource and we really are learning more and more about how to set these up and how to coach patients. I think this is the most challenging thing that I find when we do one-to-one tutorials with patients, it makes a big difference. So patients who are new to telephone medicine, telemedicine, it sometimes help to get a contact who can service estate technological he also, someone that is in for the facility and someone we can find that a family member can also be with her mission, a great contact as well. When resources are allowed, the volunteer restart for a technical liaison for care approaches. Ensure that the liaison is available during the scheduled visit. Similar to in person clinical appointments, sitting expeditions with patients at the clinicians, they will sometimes run late, have a contingency plan if he meeting does not start at the scheduled time and consider that a patient needs to be seen in person rather than video, but unlike a face-to-face visit, if you are running late, that patient is not sitting idly in a waiting room, you can create a mechanism where that you can text, or call, or communicate with that patient, to come to the appointment at the time that is going to work best.

So, it is important also to think about a place that is quiet, private, good lighting number choose a space with a professional, neutral, and not cluttered background. Is a laptop, or desktop computer whenever possible, avoid using a handheld smartphone which can be distracting, or even create some unwanted symptoms as the phone moves around. For many of our patients, we have to work with what they have, phone or tablet, or a laptop, or a desktop. For us we would like to create an environment, where we house that computer with us. Look at the camera, not your electronic device if you can, during much of the visit and inclusion, the person, where they are sitting, reassure them that the conversation is private. Ask the patient to do the same thing look for unique opportunities to learn more about patients by telemedicine using the technology created, really understand what is going on in their environment on many platforms, multiple family members can participate in the visit from separate locations. They way of example, ask for a tour of the patient harm that seems appropriate. Their pets virtually and have them share family photographs. I am hearing a bit of background noise, is that coming from me or someone in the room? Let me try again, otherwise I will switch my headphones.

I think you are fine, that was just from, just some feedback, I think.

Thank you.

The ability to learn about the environment, can be very, very important in terms of understanding with that patient, they have that positive reinforcement and reinforcement, with it may be. You can get more accurate reviews by having a patient hold of each medication to the camera, and brainstorm what parts of the physical examination can be performed by video and it is surprising how much is possible, we are getting and more technology related to what you can't do virtually. Pay close attention to subtle comments made by patients and caregivers and their body language, and a clinician should be as, asking clarifying questions to be sure if they heard the patient correctly or

having difficulty interpreting buddy lingers by video. Many clinicians know that tele-visits are shorter and more focused than in person visits. That is held by the fact that you know a follow-up visit is much easier, so you do not have to get every single thing into one visit. It sometimes feels overwhelming to the patient, caregivers, and families. It is also important to say, to really acknowledge our current situation. I know that we are really facing scary, uncertain times, how your spirits, what do you do? What are you doing? How are things going, relative to last week, last month, what are your plans for creating the current normal for yourself and your family? Let's also remember that the more we learn about pain, the more we know that neural plasticity, is a part in parcel of chronic pain, and the brain sends and receives information to pain, this is a two ways Street. It changes constantly and from a website called neural plastics, by Golden and Moscowitz, we see that what they say is, what we fire, we were, chronic pain is where to turn pain on even if the injury seems excited. This is important to discuss with patients and important for us to remember ourselves as we move away from that buyout, to a bio cycle approach to pain, and certainly telemedicine helps us with that. When we make them, we break them, we break them can we make them, developing multiple strategies for counter stimulation of the brain, providing ways to create new pathways, to turn down the painful perception and deconditioned brains, like deconditioning muscles.

I am not going to read this list; the point of the list is there are a variety of non-formal options that improve the positive impact of neural plasticity. We want to be able to brainstorm with people, what can be done in terms of touch, the senses, music, approaches to mindfulness, meditative approaches, the whole variety of ways that we can approach this wished patients, even during the pandemic. Using visualization, we know it is important. We know that the frontal lobe processes -- By visualizing the pain, constantly, it is possible to prevent that part of the brain from processing pain. There has been experiments from this, one was in unit neuroscience, the person doing 10 hand movements, look at hands, while doing 10 hand movements, then through binoculars, without vocation, and with binoculars, with magnification but they found that the pain increased when the hands were magnified, and decrease when smaller. This is an interesting study, were in England, there is a fair to demonstrate the use of a mirage box my children put their hand in the box and the camera displayed distorted images of their hands on a larger screen. The children tugged on their fingers and they were stretched to 3 or 4 times the normal size. A chosen grandmother chart the box, she had osteoarthritis, and when she stretched her fingers, her pain went away. This study was replicated in the more clinical study.

We know that there are different things that we can do cognitively that will greatly impact the pain response. We have seen this demonstrated many times, those that respond to placebos, decreased activation of impacted brain areas, acute painful stimuli, such as shocks. There is actually brain changes that go on with placebo, pet scans show an increase in endorphin levels in response to placebo. Regular visualization actually results in longer duration response, but longer-lasting changes and decreasing the need for frequency of visualization over time. So placebo works, for example, if you give someone a medication that they feel is going to help their pain, it will help for

as long as that vacation is felt to be active, but when you look at visualization exercises and other cognitive Haverhill approaches to pain, that is a very different response in the brain with more long-lasting effects. So we also understand for all the medications patients use, for everything that they find interacting with, there is a long list of side effects, positive effects, negative effects, and it is impossible for everyone to read them all. So we want to be able to do is find out how people are responding to medications with the most likely impact, and also to be able to ask the right questions in a way that goes far beyond just asking have you had any problems with the medicine? I do think that being in a frequent, recurrent ability to communicate by telehealth and many ways, enables us to better understand how medications are impacting our patients. More and more we are getting away from opioids, used even for acute pain, and especially for long-term pain. The work less well over time and we also understand that the use of policies and procedures, lifestyle events, that improve endorphins also improves pain, in more long-standing sustained ways. We know that opioids disrupt the endorphin system decreasing effectiveness, and for the ways to counter the pain response pain, touch, smell, vibration, music, and other audio responses, meditation movement, we know all of this, and this can really be very easily facilitated. The patient and even family members with a virtual approach.

Opioids and neural plasticity, helps in a huge number of ways, it has an impact on cells, cognitive impairment, suppression of endorphins, creation of a fixed me environment, more passive environment, negative impact on sleep, increased risk of opioid induced impression. Mental health concerns, risk of acute disorder withdrawal symptoms, focus on medications and we want to be able to, when opioids are needed, to use them in the lowest dose, the shortest. Lack of time possible, and telehealth can help with that. Staying active is important and we want to make patients understand, it is especially during this very difficult time were getting at is not as easy as it. Compared to just sitting around with the time, the selectivity associate with better immune function as well, and regular physical activity can help reduce feeling stress and anxiety. So, it is important for us to look at ways for patients to be safe, as well as active. Physical activity guidelines for recommendations, moderate intensity, aerobic physical activity, and two sessions per week of muscle strength training, it into 5, 10, 20 minutes, whenever, whenever you can, every active minute counts. So, ways to creatively do this, where the current stressors of day-to-day life. Exercise is important for everyone, I do not know how to people in this room are caring for older patients, but older patients can benefit from individualized exercise programs, asking patients with disabilities. So, look for virtual resources that include physical therapies, psychological counselors, and therapist life coaches, yoga instructors, Pilates trainings, nutritional, nutrition is important to inform Tory diet. There is also involving group of school therapists, and creating a physical therapy program, physical therapy takes place via the phone, and video chat, or even a virtual reality device.

When a speech therapist uses online tools to measure progress. Virtual physical therapy offers traditional care but online or phone pacesetting. They may discuss symptoms, recommend screening. Therapist may ask

clients to form exercise and use a camera to evaluate progress. Something that it will complement therapy by offering additional exercises or allowing a client to track progress between sessions and a person can use these apps alongside virtual or in person therapy which you may be able to then accomplish less often, by these adjuncts. Also, it's good to get patients to create a schedule. What is there exercise schedule and meditation schedule, there time to communicate.

Physical therapy when indicated. Time for fun and important to put that into the schedule. Time for communication with others. Family time. For those who you live with and even distance now, we are seeing more virtual family reunions and creative time and independence. It needs to be put into the patient schedule to have a full complement of brain exercises that decrease pain.

Make sure medication problems are addressed. Think about things like different options, prosthetic supports and physical exercise and cognitive behavioral therapies, neural plastic approaches, mindfulness, yoga, TENS unit, and if we have visits we can do one at a time rather than overwhelming the patient with every single option we can think available because we are stretched to get everything into that one visit. We also want to acknowledge that there are stresses, fears and anxiety related to this pandemic. We want to look at changes of sleep or eating patterns, difficulty sleeping, worsening of chronic health problems, worsening mental health conditions of for the family, as well as the patient, and also seeing increases of alcohol, tobacco and other drugs. We want to ask about these in a nonjudgmental way. We know the use of tobacco and alcohol and other substances are going to make pain problems worse as well as worse and ultimately stress and anxiety.

Mindfulness is a really important adjunct and can be a very critical thing that we can communicate during our visits with patients with many apps available to us. We will talk about it. We want to put it all together. I understand what your current options are, and what can be instituted for improved movement options. Look for virtual options. Assess risks and benefits of face-to-face. Learn mindfulness and keep connected, create goals, keep learning, and we will continue to learn best approaches.

We want to create realistic goals for pain treatment. Psychosocial medical, functional. I have a case here and we have 10 minutes before I'm going to have everyone take their first break. We can either discuss this case of your own, or deal with any interactive comments, questions that people have. I want to open it up for questions now. Also, if you don't have a case, think about the 30-year-old male with intermittent back pain and current flair. His pain began deployment five years ago after heavy lifting as a nurse. He has had intermittent flares since then. His current flair began this month. Many of his responsibilities were converted to virtual. He has been spending more time in front of his computer and has gained some weight since April. He has increased stress due to the pandemic. I left this open. Let's talk about this case or anything else you'd like to speak to at this time. We have about 10 minutes. Any questions or comments? I see someone typing so I will take a break.

Great idea. I'd like to know what he has tried in the past. That's a fabulous question. One of the problems here is this 30-year-old male has tried opioids early on, five years ago he thought they worked. He would like to try them again. Since then, people have not used opioids for pain and currently he is actually using over-the-counter medicines before his visit with you, and over-the-counter medicines he is using our over-the-counter anti-inflammatory medication. That is all he's currently using for pain. Why does the patient think he's having a flare? The patient does admit to the fact that he thinks he's having a flare because of all of the stress that's going on and he is spending so much time at his computer but he doesn't seem to see a way out of that. He thinks he is stuck in this situation where he can't change the pattern in there too many things going on, and there is no ability to change that. What physical activity and the answer is he is doing nothing. He just can't seem to get out of this rut he finds himself in. During this current crisis. I would start motivational interview questions to find out his willingness. Fabulous chat. This is great because this can be well done. Over virtual visits. Something like in terms of motivation, what we want to find out, things like what is most important to the patient. What is are the things that motivate him to change this habit. What are things that are available to him? What are his goals? In terms of this. Fabulous motivational interviewing questions. Keep the motivation, the list is quite long. What would you like to work on? What is the first step here? That is an important question as well.

Is he engaged with any behavioral health visits or applications? Not right now. Does he have localized pain. The pain is more low back. Fabulous questions. It demonstrates for us for a patient like this that this acute flare or subacute flare is something we can easily handle virtually, and he would be coming to us earlier on here. Here we have a patient who feels incredibly stressed and he has no time. His chances of making an appointment to see a healthcare provider and having to show up are infinitely smaller than if we are looking at him virtually with that capability of fitting this in his schedule. Let's develop a plan together with small goals and regular follow-up. Absolutely fabulous. That is really important. Any previous imaging. He had imaging five years ago but not since. Education about better workspace ergonomics. Recommendations to take more breaks from sitting in front of a computer. All really fabulous suggestions and things we can easily tackle here one step at a time. Putting this all together we can also offer this patient incredible hope.

And validation of what's going on. We can say, you know what's going on here, we are seeing this in increasingly common ways. People have gone from one lifestyle and it has been dramatically changed to another lifestyle that is not in our best interest health wise in terms of pain, but in our best interest health wise in terms of Covid. It's important than for us to look at whether his goals at this point. He wants to have less pain and he wants to be able to interact better with his family. What I didn't tell you is he has school aged children. He has a school-age child of 5. And 7. He is concerned the 5-year-old is about to start kindergarten. The 7-year-old is about to start second grade. He doesn't know what's going to happen with that. That is adding to his stress.

Things that we can do is create an environment whereby he takes a break and he gets up every hour for 10 minutes and walks around. Create short episodes of exercise with walking. We now know also that if you exercise outside and not in groups of people, that that is healthier. Tried to create a walking program for himself either alone or with his family can be helpful. We also know that there are virtual classes now online that people can access to get exercise. We also can look at his medication regimen, anti-inflammatories may or may not give him any pain relief, and really for back pain, some of the more nonpharmacologic approaches can be more helpful. Sometimes also heat can be helpful. We can talk about different medication regimens that may be better for him, or perhaps steer him more to a nonpharmacologic approach. He has also gained weight. We want to address that. Diets like anti-inflammatory diet, looking at how people are eating, how they are eating differently, how they're getting their food, what food is available to them. The importance of looking at our diet during this period of time and we can possibly hook him up with a dietitian to be able to create an anti-inflammatory diet which also people tend to lose weight on. It takes away a lot of the high-fat and high carbohydrate foods. All of these are fabulous. I'm looking here. We have -- are trained to help the smart goals and often get resistance from patients to CBH. How do you recommend helping engage our -- help with patients like in your case studies? It's interesting. I have found that patients respond very differently when they are just called for follow-up by different healthcare professionals.

I will tell you about a clinic that I ran before we end our break. In this clinic we had -- obviously before the COVID pandemic. We alternated face-to-face visits with virtual visits from the nurse in our clinic. I spent an hour with patients with every face-to-face visit. These are all high-risk patients. I made sure that they had the opportunity to talk about anything that was relevant to their care with directed questions from nondirected questions using motivational interviewing. Invariably when the nurse would call just as they check a follow-up a month later, people would say to her, you know, I didn't mention this to a doctor and I didn't want to bother the doctor, but I'm having this particular problem or then we got her to the point where she was asking specific questions and follow-up and people were willing to tell her over the phone more than what they were willing to tell me in person. We also find that if we set up ability for email follow-up, there are things that people are willing to discuss through secure email. Look at the wide variety of not only options, secure texting, email, and a variety of people checking up on the patient. Sometimes there is a provider that people can jell with and they are willing to make some comments to that they are not willing to make two other people. And then be able to set up a structured plan for easy to do follow-up that doesn't require a lot of time on the patient's or your part, but then includes you in when a more sophisticated or more thorough follow-up is helpful.

I think that at this point it is time for the first break to be true to our words. We want to give people time every hour to get up and walk around. And spread their legs and eat healthy snacks, etc. I'm going to take a break now. Remember this case. We will come back to this case next session. Take a break and I will see you back exactly at 9:30 AM and we will go on to the next session. Any other comments or questions feel free

to add them during the break and we will come back and start with them when we get started then. See you all at 9:30 AM.

[Event on break until 9:30 a.m. EST]

We will get started in a couple of minutes. I switch headsets. Can people hear me?

Yes. You have an echo.

Let me go back to my other sound set. Give me two seconds.
I didn't realize there was a problem with the sound. If there's a problem with the sound during any of this, please let me know and I will try to switch to just holding my phone.

I'm using any of your blood. The COVID is called the COVID coach and it talks about education about coping during the pandemic, tools for self-care and improved emotional well-being, check your mood and visualize progress over time. The nest thing about this app is it normalizes everybody's response to the epidemic. We know that there will be stress responses that is all right. Some to a greater or lesser degree. This Avenue normalizes that response and gives people strategies for coping. It talks about different things, there mood chat, all sorts of devices on their two of sorts of ways for staying well and talking about how to communicate with family, friends etc. There is also separate from the the COVID symptom study at. It asks people to call in and give them the symptoms. There is a website that has a lot of helpful information. And is asking for everybody for their systems, this is a joint effort between Harvard and the hospital in Sunday London and allows patients diagnosis For their symptoms for the duration of the study. It gives you regular updates of information, reviews ways to protect against COVID, makes lifestyle suggestions, mental health suggestions and webinars. This is the app that I have worked on. This is the VA help paint code. It provides activity patients, ways to approach pain, up paint plan, visualization, deep breathing, muscle relaxation, tips on sleeping. This is once again available to everybody. Is also a mindfulness coach app. These are all VA apps except for the COVID symptom tracking at that I'm reviewing with you.

So, what about mindfulness go the mindfulness means noticing and paying attention to what is going on in the present moment without passing judgment on it. My balance has been shown to be effective for reducing stress, improving emotional balance, increasing self-awareness, helping with anxiety and depression and coping more effectively with chronic pain. DVAP also provides a gradual self-guided program designed to help you understand and adopt a simple mindfulness practice. Mindfulness also rifles of lot of information on mindfulness coaching, additional exercises available for download, goal setting and tracking, mastery assessment to help you track your progress over time, customizable reminders and access to other support and crisis resources.

The PTSD Coach. We will talk more about that because on further questions are patient has some residual PTSD symptoms that he probably had under control but have now flared during the time it COVID. That is something

that he did not let us know at the first visit to go with something that he shared on a follow-up phone call. This app provides you with education about PTSD, professional care, self-assessment, communities to find support and tools that can help you manage support for PTSD. They involve relaxation skills, anger management and other common self-help strategies. You can customize tools based on your preferences and integrate your own contacts, photos and music. This app can be used by people who are in treatment as well as those that are not. This is what the app looks like in terms of how you navigate it. There is also a comment online version of this. There is a PTSD coach online that can be used alone or with the app as well. This also includes a PTSD family coach. It is for family members with those living with PTSD but provides extensive information about PTSD, how to take care of yourself and relationships with loved ones are children and how to help your loved ones get treatment living with a member or a family member with PTSD. That can be incredibly stressful. If we can treat the family as well as the patient our results will be better. It also has the same kinds of things. Mindfulness, tools to help build your social network, tools that was Dawson emotion and provides a way for you to track your stress level over time with specific feedback about [Indiscernible - audio cutting out]. This approach has been demonstrated in use to provide more effective sleep resolutions than any medication that we have. It guides you through the process of learning about sleep, developing positive sleep routines, strategies, and help alleviate symptoms of insomnia. It was a collaborative effort to the VA natural center of PTSD. The Stanford School of Medicine is an incredible useful app for family members, clinicians as well as patients. We know that people, some stressors have led to short uses that further compounds problems and we are hearing reports of increasing problems related to domestic violence and anger and irritability outside of the house as well. There is an anger and irritability management skills app go this is designed for veterans and military members can be used by anyone coping with anger problems. There is also a comment online version and the app is based upon that. It provides users with education about anger opportunities for mining support and the ability to create an anger management plan, anger tracking and tools to help manage your reactions. Users can create custom tools based on their preference and then integrate their own contacts, photos and music. It can also be used alone or in combination with the online course or in-person therapy. Here is a look at the online program as well. For people who have had traumatic trip brain injury you may find that they are also having problems adjusting to the changing the [Indiscernible] of our current crisis.

Concussion Coach was designed for veteran servicemen and others who are experiencing physical, cognitive and emotional systems that may be related to mild to moderate turn it brain injury. It provides information about concussion, self-assessment instrument for symptoms and their severity, tools to help you build resilience and manage symptoms, and recommendations for community-based resources and support. You can customize tools based on your preferences and can integrate your own contacts, photos and music. It was created by the Concussion Coach by vase rehabilitation and prosthetic services, the A's national center for PTSD the comment the ODs national center for telehealth and technology.

If my voice is echoing, I will see if I can change -- can you hear me better now when I hold my phone? Let's try it this way. Is it still an echo?

I don't hear an echo on our end. I am wondering if it is on Jennifer is end.

Can you hear it any better now? Let me try to hold my phone for the moment and see if we can eliminate it at her end as well.

There's also an app called Moving Forward. It provides on the goal tools and tedious problem-solving skills to overcome obstacles and there was stress. It is designed for veterans and service members but as usual for anyone with stressful problems. It is helpful in managing challenges such as returning to civilian life, balancing school and family life, financial difficulties, relationship problems, difficult court decisions, and coping with physical injuries. It may be used alone or in the combination with the moving forward online course.

This is also developed by the VA as well is the DOD. Remember the collaborative apps have been incredibly well designed and well resourced. It is provided many different options in terms of what it looks like. I need to get my earphones from the other room. These apps are incredibly well done and their free to everybody. It is amazing once we turn people on to these apps it also helps to validate how they're feeling. If you are alone or isolated or filling these thoughts by yourself, you're thinking you're the only one with the sauce. We start to see that you say, this must be something a lot of people are feeling because someone has put together an app for that. Here's moving forward online.

We know that nicotine is one of the worst things for pain. And for many of our efforts when you work with patients with pain, either acute or chronic, we tried very hard to get them to stop nicotine. We are finding that during the pandemic that more people are resorting to nicotine use. So the VA has a foot coach. Is intended to serve as a source of readily available support and information for adults who are in treatment quits making smoking. There are going to be no available smoking cessation groups. They're not going on but you can utilize this in conjunction with the questions that we give during the virtual visit. It takes into account your reasons for quitting, provides information about smoking and quitting an interactive tools and motivational messages and spore contact to help you stay smoke-free. It is based on this smoke treatment manual, integrated care for smoking, uses the results of a collaborative effort among the VA national center for PTSD, VA, public health group and the department of national center for telehealth. I keep repeating the collaborative effort for the apps, but it is important to reinforce these issues to show the importance of addressing these problems and how common they are. Once a patient sees there is an app for that then a lot of the stigma for what is going on starts to diminish.

There is an app called the Mood Coach. It is for veterans, service members and others to practice behavioral activities. It is designed to help you boost your mood through participation in positive activities. You can make a plan with positive activities and track your progress.

Code can be used on its own by those who would like mood management tools, or to augment face-to-face care with the healthcare professional. It is not intended to replace therapy for those who need it. The Mood Coach was developed by the VA National Center for PTSD. It provides schedule of positive activities for your selected values. An activity log, tracking your progress, a daily grading tool, education about depression, posttraumatic stress disorder and behavioral activation. And an assessment tool for tracking symptoms of depression.

Let's go back to our case discussion. Now we have a lot to talk about this case. Because after a month of virtual visit and PT because what happens with our patients was, we arranged for some virtual PT. He returns with persistent back pain. He now states that after thinking about the situation the stress is under is bringing back memories related to the stress of his deployment and he is having difficulty sleeping and feels like he is overreacting to even small aggravations and his level of a he is making his back pain worse. He prefers to avoid a face-to-face visit. Let's talk about all of the options available including some of our apps.

Once again, this is a conversation period. It is not to talk about the cases but to talk about this case. Any case you have or any comments or questions you have about what we have covered so far? Any thoughts, ideas, questions, comments or anything people want to talk about over the course of the next 20 minutes or so. We'll take a break while we wait for people to type again. The CBT acted is fabulous for people like him. His wife is not sleeping that well either so being able to create and show the CBT-I, how it works, take bite sized pieces of the app in order to be able to slowly improve his sleep, that will be really helpful. Once again it lets him go as his own pace. Sometimes looking at all of these apps can be pretty overwhelming. And what we may wind up doing is explaining to the patient that there are apps available and we want to try one app at a time. Because as you can see, there is a lot of overlap between these apps so if we can pick one app and demonstrate success with that one app we can go on to other apps. We can use our motivational interviewing to find out which of these apps may be an important priority for this patient. Sleep, I think, is critical and it is a very good at the start with because when you don't sleep the rest of the day falls apart. So the compliance with these apps is related to a number of things. Frequently it is very difficult to measure compliance with the apps. But compliance may be from somebody using it every single day. To help them. To the apps giving them some ideas to the app making them understand that their problems are more universal to picking pieces of the app that help out. So, I do you wind up seeing improvement for a variety of reasons. We hear from Julie. There some medications indicated for PTSD and anxiety.

And Nick consider trazodone. So clearly if we are not getting the benefits that we need especially earlier, if there is a more of a crisis situation, we can start to consider some of the medications we use for these situations. Do antidepressant things such as the feed including pain care or studies related to pain care are not related to the medication. Certainly, ever going to use the medication we do not want to use the benzodiazepine for PTSD. Sleep hygiene is incredibly important

and that is something we can use the app or uses which ration with the patient. Any other thoughts, comments or questions? Anything anybody wants to bring up related to some of these apps or this particular patient. Or a patient of your own. I thought we could use the time for the first presentation discussion. I created more time with this so that anything can be brought up. I see Julie typing.

Let's go back while waiting for people to type in and talk a little bit about in more detail about what we might be able to use with this patient. Use the app as a way to include a better history. Remember what we are talking about here is people are just overwhelmed and sometimes we have to take our history over time. Will talk a little bit about that. I cannot give priority to our chat. Can you explain why the resistant to face-to-face encounters time for physical assessment. Let's talk about why there are challenges to face-to-face encounters right now. And the list is quite long. It is added to the challenges of face-to-face encounters prior to Covid. I want to talk about that as well. So frequently their patients that I saw, and for those of you that do not know me I worked for 12 years in the VA doing post deployment care and pain care. I had a number of patients in whom it was a challenge to come to the hospital. And let's talk about every single one of those challenges are going to exist after Covid as well.

Number one, I had patient who has such significant PTSD symptoms that just walking onto the campus of the VA or walking onto a campus in a medical facility was difficult for them. I had to arrange for virtual visit or have them treated in a setting in which they did not have to come onto the VA campus such as the vet center. Or even arrange for a combinations of VA care and private care so for some patients just coming into an institution is a challenge. For many women especially and some men put more women than men they had childcare challenges no of trying to find someone who was going to be able to take care of the child go while they were at the hospital and the challenge of bringing a child to the hospital. For people that were working the challenge was that time involved to get to a face-to-face visit. Graded problems in terms of their work schedule. If you have a one-half hour visit that is a virtual visit, that is one half hour out of the patient day. If you have a one-half hour visit that is not you've got the challenges related to travel and parking and walking through the facility. I also did a lot of virtual care with patients that were distant from the facility. That were in rural areas and whom we were able to create virtual options for them and for many of them it was lifesaving. Because it meant that we could get them off of opiates more effectively, get their substance use disorder treatment, get them on medication and that creative problem. We now have the added problem of COVID. We have school disruption, work disruption, people of concerned about healthcare facilities and getting onto transportation related to getting covert and even in younger healthier people if they are living at home or have access or older people are people with medical problems, they do not want to be able to have to increase the risk of getting covert especially in high risk areas. Those are all things that make people want to either not come in person or minimized in person risks.

Those are the kinds of things that will enable you to want to use virtual care primarily or at virtual care to your less often face-to-face visits. Platforms? The VA and DOD have their own platform for virtual care that creates a secure environment when you're talking to patients. I would recommend that you talk to your telehealth representative in order to find out which is the best platform for you to use. Zoom is not considered currently secure enough or face time. [Indiscernible - audio cutting out] draft care through special programs that are available at the VA and DOD that will connect with smart phones, computers and tablets. [Indiscernible - audio cutting out] department [Indiscernible - audio cutting out]. [Indiscernible - audio cutting out]. I think this is a really good point. The number of medical [Indiscernible - audio cutting out] is exploding right now.

Let me also remind everybody that this is not just chewing tobacco and cigarettes but also with vaping and the data with people that are vaping, they have a worse disease. Julie says what is the bar for hands-on assessment granted excluding COVID-19 restrictions if the client is not sending a significant red flag at this time? Clearly, it is nice if you can get a face-to-face visit. Related to doing at least one exam for pain but right now during COVID-19, that might not be realistic, and I think you bring up a really good point, Julie. In terms of demanding a face-to-face visit, you want to look at red flags and symptoms that are more suggestive of something in which your treatment options would change. There are also things you can do in terms of an exam. Clearly, you cannot lay hands on an individual, but you can have them go through to see exactly what can bring the pain on. You can request that they show you specifically if there is a specific area of pain and through your history, you can make of that assessment and start to see or start to do a modified physical exam even virtually. Interestingly, for some, some devices and some ways in which you can actually look virtually and listen to lungs, that is someone seeing a patient where they can be hooked up to a more sophisticated system but I know in Israel they developed the vices that they mail to patient which have the ability to put a particular microphone on the patient's chest so you can hear the heart and lungs. That is something we will start to see what important developments on as well. It's a matter of looking for those red flags and maximizing visits and then using the telehealth visits exclusively or as adjunct for better follow-up.

Shannon says the Adobe Connect App is not as user-friendly for patients and would prefer if we could use the programs patients are most familiar with Zoom and Face Time and sometimes we spend 10 or 15 minutes of a telehealth appointment trying to get over the technological issue and this is an important point. We will see this evolving over time and Zoom is doing better in terms of their security and whether that might be more adaptable over time if security gets better because there is no doubt in my mind that if they are looking for that, we will keep our eyes and ears open for that.

Julie says we are all aware that this comes from the discussion interview with patients versus assessment. Any research, the App provides virtual over encounter. It's hard to know because most of the studies done have either been done with that hybrid and I haven't seen purely virtual

birches non-virtual and I think that will get studied over time. Of course, you have some limits unless you can figure out a way to randomize that and the patients that show up for a face-to-face visit might not statistically be the same group as you are seeing virtually so we will have to see how that works.

Do you know if virtual appointments are getting reimbursement? Yes, they are. They are getting insurance reimbursement pretty much universally and some of the funding is being worked out but that is improving over time. They are getting pretty much universal insurance as I understand. Once again, we are sort of in uncharted territory here and are looking at the pros and cons of creating virtual options even if we see that we will see the patient face-to-face but less often or virtual options for patients that don't really want to come in or can't come in. Remember, we have people at home having children at home that may have scheduled appointments with school when schools are coming back virtually in some places and is not guaranteed that your child will be in school so we want to be able to offer these kinds of follow-up appointments whenever possible.

I also want to point out these online courses which are extremely helpful. Even things like moving forward, this provides us the ability to normalize overcoming life's challenges. There is nobody that lives that doesn't have bumps in the road and COVID-19 is more of a mountain than a bump in the road but it normalizes the fact that there are life challenges and many other things that people are learning right now are not something just to be used at the height of the COVID-19 epidemic but also skills used when there are bumps in the road rather than mountains over the long haul. Understand and create that atmosphere of this is not something just for now. This is when we get this disease more manageable which we will and once again, we can normalize what people feel are pathologic rather than just a normal response to stress. So, I'm assuming that I don't see anything about my audio now so I'm assuming it's okay but if not, please let me know. We have about five more minutes and these are fabulous comments. I'm just trying to have you understand how all of these can subtly be introduced one at a time to really create improvement in terms of what we are doing.

The CBT-I Coach we talked about, but we really need to talk about sleep and validate that for the patient. Many patients may not be all that willing to talk about their sleep problems but suggestions such as many people are having difficulty sleeping now. Are you having difficulty falling asleep or staying asleep? We have solutions for that, and this App has been well studied and compared to medication with great success. That was the other thing I wanted to point out. Let's not forget about the family. The family will be greatly impacted and not only by the pandemic but by the individuals increased stress level. I had a patient once that was doing extremely well and all of a sudden everything seemed to fall apart, and we couldn't figure out why. Nothing seemed to be working. Finally, through questioning, I found out that what had happened was, this patient's husband have been someone that was always able to handle every job stress but it was off the charts and in order to be able to get through each day, she just assumed all would be good with her spouse because back I rolled with every punch and she was always

amazed and envious of how well he could roll with the punch and when he was impacted by work stressors, she didn't quite understand at first how negatively that impacted her. Mister reliable in terms of his perception of stress was now unavailable to her because of his job stress is with the extra hours of work and the inability to be able to cope and it was by treating the spouse and being able to address what was going on that we were able to better take care of this individual patient. And let's also talk about the family. This App gives you that entrée and we know when people are stressed and when issues of PTSD or posttraumatic stress on you coming back, that will impact not just the individual but the family and this App gives you that entrée and what can be done to improve the stress level at home and that can make a huge difference as well. I just wanted to make sure we went through and mindfulness training I think is invaluable. If there is one thing I can say, and you never say 100%. Mindfulness training is was all chronic pain treatment. Bringing this back once again as a normalization of people's responses and creating a mindfulness opportunity for patients related to the pandemic will exceed and expand which is really critical and I highly recommend this app. It is incredibly useful and there are so many mindfulness apps out there and some people may wind up wanting to go and explore and you have the free period and you want to pay for more use and some people find that helpful and I know the most widely used private apps are headspace and calm but those costs and it is such a great introduction to people that are trying to explore mindfulness.

With that, it's time for everyone second break. Any last-minute questions and I will see you back again exactly at 10:30.

[The event is on a recess. The session will reconvene at 10:30. Captioner on standby.]

I am back on the call and as we are waiting for people to get back on, if anyone has any questions or wants to chat, let me know. Oh, great. I have given up on all my devices. I'm just talking directly into the phone. How old-fashioned is that? But that is what we are doing. We have a few more minutes and we will get started exactly again at 10:30.

Once again, anything that comes up, I want this to be as interactive as possible and interaction is my priority because we want to create a way through the virtual programs that we can create inability to continue to communicate. What we know about pain care is the more we talked to one another as clinicians, the more we learn and the more ideas we get and the greater our ability to be able to function. Gone are the silos of walking in a small room with an individual and that is the only person that knows about their care. We have learned from one another and all the different fields and we want to be able to use this teaching opportunity as a way to communicate with one another and share ideas as well.

So, as everyone is joining us, if anyone has any comments or questions or ideas or thoughts about the first two presentations, please feel free at this time to voice them or put them in the chat. Okay, it is now 10:30 and we will get started.

One of the things I wanted to talk to everyone about today is our growing recognition that COVID-19 itself may present with pain related symptoms. While chronic pain is defined as pain for three months or longer, some say 3 to 6 months or longer and we are too early in his pandemic to understand whether these symptoms may be chronic. We will see patients presenting with pain related symptoms related to COVID-19 and we are currently understanding how to deal with that. We need to figure out an approach to addressing those problems and everyone on the call will wind up seeing a patient with a COVID-19 related problem. I wanted to review what we now know about COVID-19 and pain and how telehealth may be an important resource here.

I have a new case discussion and our other patient quit smoking and we continue to work with him. He hooked up with his physical therapist and started to get more help through virtual counseling is doing well thanks to her efforts. We have a new case discussion, and this is a follow-up period she contracted COVID-19 at work and was hospitalized for a week. She did not need support and she finds it difficult to sleep after she returned home and complains of fogginess and joint achiness. She has a five-year-old daughter and his unable to do simple things without profound fatigue and is unable to go back to work. We are starting to see this more and more. She is unable to sleep at night and is sometimes unable to get back to sleep and has been exercising regularly before she gets out. She is taking medicine over the counter but states it has not helped her as much as she needs it to. Her exam is normal without evidence of joint inflammation and there are no focal neurological findings and metal status exam is normal but slow response to questions and currently feels hopeless that her situation will improve. She is now requesting a follow-up virtual care visit. So, we want to know how you would address that sense of hopelessness and despair and maybe when options would be available to approve the ability to function at home or in attempt to return to work. What are the symptoms? Let's look. Three are pain or pain related because we know fatigue comes increased risk of pain. Fatigued muscle or body aches or headaches are now part of what we understand about acute COVID-19 symptoms that include shortness of breath or difficulty breathing and loss of smell and nausea or vomiting and diarrhea and chest pain is also included as part of that list of symptoms.

Remember, they have found and while it is not important to understand all these symptoms types but look at all of the number of clusters associated with pain. Headache, muscle pain, chest pain, the fatigue and abdominal pain. Many times, you may see patients presenting with pain or whose prolonged symptoms may be pain related. Within the symptom clusters, they found that certain symptom clusters were associated with worsening acute outcomes but what I wanted to point out here is for many patients with what we called long-haul symptoms, long-haul fatigue and pain related symptoms, many times is not necessarily related to how sick they were to start with. What we are starting to see is patients develop symptoms that thought they had mild illness but now they can't shake their symptoms months later and that is where that tracker app has been helpful. Once again, the insomnia and the pain that lingers, we start to see vertigo, and these will all be part of what we are seeing, and many patients will develop COVID with mild symptoms. Frequently measuring

antibody response in the patient population months later will not show you an antibody. Therefore, we will have to make some of these distinctions as we evaluate people for what is going on. We talked about this COVID symptom study and I showed you the app. Many people in the United States and United Kingdom and Sweden suggest 10 or 15% of people including mild cases don't completely recover. A radiologist in Germany said as the acute systems are unprintable, so are those that linger. He saw one patient who was at high risk that did well and one patient that was low risk that did not do well so we can't assume that when someone with low risk presents with long symptoms that it is not due to COVID and we need to present that as part of our diagnosis.

This particular app is between the massive student general and the King College in London. It has many research collaborators and is really gaining more and more information and that website is extremely helpful to look at. The symptom study website has demonstrated that frontline healthcare workers are more likely to test positive for COVID despite protective equipment. What doctors wanted to know about pregnancy and COVID because it is important to understand that we are just learning the impact on the fetus. Six myths, skin rash should be considered as a fourth key sign and the data tracker and ability to sign up for updates. This is an important website for anyone that wants to keep in the loop and it is designed for people that have and have not been diagnosed. So what are the six facts that the website want you to remember? It is more serious than the flu. People actually are likely to contract the coronavirus and wearing masks, we now know that they not only protect the individual but they protect you and decrease your chance of getting the virus and the severity if you get it. We are still at a point where you should avoid large gatherings and know when you need to seek care and when you do not. We have a tremendous treatment that is also related so that if you avoid crowds and wear a mask, it looks like your chance is substantially less of getting COVID and the severity of your illness will be last.

Nevertheless, we have a syndrome that they are now referring to as the long-haul syndrome and symptoms that may linger for months or weeks or months and people that already have pain, that may make it worse. That is why it is important to understand this complex when we are seeing patients with pain. We also are starting to see outpatient clinics and I have heard that the DOD has something being developed and that might be something you might want to ask about if you find that you are seeing patients that you find difficult to treat and I'm sure that clinic will most likely be able to provide some telehealth options for you and both in terms of clinician and patient health. A racing heartbeat and shortness of breath and achy joints and muscles and foggy thinking and persistent loss of smell, one group in Italy found that 87% of the patient cohort hospitalized was still struggling two months later. Many long haulers are not admitted and may not even be diagnosed. We will wind up seeing these patients presented in primary care clinics and pull Neri care clinics, infectious disease clinics, mental health clinics and we will all need to be touching base about these patients. We are also seeing depression and anxiety related to the pandemic and those are important issues not only for the long haulers but other people in the population and we will need to address that in our patients. We have seen

early on that the impact is that you may receive immediate medical attention but symptoms are very common and frequently occurring problems in the patient population and there is actually some self-help groups that are being developed around this. They are group reaching out to primary care doctors and just reaching out that there is not always as much of an understanding about what's going on and the app certainly helps and that will help us understand this more and more but on a reported 26 1/2% patient's expansion long-haul are describing it as painful by the particular support group. The top 10 long-haul symptoms, fatigue seems to be the most profound but body aches and pains are the second one with shortness of breath and difficulty concentrating and that will make pain symptoms worse. Inability to exercise or reactive, headache, difficulty sleeping and anxiety and memory problems and dizziness and remember when we use medications for pain, certain can exacerbate some of the symptoms related to fatigue or difficulty concentrating or functioning as well.

Other pain related symptoms that are less common but still present our persistent chest pain or pressure and feeling of sadness or depression or neuropathy in feet and hands and reflects her heartburn, change in symptoms, partial loss of taste, lower back pain or exhaustion from small things like bending over. We see these acute COVID symptoms we have talked about but there is a large number of chronic symptoms not currently on the list and those include fatigue or muscle or body aches or shortness of breath or difficulty breathing with minimal effort. Headache, cough, partial or complex loss of sense of taste and those were late to come to the acute symptom list. Once again, painful symptoms are about a quarter of the long-haul are symptom and not an insignificant number. It includes many things we have talked about and other things that are on this list including burning skin and neck pain and painful scalp and burning sensations. Cramps and upper back pain and mid back pain and jaw pain and wrist pain and foot pain and some people complain of urinary tract infections that can cause symptoms as well. We are also stern to see concern over psychiatric symptoms.

Preliminary data indicates that there are symptoms in responding to this disease with the meeting establish in March. Maybe we need to start to have some of these webinars related to long-haul symptoms because this will require a multidisciplinary approach just the way pain care has evolved as well and perhaps people taking care of patients have quite a bit to learn. The five major categories related to neurologic and neuropsychiatric concerns, some people have developed delirium, psychosis and no distinct MRI abnormalities. Others have developed inflammatory syndromes including encephalitis and post infectious diseases with hemorrhage. Some have experienced strokes and somehow developed peripheral neurologic disorders and several whiskey on beret and some with her off the peas. Patients have developed miscellaneous central disorders in a particular category and there is a high incident of edging that is so striking that was not related to the severity of the respiratory disease so after those concerns in patients that previously had COVID. What are implications for rehab? There are challenges. There is high risk of acute pain and population is diffused. The mental health burden and for those that have been in ICU, that ICU specific risk. What about comorbidities? What about adding that previous and when we see

patients that are older and adding that to some of the aging problems associated with having COVID at a later age? There is a risk of posttraumatic stress related to having COVID and living in the COVID era. The social isolation during admission of people admitted to the hospital and if they are committed to a rehab facility and even being at home with limited access to others that live in a situation in which they don't have as great of access as they need to with friends or family. What about the neuro- immune response that we are just learning about? Painful acute consequences such as stroke. The ICU specific risk is related to prolonged ventilation and a mobility and the block associated with being on a ventilator and repeated pruning and risk of many of these patients having multiple procedures and the risk of procedural pain.

What are the rehab challenges posed COVID? They are quite overburdened in terms of personnel and the volume of people that need rehab services. We are just learning how to coordinate rehab and here is where telecommunication in between providers and clinicians will become increasingly important. Resources may be diverted so I just spoke to someone the other day about the fact that even research resources are being diverted. We are using supercomputing more and more to coordinate this COVID data and other services are being kicked off of the supercomputers. We are winding up having to divvy up resources now in a way that we have never done before related to the risk of infection and the burden of quarantine on healthcare professionals. Right now, we don't have a COVID specific rehab service and nor do we have the evidence in our literature for a disease that is six months old or eight months old or nine months old but those are starting to evolve. This fatigue is the one thing that people talk about the most. This profound fatigue and how it interferes with our ability to care for patients in whom they are getting back into the functional life when they are just so tired. There is a high risk of acute pain and already stretched healthcare environment and we talked about that risk of procedural pain.

So, what can understanding chronic pain add to the literature? The importance of a social approach and functional rehab goals and understanding opioids and other medication risks. Understanding importance of diagnosing and treating comorbidities both medical and mental health. Understand the importance on the impact of the family. Understanding the role of substance use and misuse in treatment of challenges and outcomes. So, let's go back to the case discussion. We have a 30-year-old female who sees you in follow-up after recovery from COVID. She is requesting a follow-up ongoing virtual follow-up and contracted COVID at work as a healthcare clinician and was hospitalized and did not need support but can't get going. She is having problems handling her home responsibilities and can even get back to work. She is unable to sleep or exercise and denies use of alcohol or use of drones. Her exam is normal, but she is not doing well. She has joint achiness and most of all, she is feeling hopeless that she will never improve. What else do you need to know? How to address your sense of hopelessness and despair and what treatment options might be available. Once again, this is all uncharted territory for us. Every suggestion is helpful and Iris Justin for members of her audience helps other members of our audience understand how to approach patients like this.

Right now, I will leave it open to questions. Comments, we can use this as an opportunity to respond to every single one of the parts of this presentation and talking about this case that could be similar and anything else we have brought to the table. Everything is fair game.

What is the sleep pattern? She falls asleep because she is so tired but wakes up an hour or two later and struggles to get back to sleep and then falls asleep again and find yourself needing to take frequent naps during the course of the day because she cannot function otherwise. So, is she able to do gentle exercise?

These are fabulous questions and great points. Here is where we have someone who is used to going out and doing exercise and functioning perfectly well. Attempts to go back to exercise are being fraught with difficulty and not just because she's got a physical problem going on but because she wants to exercise the way she used to. This may be a situation in which we find out what was the exercise before? She was a runner, and we are not going to do that right now and what are her options for exercise now? We also may want to suggest exercising within the house because who knows where she lives or what the environment is and if it is stressful or not and if you go out to exercise, look at exercising initially for five minutes at a time. Multiple times a day rather than all at once. It is really important for us to reintroduce the issue of gentle exercise with things like a gentle walking program and find out if she has any equipment in the house or a stationary bike or elliptical. Can you set up something very small or what kind of protocol can she put together in the house and also, there is a lot of virtual exercise programs that can be modified. They are available for free and are on YouTube and can be Google search. She should be referred for integral health and TTS. We want to try to prioritize this and see which of these programs she is willing to start with and then integrate this approach.

One of our problems is the haziness to get easily overwhelmed. This is the value of virtual follow-up where we can make one suggestion at a time and see how that goes and create some type of follow-up by email or phone or quick virtual video and see how that goes and expand on that and add another thing. What we want to do over time and add one thing at a time but what I like to do when I see a patient that needs multiple things and use my menu of options. As a way to give hope. If I say to a patient, you know, I have about 30 different things that we can think about adding but we will only add one at a time. I want to make sure you understand how deep that menu of options is. So that you can see the long list of options that we have and we find adding things one at a time to be helpful. We can figure out through motivational interviewing and what we think is the best approach and what we will start with. If that works, we can improve on it and if it doesn't work, we can figure out why and perhaps switch to something else. Discussed counseling options and once again, we want to normalize this. We want to be able to say things and we know there is a study looking at people in your situation and we find that what is happening here is just about universal. There are common symptoms and some of them will go away quicker than others, but we do see that there are a number of people with residual symptoms. Some

have none at all but many people feel the way you do and we are tracking and learning ways to treat it. We want to be able to give hope. We want to talk about counseling options in order to be able to look at how she is functioning during the day and coping with new set of symptoms that she's never had before and how to prioritize and what she will do and then be able to add that to the daily routine. What medication is she taking besides Tylenol? She currently tried anti-inflammatory medicines and she is pretty much giving up on everything. How supportive in respect to health? Really critically important. Is she at risk of losing her job or does she have disability insurance? What is this doing to her finances and are there stresses at work? Once you are home, people say you can work virtually. Therefore, they may create virtual work option that is stressful that she can't do or maybe they haven't created a virtual work option and she thinks she can do that and it would make her feel better. Bringing in all of the parameters of her life, her home, her work, seeing cases and the "normality " that we can bring back into her life. We also need to be able to celebrate the small successes because we now have someone who was so functional before and small success may not feel celebratory to her whereas it needs to be celebrated. Her ability to reintroduce small things may make such a huge difference rather than say I can do this but I can't do the two or three or four things I used to be able to do so we want to support the small celebrations of normal life.

All great questions and comments. Any other comments or questions or things that we want to talk about related to any of the first three presentations or discussions? Anyone have any thoughts about any medications that might be helpful here?

One question I would have related to her symptoms is has she developed depression and do we want to then do some screening for depression and if we think that some of the cognitive approaches will not be adequate, do we want to than add antidepressant medication that may be helpful for pain and I ask this as a question not knowing the answer because we really don't know the answer. If we can identify that her situation has increased the risk of depression and there is this mingling of depressive symptoms, can more effectively train that help the symptoms? That is something they will need to be able to tackle for someone like this over the long haul and I cannot over emphasize and I raise that as a question because I don't know the answer.

What about her support system? It is really important and frequently, people with support systems have come from out of the house that are no longer available. Just talking to people that have had a structured support system in place with children and especially in the house, that support system is related to aunts and uncles and parents and grandparents and helping out prior to the pandemic. Childcare resources, school resources, her child is also suffering from isolation and inability to interact and stress related going back to school. What about her support system? Has there been a deterioration of her support system where childcare is unavailable and grandparents or her parents or her husband's parents that are coming to help out, they are not available? What is going on with that? Support system deterioration we want to be able to address. What is her diet like? It's difficult for people to get

out and get food and does she need to go to the grocery and if she can't, are there food delivery services near her? How do we look at anti-inflammatory diet in terms of choices available to her?

Fabulous questions and these are all things we can address and the more we address this, the better that aids in helping her understand that this is not the overwhelming tsunami that cannot get addressed by addressing small pieces of it. That helps with the hopelessness as well. Alyssa says that there is a COVID survivor support group, and she may find this resource helpful to normalize her experience. That is fabulous and I'm sure that is available online. It makes her also understand that she is not alone and people that have strategies, we are now starting to learn what strategies people are developing that have been helpful that they can share with us as healthcare professionals as well as each other and once again that support group is starting to share those strategies as well. Small winnings and encouragement, I cannot emphasize that enough. What may look like an incredible win to us may look like such a small one to her and she discounts it, and we need to be cheerleaders for the small wins that occur and find them.

Kimberly says I have a patient with lingering chest pain and severe fatigue. He was so positive for COVID one month out and the pulmonologist will not see the patient until he is negative. Should we even send the patient to pulmonology? He is coughing severely and upwards of an hour and is greatly fatigued. I think we need to have ways of treating this patient and we also don't understand what prolonged positivity means. I think we are starting to see that people do need to sometimes be seen when they remain positive and I will also tell you another piece of data that is becoming clear and that is that patients have developed, one study, they have developed some degree of heart damage. Some of these patients that clearly have shortness of breath, it may not be due to pulmonary problems alone but there might be an underlying cardiac problem and we will need to start to think about getting cardiogram's on these patients and getting more cardiac work as well. I think we need to be able to follow up on these patients and it is unclear what that prolonged positivity means. We are still learning what to do. What treatments have been tried for the symptoms, that is important to understand and sometimes cost is tough and we have seen that the things that include opioids, make some of the other COVID symptoms were so that can be difficult to treat and other things that we have found with COVID that have exacerbated our asthma and sometimes different things are needed so those are the things we need to really consider and this is a situation in which the patient may need a combination of virtual as well as face-to-face visits.

We are also seeing people with post COVID pulmonary emboli so we want to intentionally get things to evaluate that. I would consider some lab work such as vitamin D and exacerbates COVID symptoms and thyroid is a very good idea and don't forget the applauding studies. There is a negative chest x-ray. Julie says Robitussin may be an option, but the more extended workup may be in order here to find out if this is just pulmonary or if there are other things going on. You can use hydrocodone and now Robitussin and we treated with the six-day dose pack. Is that steroids or an ironic or both? So, that may be another consideration. We

are starting to see that some of these prolonged symptoms are due to prolonged inflammation and some are due to secondary infection. That is nothing we need to get a good look at in terms of prolonged symptoms. Fabulous discussion and looking at the interdisciplinary nature of these prolonged symptoms and how we have to put our heads together in order to figure out the best approaches. Any other comments or questions or other cases people have had an ideas about how to approach patients which we will see more and more of and also keep in mind that we are going to see these patients that had very few symptoms and may not have been tested and while we want to do a full workup, keep in the back of our head that we may have symptoms of post COVID syndrome or long-haul symptoms and those never diagnosed with COVID. That will probably be important to add to the differential diagnosis list and we might be seeing some of these patients presenting to us especially in primary care with fatigue and achiness symptoms.

We have about five more minutes before our break and this discussion has been fabulous. I really appreciate everyone's chat. Anyone else before we let anyone go back to a brief break?

There were some personal protective opportunities yesterday and maybe die adjustments could help and I think that will be something important for us to follow. The other thing I have found is working with patients with chronic pain. There is a subset of patients in whom anti-inflammatory diet has been life changing. We talk about this diet with low in fat and higher in fruits and vegetables and lean meats such as chicken and fish and those diets can make a big difference. That is something worth talking about and easy to get. I completely agree that diet will be very much worth discussing. During periods of stress, people turn to comfort foods and high in carbohydrates and that may be the worst thing for them. We also want to find out how they are getting their food. Everyone is stressed and concerned about going to the supermarket and getting to work and remember to look at alternatives showing up in person and mail delivery options for them. We have two more minutes before we take a break. Kimberly says I started testing for allergies for patients and lingering severe nerve pain with no reason for having pain and no injuries so looking for food allergies and different options in terms of food and sometimes protein and milk products can cause a lingering reaction in cough and that is including yogurt. Sometimes just doing a trial illumination can make a big difference.

Jennifer says the University of Wisconsin and the lifestyle handout is a great resource. That's another thing and Kimberly says I was surprised at how many have high allergy and gluten. That is also really important and if you get that testing, that is great. Sometimes if we know there are high yields and temporary changes in diet in which you can temporary illuminate one thing or another, one thing at a time to see if it changes, that is sometimes worth a try while you are waiting for testing to come back or if you find testing is more of a challenge. I have found other Corona viruses post viral such as the common cold, some people with these allergens have had an exacerbation of congestion and runny nose and symptoms and once again, that milk allergy. That is different than lactose intolerance that we see but it is all milk problems including yogurt so that is other allergens as well.

Any other comments before we break? It is now 11:15 and we will be back exactly at 11:30. We will tie this all up with our last presentation. Thank you all. Fabulous comments during discussion and I truly appreciate it. Break until 11:30.

[The event is on a recess. The session will reconvene at 11:30. Captioner on standby.]

We are on the home stretch now so I'm available for comments or questions. As people are coming back and just curious if people are telling where they are coming from.

Are you in DC or Florida? I'm in North Carolina right now. Oh come online. We have people from all over the world joining us here. Isn't that special in such incredible opportunities. Look at this. Incredible opportunity to share thoughts and we have been using supercomputers to compare expenses and ideas and successes and failures from all over the world. That has been currently ramped up our understanding and knowledge about the disease and ways to treat it and we are starting to see a spike in things like understanding wearing masks decreases risk of getting the disease and early care. We can't wait for people to feel short of breath to get treatment. We have learned so much find credible collaboration and it's great to see the whole list of people from all over the world.

We will get started for the last 45 minutes in just a minute. I saved the most challenging for last. In my role as a chronic pain consultant, I actually had a somewhat specialized role. I ran clinics virtually and in person for patients at high risk. These are patients not only with chronic pain patients that had medical problems that made it more difficult to treat and substance use problems let me pain more difficult to treat and sometimes persons had one or two or all three and that resulted in the need to learn how some of these difficult conversations about how to proceed. About 10 years ago, I was asked to make an article on taking care or how you have a conversation with a difficult patient and I said I'm not willing to write that article because it's not the patient that is the scope of the conversation and the minute we take the difficulty away from the patient and onto the conversation, we have already made great strides in terms of it being successful. I want to point out how these difficult conversations may be easier to have through virtual healthcare. Let's talk about that. I wanted to end up with discussions related to the difficult conversations we find ourselves in and related to pain care. So, here is a new patient, 30-year-old female with chronic back pain place on oxycodone five years ago and did not respond to other options. She is now requesting a telehealth visit as she's interested in discontinuing her opioid therapy. She has a number of reasons for this decision and we will talk about that at some point during our case discussion. She has tried to take opioids before and was unsuccessful so is concerned about how this will go but is motivated to try again and she thinks this will be easier to follow up. What information do you need to get started and my case is a lower priority so when we come to the discussion portion of this and if you have a case that you want to put in instead, feel

free to do so but I wanted to make sure we had a case just in case no one has a case to discuss. So, we have a lot of challenges, right? We need to increase supply on what that means is there are areas with more physicians than other areas and as we are seeing with this pandemic and even prior, there are areas with physicians or other health care therapists, physical therapists and pharmacists and the list goes on. Healthcare disparity in order to even out the diverse population spread throughout our country and the world. We want to maximize workforce potential and what if you are a healthcare professional and should be all healthcare professional so what if you feel perfectly healthy, but you are quarantined because of an exposure. We want to be able to utilize during this challenging time and use telehealth to treat non-tran03 patients. If we have over 60 or with a medical problem that will increase their risk of getting to the healthcare facility, how do we best treat them? We want to be able to use our things like top box or secure testing and other things to be able to approve efficiency of communicating with patients because sometimes these questions asked can help when we finally meet face-to-face with the individual or virtually.

So, the next phase of telemedicine is having an encounter where a patient can enter information while they are waiting. What if instead of saying I will see you at 9:30 today, you ask I want to see you at 9:15 and we will get questions answered so I know how to prioritize and make that appointment more efficient? They encounter information and that has been aggregated for that health provider and this gives time to think about questions that they might not have considered and that increases the efficiency of the appointment. The most difficult conversations are related to opioids frequently or substance use or mental health problems as well.

Let's talk a little bit about opioid risk. They decrease the immune response and risk-averse with her depression and fatigue and drug interactions and the risk of falls and sleep disturbance and dizziness and constipation. We also know that patients have been on opioids, the DEA did okay telehealth to prescribed opioids amidst the COVID emergency and for as long as they designated the public health emergency and it remains in effect, registered purchasers may issue medications and in-person medical evaluation provided all the following conditions are met. These conditions include prescription is issued for legitimate medical purpose acting in the usual cost of his or her practice. The medication is conducted using audiovisual real-time two-way interactive patient systems and the practitioner is acting in accordance with applicable law and practitioners have further flexibility to prescribed more to new patients by otherwise authorized practitioners without requiring practitioners to conduct an examination of the patient. These are the rules, currently. The American Society team medicine and society provided a joint statement paired elderly patients are successful and they may cause immune depression. Use of steroids may induce immune depression. So, a couple of problems that will be encountered by our interventional pain specialists what about malfunction and what they are saying they suspected and in person evaluation that may be necessary depending on whether it is superficial or might be warranted and to be performed as soon as possible. You telemedicine as soon as possible to sort out issues to avoid new trials or implants at the current time.

Current considerations evaluate other cases with shared decision-making and avoid deterioration of function and emergency room visits which increase the risk of exposure. If you perceive that bringing someone in face-to-face for a visit or procedure will decrease the risk of deterioration or function, that qualifies as an invitation for those face-to-face visits and that can include but is not limited to acute herniated discs or worsening lumbar neuropathy. Acute cluster headaches and other pain syndromes. What about opioids? You can evaluate and continue therapy because we do not want to stop opioids and provide prescription for high-risk patients I would say I would provide them to all patients on opioid therapy because we don't know what happens in terms of the risk for depression. Registered partitions can have therapeutic in person evaluation for legitimate medical purposes. You can have interactive real-time with federal and state laws and opioids are not needed for discontinuation and you consider therapy.

The last point is Ashley my editorial comment and not part of the joint statement by the pain society. So, significant immune damages occur in patients with COVID-19 and most have normal or decreased white blood count and once again, opioids are known to suppress the immune system and we do think but we really don't have all related to suppression immunity but we certainly do know that there is less risk of respiratory infection and the recommendation that this group did make and people made this and may agree or disagree with this but I did want to record this for purposes of completeness and issue a joint statement. Patients with COVID the receiving opioids can have version of Sentinel and may increase with fever.

Once again, we want to make sure that if you have a patient that may have COVID, how you deliver opioid therapies are also addressed. Steroids increased potential for immune response and that could be high risk of influenza so we do get concerned about that even for joint injection and duration could be less with the use of steroids. Important right now, more than ever to consider the risks and benefits and use a decreased dose especially in high risk patient population. What about opioid tapering and CDC guidelines in general? Consider tapering to reduce the dose when the patient requested. Does not have clinical meaningful improvement in function. Is on doses higher than 55 without benefit and once again, that is without benefits. At the higher dose. Show signs of substance use disorder while on opioids and other serious adverse events and once you have the adverse event, the risk of ongoing are very high. Early warning signs for overdose or slurred speech. Once again, creating telehealth options for patients may enable you to pick up these problems sooner rather than later.

Why is telemedicine better? Patients are in familiar surroundings and may feel more comfortable paired there is an ease of follow-up. You have access to family members and the ability to use surroundings for safety and the ability to intervene earlier because it is not as much of a burden to make an appointment and there are less disruptions. While searching for this difficult conversation and the portion of this presentation, I struggled on the guidance tools and I wanted to share a lot of those tools with people. This is a fabulous website and resource. I just found it was extremely helpful. I want to share some of the

things I have found and one of the things they talked about was doing a risk-benefit assessment and reviewing and discussing addiction and dependence and validation of the challenges of this particular problem and other strategies for coping with pain. Involve the patient and take some time and get the support of your team. You have seen the importance of motivational interviewing especially during telehealth calls and that may get into trouble. We call that maintaining the current dose and that will be what is best for the patient or do you need to consider a taper? That risk-benefit assessment and if the patient is requesting a decreased dosage, take that seriously. We talked about all the other things with pain and higher doses. Diagnosis of opioid use disorder or history of opioid overdose. Addiction independence, you have to remember the three C's of addiction. Loss of control, craving and continued use despite constant lenses. If someone has hadn't overdose and cannot stop opioids, that qualifies, to me. Dependence is tolerance and withdrawal but sometimes the dependence creates a roadblock even when it is apparent. Anyone can become addicted or dependent and there is effective treatment for both. That could be the first line of treatment and as methadone is a more dangerous medication and only reserved for opioid treatment programs. Velocity and validation go slow rather than rush. Maintain the same schedule and for patient has not, try to lower the dose. If you have two different opioids, you want to make it as simple as possible. Take breaks but don’t go backwards if you can help it. Warn patients that the pain might get worse before it gets better although I see patients in which they had significant issues, but their pain got better right off the bat. Validate that this is difficult but not impossible. Come up with strategies for addressing those difficulties.

Other strategies for coping with pain, understand how the pain works. We can do programs and encourage rest and sleep and promote healthy activities and create positive moods. Foster social connections and make good nutritional choices and consider non-opioid medications and as a tribute to our audience here, all these have been brought up but need to be structured in the virtual experience and into the day-to-day life. Screen evaluation and similar control and we will not go into detail about this but look at different screen devices that work for you. Sleep disordered breathing and screenings with sensual sensitivity and I am not going through these. We don't really have time but look for ways to utilize the ones you are most comfortable with. Don't forget to look at most programs interact with others and you want to look at are there new issues involved with the tissue destruction and evidence of further damage that needs to be evaluated.

What about trauma and chronic pain? The prevalence of trauma is substantially elevated in patients with chronic pain. Post my stress prevalence is about 35% compared to 3.5% of the general population. As we talked about before, addressing trauma, and might be easier in a virtual visit. 51% of patients developed significant posttraumatic stress symptoms. They found a strong association between trauma and sexual abuse and central centralization syndromes. Most of thinking amplify physical pain perception and frequently these are difficult conversations as well. What I find is they don't always occur at the visit in which you ask them. Sometimes what you need to do is give permission to acknowledge that there is past trauma and leave that door open for the patient to

bring that up and discuss that at a future visit. Then, we want to make sure that we screen for symptoms and also have an effective way for a referral. Even if we feel it is important and necessary, the patients themselves may not be as amenable to that and we can start to use those as an introduction into therapy so that it softens that and even in the back of our heads, therapy is where we want this patient and not just with the use of the app but the use of those that we talk about can break down some of the barriers about therapy that may make that referral easier. To assess those problems and do a risk assessment and once again, these referrals, we may need to look at that referral process as just that, a process. It may take us times to be able to develop and the patient trust to develop and the careful use of those apps can help break down the stigma. So, we know posttraumatic stress symptoms can also lead to improvements in pain functioning and the approaches are so much more rewarding and beneficial. We have many treatment options and we won't go into detail about the specifics of that but I think it is important for us to make sure that our patients understand that the cognitive approaches have been evidence-based and demonstrated with high effectiveness giving that hope back and these are all being utilized. Lo and behold, this was developed and it can be utilized to share with the patient of the importance of putting this together in order to be able to improve functioning and for many of the problems we are seeing during the current crisis. Plans seem to be individualized and we talked about knowing slow with decrease of 10% a month. I have gone lower than that and there are times I just take a break. I don't change the dose every month. We just make a slow dose change and then incorporate options and go on. Discussed the increased risk of overdose if patients return to prescribed higher dose. I look with every patient I see and with every taper as well. When you taper, watch for signs of insanity and depression during the taper and offer support or a referral if needed.

Tools for difficult conversations, remember our model for motivational interviewing. Validate and educate and motivate. Looking at whole how, change the conversation with management plan suggestions to offer patient's clinical tools. Some ideas for patients to consider, plan ahead. What's the difference between hurt versus harm? Does walking actually harm the underlying condition or just create a temporary burden where you need to adjust your approach? Be a detective and run that patient that was doing poorly because her rock-solid husband that never had stress before was doing poorly? Keep the pain diary and work with acceptance.

What about personal flareups? What can be utilized? Distraction and musician and changes in activity level and what consumes the pain and what about those thoughts on the problem of this will never get better versus this is a problem now? There are medications that can be used more safely than others that we can certainly talk about as well.

What about back pain? This is probably the most common thing we see. We don't know the use of opioids is counterproductive. We know advanced imaging is also counterproductive and that is why we talked about the benefit of a physical exam and a patient. The patient was all earlier on and we could fill more comfortable patient with lifeline, we may want to

bring them in and before we bring them in, we need to ask ourselves will not change my approach? We know that keeping a patient active is essential and improved function is the goal and we need to be able to set functional goals and we can do that virtually. Here is what we see when added individually. The reduction of pain with physical fitness or improving physical activity is quite substantial and higher a medication. Same thing with CBT and mindfulness. What about lifestyle? Sleep management and weight reduction and I reduction and exercise. Physiotherapy interventions, frequently these can be done virtually. Behavioral interventions. One-on-one counseling and cognitive therapy. Does that patient with substance use require that face-to-face or residential treatment or medication treatment for addiction? How about case management? Do we need to create virtual case management opportunities and trauma informed care?

What about domestic violence? We are starting to see increased case rates during COVID and related domestic violence. We want to be able to screen for that as well. I have also done virtual group visits where we have actually been able to get people together in a group setting for care and that might be a little more challenging but certainly possible. Let's go back to our case. Three-year-old with chronic back pain and was placed on oxycodone where she did not respond to other options and is now requesting telehealth visits and is interested in continuing opioid therapy and has a number reasons for this decision. She has tried to get opioids before but was unsuccessful and was concerned about how this would go but is motivated to try again and things being able to be seen by telehealth would make it easier to follow up. Let's use these last 15 minutes. We have 15 more minutes as a chance to throw anything out, questions or anything that people might want to talk about related to that series of presentations and thank you so much for sticking in there for the whole four hours and also any cases you have as a way to create a discussion about general approaches to patients like this.

I will enable everyone's WebCam if anyone would like at this time. You can say hello and share your face. We would love it.

Duly says has she tried to discontinue pain meds before and how that beautiful with provider intervention? That is a fabulous question. What has happened before issues had side effects has been constipated and thinks it doesn't help is much and has been foggy headed and just stopped them. That has obviously not helped. Then she has gone back on them and then try to lower the dose but she would lower the dose a lot one day and the pain would flare and she would then go back to a lower dose but not the dose she was on so there has not been a structured approach so this is such a great question because what we want to reassure her is what we do this in a slow way, there are things we can do to accommodate and increase the risk. The reasons for previous failure, first of all, she is trying to do it on her own and started to do this in the clinic but couldn't keep up and couldn't keep going back. They kept referring her and it was turning into a thing where she didn't have the time to show up to all of the places they wanted to go. That is also creating problems for her. What is her motivating factor? She is not functioning or feeling well. She is thinking she might want to get pregnant and have a baby and she doesn't want to do that while on opioids. When you ask her

if there is one motivating factor, she says no. They are all coming to me at this time. Also, I have a friend that was on opioids that not COVID and that friend wound up on a ventilator and survived but isn't doing well. I don't want that to happen to me. So, she has a lot of different reasons and feels like she understands this is not a long-term solution to her pain and has been told that before. Once again, she has been seen in the clinic, but every intervention was show up at this clinic or that clinic and I need you here on this date or that date and it was exhausting her. She couldn't keep showing up so when she thought there were virtual options, this became much more reasonable for her. Great questions. Keep them coming. Anything once again at all related to where we are going in any aspect of this program.

I wonder and just for me, I will put up that case again so we can have that in front of us as we are talking about it. Then, I will go back to the WebCam. 30-year-old female back pain is oxycodone and did not respond to other therapeutic options. She wants telehealth and has a number reasons that we talked about in tried and wasn't successful and we now know why. We talked about the fact that she doesn't function well and is not as clearheaded as she was and is thinking of having a baby and doesn't want to be on opioids when she gets pregnant. She's not taking her back pain is all that good but when she goes to try to taper, her back-pain flares even though it is much worse now than when she started the opioids. The other thing I will tell you that she has been doing is that she has gone through periods of time where she has stayed off the opioids and hoarded her pills and then when she couldn't take it anymore, she went back on. Currently, even though she is prescribed oxycodone, 15 milligrams four times a day as needed, she is currently taking double that amount. Once again, she had been prescribed oxycodone and has been tapering up and down and over and under and around and through and now is on twice that dose because she has been hoarding pills because she has gone through these periods of up and down. So, let's decrease slowly and follow-up next week and talk about functional moves and therapy. Fabulous. So, we can reassure her that her previous attempts were predictably I'm beneficial because of all the things we talked about and she is absolutely right that the ability to come back and telehealth will make things a lot better and easier and more effective and we have the ability when things are not working to communicate about what the problem will be.

Let's go through some overdose education and that is a great point. That is really important. Jennifer says that the risk of opioids and poor outcomes, should we be discussing this with all of our opioid patients and what we should give them. Absolutely, there is no doubt about it. This is a helpful conversation and I also called this planting the seed. I find that when you have conversations about opioids or mental health concerns or other substance use problems, you don't always get the response but the ability to have these more frequent follow-up visits even if they are shorter allows that response to occur down the road. I do agree.

James talks about continued tapering and aquatic therapy can be really helpful. Common procedures, what should we be telling our patients? I will tell you the joint injections can have cognitive and physical

therapy approaches that are not that helpful. I would start these other approaches first and I would joint injections further on the back burner and that is why I wanted to present utilizing those injections when you don't have further alternatives because the risks will be higher but I do think this is a great opportunity if you do joint injection to make sure it is a more comprehensive plan and many times the ability to make that a comprehensive plan, it is not intended by the clinician. They intended that all along but once they have the injection that they are feeling better, they sometimes drop off some of those other approaches so you want to make sure that that is really a highlight here and when or if you need an injection, it should not be overemphasized that it is a temporary fix that must be combined with the longer term pages. Why is the exact reason opioids produce poor outcomes for COVID? Probably related to depression and increased risk of respiratory problems. That is what people are thinking. That will be studied more and more. Has she ever purchased oxycodone outside of prescription it and has she had tapering with continued horny? She's always had enough medicine to do what she wants you but remember now we are double the recommended dose and that brings up a particular problem with opioid use disorder and if we struggle with taper, does the conversion come into our heads if we have access to the provider because that might be a consideration here. We don't know if this is something, she could tackle appropriately because of all of the barriers but if we start to taper and she struggles, we need to raise the issue.

Those are fabulous questions. We have a few minutes more before we ended the session and I just want to throw it open for any conversations and discussions related to this patient or anybody with pain that we are tackling related to telehealth and also anything we have talked about today. I did promise you 45 minutes at a time and that will be true for even the last presentation here. You guys have all been so amazing so to be able to plow through this presentation, I so appreciate it.

Any other questions or comments that people have? I will make a bid here. If you are not X waiver to be able to prescribe morphine, there are multiple people and courses that are virtual. It really would be a good idea and the education he received in those presentations is really important and even if you never intend to use it but I would like to prescribed has increased and can be lifesaving for many patients. I also will refer you to PCSS now where you get a lot of information and this really has a use. It's not something we have found all that helpful and then you do have a question of what to do if you are drug testing and when they come up positive for THC but I work within the parameters but I don't use it. A few minutes more and we will make sure that every comment is registered. There are different opinions and they will see a lot of different opinions about this that you want to make shared decision approaches so let me see if I can type this in for the way to get waivers. It is www.pcssnow.org. It is a fabulous website for all sorts of resources.

It is now 12:15. I will put a last call out for comments or questions or anything at all related to the full four hours and other than that, I will think you all for participating in the webinar and I appreciate

all of the incredible comments and it has been a breeze for me because you guys nailed it. Thanks a lot.

Think you just remember you can download the sign in sheet and complete it and return it to the email. Thanks.

Thanks a lot everybody. Hopefully we will catch up with you during the regular virtual training and we do a monthly virtual training on substance use disorder the first Tuesday of every month and on pain care the first Thursday of every month. Thanks a lot and we will see you then.

[Event concluded]