

VA Mobile Discussion Series

December 2018 Webinar: Minding Our Veterans

VA's Mobile Discussion Series is a monthly webinar featuring a variety of topics focused around app development and mobile health at VA.

Micah Azzano: Hello everyone. Welcome and thank you for attending our VA Mobile Discussion Series webinar this month. This month, our discussion is Minding Our Veterans: Using Technology to Augment Psychotherapy and Self-care. My name is Micah Azzano, and I'm going to run through a few brief technical reminders before we begin the actual discussion. Your phone lines are muted, so we'll be taking questions in the chat feature. The chat function is available to you at the right of your screen. If you're experiencing any technical difficulties, please use the chat, and someone will be in touch to offer assistance.

Today, we welcome Dr. Jennifer Roth, Clinical Psychologist, Outpatient Mental Health at St. Cloud VA Health Care System. The presentation you will see today will be available online, and if you would like to download it, please click on the file name below the chat screen. During our discussion, we will be covering VA tools and technologies, including CPT Coach, Mindfulness Coach, Virtual Hope Box, Annie, as well as going over traveling with VA Connected Care (Video Connect) and Tech Into Care. We will be taking your questions periodically throughout the webinar. So, once again, if you have any questions during the presentation, please type them into the chat feature on the right. And with that, I'll turn it over to you, Dr. Roth.

Dr. Jennifer Roth: All right, thank you for having me, and thank you, Micah, for that introduction. I work at the Outpatient Mental Health Clinic here at the St. Cloud VA and have been employed here for just over two years. This is my first job since completing internship at the Fargo VA Medical Center in 2016. Using technology to augment psychotherapy and self-care is a topic that I find really important in my practice. And like Micah had said, I'll be highlighting a few of the apps that I consistently use or that Veterans I work with have chosen to engage in.

So, the first, CPT Coach, and overall in therapy, like CPT states, there's 168 hours in a week, and if you practice a new way of thinking or in other cases, if you practice coping skills only in that one hour of therapy each week, and the old way the other 167 hours, there's little progress that's going to be made. And I think that these apps and others found in the VA Mobile App Store really help to encourage engagement and self-care throughout the week between appointments and just throughout life overall. And these apps really help to bridge and augment that content of a therapy session, and then the practical application of the skills used in real life.

So, I recently completed consultation for cognitive processing therapy and have found that the CPT Coach App is a really great therapy companion tool throughout the treatment, and then post-treatment, as well. So, CPT Coach is for use by a patient who's participating in the evidence-based psychotherapy of cognitive processing therapy for PTSD with a professional



mental health care provider, and like PE Coach, this consolidates CPT's various handouts and worksheets all on the patient's cell phone or mobile device, such as a tablet, so that they don't have to manage a binder or papers, and it tracks their stuck point logs, ABC worksheets, challenging questions worksheets, patterns of problematic thinking, challenging belief worksheets ... The one-stop shop for everything that they need throughout this therapy.

One nice feature that I like in the app is when a Veteran is completing a new worksheet, there's the option to enter a new stuck point or to use an existing stuck point, which when selected, it brings up their own personal list. This app, like I mentioned a minute ago, is the treatment companion, and it incorporates all of the assigned readings, all of their writing assignments week by week. And then another great feature that it has a really nice graph of an assessment history, so that their symptoms can be tracked and viewed over time. I found that Veterans really enjoy seeing their progress in that graph form because they take these outcome assessments every, every appointment session, and to see that progress as a visual aid throughout the therapy has been really helpful.

And at completion – or at any time really, but at, you know, we're always hoping that it's not done mid-treatment or by accident that the Veteran – they can delete their assessment history or they can delete all user data at the end of their treatment.

So, right now, the app gives the options of CPT or CPTC when you're first logging into it, to pick which modality you're going to be doing. Whereas the most recent trainings where CPT is now without the trauma account, and CPT+A is with the trauma account. So, just being mindful of having the Veteran choose whichever course they're going to engage in throughout the app.

Micah Azzano: Thanks Dr, Roth. I just have one quick question that I want to jump in and ask you real quick. When should a provider with a Veteran participating in CPT recommend CPT Coach?

Dr. Jennifer Roth: I really, I find it best to recommend or have the conversation of interest in downloading CPT Coach to a Veteran in our psychotherapy consult appointment, where the treatment options or the treatment planning occurs. Or if that's already been completed and they're being scheduled with you for session one, having that discussion then. Essentially, doing it as soon as possible so that they can follow session by session all on their phone if they're choosing to do that and kind of going through it the virtual route versus having the hard paper copies handed out.

Micah Azzano: Okay, great. Thank you, and so I think with that, we're ready to move on to Mindfulness Coach next.

Dr. Jennifer Roth: Great. So, Mindfulness Coach is another really great option, and it's popular with the Veterans in our outpatient mental health clinic. It has a really wide array of audio mindfulness exercises, and a log for tracking their practice. So, version 2 was recently released for Android, and I think it's in late development for iOS systems. If that's been released, I think



there might be a few people attending the call that would know if it's been released for iOS or not. I think I see someone, there we go. It's live on iOS, that's great.

So, version 2 adds mindfulness training plans and has an expanded selection of audio exercises. It also has a folder for all of the content that are found on the first version, so it's a really great – you have Mindfulness Coach 2, but it has all of the content that was available on the first one, as well. So, this app provides a mindfulness training and helps the Veterans get started with their mindfulness practice. There's a really cool little tree that grows as they complete each of the four levels, which I think is a great visual reinforcement for their engagement.

With the Mindfulness Coach, the Veteran can learn about the basic principles of mindfulness, how to overcome common challenges. There's topics, such as how to get started, what are the benefits of it, how do you cultivate mindfulness, how do you incorporate it into your everyday life, using it with difficult emotions, what to do when it's challenging, and the frequently asked question option. So, I really like this one. The FAQ section answers questions, such as, “I can't sit still. Is it okay to move around?” Or, “How long is this going to take before I start to notice a difference in my practice?” And the answers to those questions are really normalizing for anybody starting to engage in this and incorporate mindfulness into their, into common practice and throughout their life and on a daily basis.

The Veterans using the Mindfulness Coach can create goals to use mindfulness in their daily life. So, for example, they might be able to say that they want to practice mindfulness for five minutes a day, and they can set that goal on this app, and then track their progress on a log, noting which exercise that they completed, and it tracks that for them. There's also a mindfulness mastery survey where they can get feedback about their progress. The survey asks them how well the world is observed around you, what's your ability to give your full attention to what you were doing, what's your awareness of your own thoughts and feelings, how have you noticed them in a non-judgmental way?

One other really great feature that I love about this app, and that the Veterans that I've worked with who have downloaded this app, is that it has access to support and crises resources. So, it's a really great one-stop screen that offers numerous resources, such as 911 or the Veterans Crisis Line, Veterans Crisis Line and texting, the National Domestic Violence Hotline, National Sexual Assault Hotline. There's also options to add personal contacts into this, as well, for added support or if a Veteran is having a crisis. And one thing about this feature for crisis is that you just click on the number and it automatically brings it up on your phone for you to call, so you're not having to copy and paste anything. It's a really great feature on it.

Micah Azzano: And Dr. Roth, do you have any real-life success stories or examples that you can provide on how Veterans have benefited from the mindfulness exercises?

Dr. Jennifer Roth: Yeah, absolutely. One in particular comes to my mind, thinking about this, probably due to recency; so, I was recently working with a Veteran who was referred to therapy for managing anger, and in discussing different potential mobile applications to augment our



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therapy, he chose to download and participate in the Mindfulness Coach. And he reported throughout our work together that setting aside time to specifically engage in mindfulness practices through the app, he had a greater awareness of his internal experiences. He felt like he had room now to really slow down and move around and become an observer to his thoughts and feelings.

Remembering correctly, he specifically enjoyed the awareness of breath, and the mindful listening practices. He had talked about how just sitting back and practicing listening to the sounds or doing things like that, it really allowed him to sit back in other conversations with other people, and listen to what they were saying as opposed to having a comeback already, you know, thinking through in his mind, he was able to practice that patience. So, overall, he really evidenced an increased ability to slow down in that moment and respond as opposed to reacting.

Micah Azzano: That's a perfect segway into our next app, with the Virtual Hope Box and the upcoming holiday stress and travel, so ...

Dr. Jennifer Roth: Yeah, the Virtual Hope Box. So, this was an app developed by the National Center for Telehealth and Technology, or T2, and it's the winner of a 2014 Department of Defense Innovation Award. So, this one's not on the VA App Store, but it can be found on any Google Play Store or iOS App Store, searching Virtual Hope Box, so, and it should pop right up when you type that into the search frame there. So, the Virtual Hope Box, it's an empirically tested smartphone tool, and it's designed to support patients at risk for suicide, and I was recently looking at the VA website for this, or for talking about the Virtual Hope Box, and it looked like that as of the spring of this year, it's been downloaded over 400,000 times, which I think is incredible.

This app, it's modeled off of a cognitive behavioral therapy technique using a physical box containing those things that remind our Veterans of positive experiences or reasons for living, reminding them about people who care about them, and having different coping resources that are included in this box. So, the Virtual Hope Box is really similar, and it fits in your pocket, and you can carry it with you absolutely everywhere.

It's multimedia, it's a coping skill application designed for individuals struggling with depression or, particularly our service military members, and there's four main features on this Virtual Hope Box, as you can see that in the picture on the screen. But this – the features here include sections for distraction, inspiration, relaxation, and then a coping skill option or coping tools option.

So, the distraction techniques has games that require focus – so Sudoku and word puzzles, things that can get you really engrossed in completing the puzzle. Relaxation techniques: there's a variety of guided and self-controlled meditation exercises – so, guided meditations on the beach or a guided meditation in the forest or on a country road. And these coping techniques really offer suggestions for activities that reduce stress. The inspiration section has



brief quotes that improve mood or motivation, and you can kind of swipe through them and find quotes that maybe are more fitting for you or just kind of reviewing them, I think they're really great, the ones that were chosen to be included on this one. And this app can also be used in collaboration with a mental health care provider through the coping cards feature, and that can be programmed to address specific problems.

The relaxation tools can also be used with a clinical professional or another, you know you can kind of engage in the meditation activities with a friend or a partner – having people engaged in that, as well. There's also a remind me section, which I think is really neat, and you can add photos of close friends or relatives or songs that are special to you or special messages from a loved one as well.

Micah Azzano: And that's really interesting, Dr Roth, and with the holidays coming up, and the travel and everything, can you give some examples of content that, specific examples that you might add to the Virtual Hope Box to prepare for the holiday stress and travel?

Dr. Jennifer Roth: Sure, I think the holidays is a really great time to review maybe what's currently in the hope box, or in the Virtual Hope Box. Maybe adding in more music that's helpful at this time of the year, or creating specific or new messages from loved ones. It might be helpful also maybe if the Veteran isn't going to be home, or is going to be over the road over the holidays. Having a nice reminder of those – thinking about them or photos or music that's important to you. Also, looking at the coping cards that have been developed, or adding in any new or anticipated problem areas proactively and then pairing that with, you know, what are the emotions or physical symptoms that might be associated with this problem area that might pop up more so during the holiday season, and having an associated, specific coping skill for each to access that stress reduction for the Veteran.

I think it can be really hard to think in that moment how to reduce your stress, so this is a really great way to have skills at the ready, kind of proactively what might be useful, and if anyone on the call has ideas or things that they've used for content, or that they've seen Veterans put into any of these apps in your practice, I, you know, I'd love to see what you guys are using as well.

Micah Azzano: Great, thanks, and with everything going on, I guess it is helpful to have sort of those reminders, which takes us into our next app, Annie.

Dr. Jennifer Roth: Yeah, so Annie is VA's texting platform for Veteran self-care. So, this was developed with the Office of Connected Care for access and the Veteran experience to be enhanced throughout information and communication. And then it's integrated into our daily lives of the Veteran and VA staff.

So, Annie is ... We have a lot of acronyms in the VA, and Annie is not one of them. So, Annie is named after Lieutenant Annie G. Fox. She was the chief nurse at Hickman Field during the attack on Pearl Harbor, and is the first woman to receive a Purple Heart for combat. And then VA's Annie was developed through the international collaboration, and is modeled after a



similar award-winning platform in the United Kingdom. So, the British National Health Services program is called Flo, after Florence Nightingale, the founder of modern nursing, and then other platforms based off of Flo, such as Annie or other ones in other countries, such as Australia or New Zealand, they're also developing them. They're named after famous female nurses.

So, Annie is, it's a protocol-based message for self-care. It is for Veterans to track and monitor their own health, and one thing that I can't say enough with Annie is that it is, it's self-care. So, it doesn't mean that a clinician on the other side is regularly reviewing the messages coming back. This is for the Veteran to engage it in their self-care. There's no smartphone needed. It's prescribed by a provider or a licensed provider, and there are ... informed consent that we go through with the Veteran, letting them know that it's not regularly reviewed, you know, standard text messaging rates apply, kind of some of those standard things. And no smartphone needed means that there's not an app to download. You are prescribed the protocol or an appropriate protocol that the Veteran is interested in, and then you just get the text messages on your phone. So, we get the short code from Annie. We always ask that people change that short code to Annie, and they just kind of have that interaction with that software, knowing and having that informed consent piece that it's not an actual person on the other, on the other end of the line.

So, we have ... also some broadcast messaging that you can send out, so such as, you know, it's flu season going around, and you know, your facility might have a flu clinic, and you can send out a broadcast message to anyone at Annie stating, you know, "Hey, there's a flu clinic, and here are the dates and times that, at this facility," for the ones that they might be getting the messages from – so, Annie messages are automated, and they're not direct messages between a Veteran or a clinician.

Some care team benefits of Annie is that it enables the collection and synthesis of clinical data outside of our office visits. It reduces the need for staff interaction between visits. We get automated clinical feedback, so it increases patient safety and education. They get automated treatment prompts, reminders, you know it can reduce the calls or questions about a care plan potentially. And also, it can assist with review and documentation for us for different numbers that are coming in.

Veteran benefits, it really empowers Veteran self-care. It enhances active partnership with your care team. What I've found as a pilot site here is that Veterans feel more connected to their care team, they feel supported in completing different health tasks and achieving different improved outcomes. We can modify the data parameters for the, or the, for the messages and the timing to fit any individual clinical needs or their lifestyles. So, if they don't want to get a message at seven in the morning, they prefer it at 9 a.m., we can change those to having the messages being sent to the Veteran at whatever time is most effective for them.

Micah Azzano: All right, thanks Dr. Roth, and we're going to take a quick break right here and take a couple questions. The first question was "When will the Annie app be available for other



VAs?” And I don't know if you have an answer for that, Dr. Roth. If not, I can jump in and provide some help there, too.

Dr. Jennifer Roth: Okay, it's being rolled out on a VISN by VISN basis. So right now, VISN 23 is live, and they're working on completing the train the trainer in VISN 4, and they have a targeted date to be live in mid-January. I'm not sure, and maybe Micah, you have some information on other VISNs that are kind on the docket for being rolled out to next.

Micah Azzano: No, that's – so, right now, that date has been pushed back. There's no definitive date yet; however, we'll keep everyone updated and send – information will be going out as soon as that's more finalized. The next question that came in from our participants is “How many different Annie protocols currently exist? CPAP sleep, but what else is there?”

Dr. Jennifer Roth: So, I think there's about 17 – don't quote me on that – different national protocols that are available in Annie when it's released to the VISNs. Like Amy had mentioned, the CPAP one. So, CPAP appears – I have three different examples on the slide right now. That one in the far back is a CPAP reminder, so the Veteran would get a motivational message nightly. There's no interaction needed. The middle one is an exercise reminder, one where it's just a reminder to remain active and get up, get moving. Again, that's a motivational one; there is no participation needed. And then this last one here has a sleep duration protocol, and this one is one that asks for Veteran feedback, and it says, you know, “Good morning, this is Annie. How many hours did you sleep last night? Please reply with the keyword sleep, followed by the number,” and the Veteran can say “sleep 7,” and then that's tracked within the Annie database.

Other protocols that are out there are a medication reminder protocol, and you can set that up for any number of times. So, if they wanted, if they need to take their medications at eight, noon, five and eight, you can set up a reminder at any of those times, and they'll get a text message saying, “Hey, it's Annie. Remember to take your medication.” There's a few protocols for hypertension, for advanced liver disease, for diabetes management ... let's see. There's a few other ones out there, as well. I could look them up if you wanted me to, but ...

Micah Azzano: And I would, if you want, if you would like additional information on any of the apps, on Annie, specifically, I would suggest going to the VA App Store for additional information, or feel free to send us a note through the chat, and I will follow up with you too. Okay, so with that, Dr. Roth, let's move on to talking a little bit about using, traveling with VA Video Connect.

Dr. Jennifer Roth: Sure. VA Video Connect is a really neat tool that allows us to connect with a Veteran wherever they're at. So, how do I use this in the context of telehealth? So, first I want to talk a little bit about telehealth itself, and the VA Video Connect offers a really great opportunity to connect with our Veterans and have uninterrupted care as they travel. So, we recently had Thanksgiving, and there's a significant amount of travel between then and Christmas, which is next week, and it has the potential to become a barrier in engaging in



therapy or having consistent appointments, and VA Video Connect really gives me that opportunity to continue that care, really, (un)interrupted.

There's a few VA Video Connect differences between Android and iOS. The iOS systems, they have to download the VA Video Connect app, which will launch when the link in their email is clicked. And then Android, you just click the link in the email, and it automatically opens up the link, so there's no app needed to be downloaded. Telehealth has really improved access, not only for those who travel, but also rural or remote Veterans. Being able to offer appointments through VA Video Connect, it reduces a lot of barriers for them, such as time or distance or stigma or mobility concerns, and it saves on time and money.

There's a continued engagement in their care from comfort of their home or ... I've engaged in having appointments, you know, outside in a parking lot – I wasn't, the Veteran was – but, in the parking lot outside of a Buffalo Wild Wings, in their winter vacation home. It really allows you to connect wherever they are at, and along the way when they're going there. There's a big encouragement at our facility to incorporate the technology and care, and from my experience, most people welcome it. And research also shows that it's as good as face-to-face care, and it has high satisfaction and it's safe.

At our facility here in St. Cloud, we experienced a 92% growth from FY16 to FY17, and another 14% growth from FY18 to FY – or, from FY17 to FY18 with telehealth. And to put this into numbers, it means we went from 162 telehealth encounters as a facility, so not just mental health, in FY16 to 2,417 encounters in FY18, and we're fully expecting to see this growth trend continue.

Getting back to meeting them where they're at and wherever they are along that journey is ... documenting also for patient safety is, you know, where are they located during today's CBT appointment? You know, is it at their home? Is it at a winter home or are they on the road? Are they in a parking lot somewhere, and making sure that we have emergency phone numbers for that patient or Google what county or get the address for where they're at, and get an emergency number. So, it's important because we never know when a medical emergency could occur with this modality, as well, also getting, you know an emergency contact for the visit for another individual, as well.

And continuing care virtually and offering or suggesting mobile apps, it's helpful to know the apps. And I discussed a few of the ones that I regularly use, but it's also helpful to be the patient and download the app and become familiar with it. Check it out, play around with it, see what the different buttons do, and where does it take you, and understand how to troubleshoot and what it looks like, so that when we're working with them when they're traveling or making sure that we're not having interrupted care that if they say, "Hey, I'm seeing this," you know, we kind of know what they might be talking about, and we can help guide through the process of troubleshooting anything.



It might be helpful to also have some materials and screen share with them when we're doing a VA Video Connect appointment. We have the ability to do a presentation mode and have, you know, we can share a visual aid about what we might be discussing, and they can see that as well, just like we would be doing if they were in the office with us. VA Video Connect, it uses the Virtual Medical Room and uses Google Chrome from our computers. It's as easy as clicking the link generated when that appointment is made, and it's, for me, it's really helpful to have a second monitor. I move everything to my main monitor except a document that I might be sharing with a Veteran, and that can include making sure that CPRS or other Word documents are minimized on my main screen, and that if I'm going to be sharing anything with a Veteran, it's on a completely blank monitor.

And using these apps with Veterans who travel during the holiday season, it can help eliminate that delay in care, like I had said prior, with that option of VA Video Connect. So, such as, sessions of cognitive processing therapy and using the treatment companion app of CPT Coach. All session content is on their phone, and it can be accessed wherever they go, so if they ... Even if they, you know, you might be doing it paper and pencil, and they might have a workbook and they forget it. You can still download the app and go to the session that you're working on and continue that care with the Veteran wherever they're at.

In holiday seasons, it can be stressful for our patients, and with the apps, it's really helped me remain engaged with those that I see, and have active plans developed for coping through the stress with apps that I have mentioned above, or mentioned prior, like the Mindfulness Coach. It's taking a break or regrouping and engaging in a grounding exercise or practicing patience while standing in line. Coping with the crowds that are out and about at this time, you know, the Virtual Hope Box of playing some of the games offered or reviewing messages or photos from loved ones, or having Annie send you messages to your phones with tips to remain active. I think when we get stressed, it's hard, you know, again, to access those coping, and sometimes that results in us doing nothing, and most of the time that nothing isn't helpful. But when these tools are pre-programmed, and they're with them and they're willing to engage in these modalities, it's really beneficial and they remain active, and it promotes more autonomy and just that self-care and engaging in that treatment, and what works for the Veteran during the holiday season.

Micah Azzano: Okay, great, thank you Dr. Roth, and you talked a little bit about this, but can you expand a little bit on how these technologies are used to complement each other and add to the quality of care that Veterans receive, too?

Dr. Jennifer Roth: Yeah, I think we're moving, you know, in a direction where technology is kind of expected and it's welcomed. And a lot of the individuals that I work with, I'd say more often than not, are excited to have other coping, coping skills and not have a worksheet given to them, and finding that having these tools and mobile apps at their fingertips and through the VA, and it really increases their activity in engaging in any of these modalities or in therapy or keeping them active and having reminders between sessions to use the coping skills – that's all been really helpful and complementary of each other.



Micah Azzano: Great. Thank you for that, and I would encourage anyone that has any questions to enter them into the chat. We're getting ready to move on to our last technology today, Tech Into Care.

Dr. Jennifer Roth: So, the Tech Into Care Community of Practice Call is hosted by the Practice-Based Implementation Network, and it's a monthly call open to any VA mental health provider interested in using a VA mobile app or online self-management programs with Veterans. So, this call occurs the first Tuesday of each month, and you can sign up through the call through their SharePoint link, which is on the slide here, or you can also email them mobilementalhealth@va.gov for more information or to join or receive a calendar invite for these calls.

So, this is a really great one to attend as technology is always changing, and it's always being updated, and sometimes, I know for me, it can feel hard to keep up and to know what changes are happening or if a new version of this app, of an app is available, or like I learned earlier that the, you know, the iOS version is now live, and last I knew it wasn't, and so these are really great calls for us to remain active and up-to-date on the apps and technologies that we can offer the Veterans to engage in, what it looks like, how to troubleshoot things.

The Tech Into Care call is where we can go to learn the newly released mobile apps or online programs directly from the teams that are developing them, and you can troubleshoot or give ideas to other providers and the subject matter experts with these applications. The most recent Tech Into Care call had a really great overview of the new version of PTSD Family Coach, included the evidence base behind some of the development and what the different updates for the version 2.0, which was released in October of this year, so that's less than two months ago, and it looks different from the one on the VA Mobile App website, and so I'd encourage everybody here, you know, download it and see what the changes are. See what the new tools are moving forward.

There's been ... you know, a bunch of different topics that have been added to it. There's been re-designs on how the psychoeducation pieces is, you know, it's more appealing. There's different visual cues for it, there's different ways that you can customize it, as well to the Veteran. And then the next Tech Into Care call is going to be February 5th, and that's going to be an overview of the STAIR Coach by Dr. Wehrle. And the STAIR Coach is – it's a supplement to the in-person psychotherapy using the Skills Training in Affective and Interpersonal Regulation. So, I'm really looking forward to attending that one and finding out more information about the STAIR Coach. And additionally, the Practice-Based Implementation CE Lectures that are also hosted by this group – there's one going to be January 9th by Dr. Connelly, and it's going to be discussing Veterans' attitudes towards mental health apps and the qualitative study of virality and the age differences. And again, these are really great opportunities to stay in the forefront of the technology available, and the technology that we're offering and that we're supporting to the Veterans that we work with.



Micah Azzano: Okay, thank you Dr. Roth for walking us through those, all those technologies and how they can be used during the holidays, and really, any time traveling and to ensure mental health care can continue. We haven't had any new questions come in right now, so I'll give everyone just a few minutes, but while I'm waiting, while we're waiting to see if any new questions come in, we'll, I'll just, I just want to bring up this slide. If you have any feedback or thoughts for us or have any topics that you would like us to discuss in the future, there's a little, there's a link to a survey. Please go there and fill it out, and let us know how we're doing. And Dr. Roth, is there anything you would like to add before we log off today?

Dr. Jennifer Roth: I don't think so. I think, thanks for everyone who joined the call, and hope you have a wonderful rest of December and start to your 2019.

Micah Azzano: Okay, great. Thank you everyone, and happy holidays. And if any questions come in after the chat, or after we close out here, I'll be happy to answer those offline. Thank you.

