VA Mobile Discussion Series

April 2019 Webinar: Path to Better Sleep

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: Hi everyone, welcome and thank you for attending our VA Mobile Discussion series webinar. This month's discussion is improving sleep quality for veterans with VA Technologies. My name is Micah Azzano and I'm going to run through a few brief technical reminders before we begin.

Your phone lines are muted, so we will be taking questions through the chat feature. The chat function is available to you at the right of your screen. If you are experiencing any technical difficulties, please us the chat and someone will be with you to offer assistance.

If you would like to download this presentation or other resources from the presentation, please click on the file name below the chat screen. The full presentation will also be available at a later date on the VA Mobile Discussion series webpage.

Today, we welcome our presenters: Christi Ulmer, Sam Kuna, Jill Reichert, Kelly Ramsey, and Julie Kinn. During the webinar today we will be discussing VA apps and technologies, including Path to Better Sleep, Remote Veteran Apnea Management Platform or REVAMP, CBT-i Coach and DoD Resources, A Better Night's Sleep Podcast, Military Meditation Coach and the Dream EZ App. We'll 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 will turn it over to Dr. Christi Ulmer for the next 10 minutes to introduce herself and discuss the prevalence of sleep issues within veterans and the Path to Better Sleep course.

Dr. Ulmer: All right. Thank you, Micah, I appreciate the introduction. And as Micah mentioned, I'll be talking about Path to Better Sleep, which is an online insomnia treatment course. Before I start, I would to like to first talk a little bit about insomnia and the prevalence of insomnia among veterans.

So, for several years now, researchers at the San Diego VA have been surveying veterans who are registering for VA care about a range of issues. The insomnia severity index is among the measures they use in their assessment and they're finding that almost half of all newly enrolling veterans meet criteria for clinically significant insomnia.

Accordingly, research examining insomnia diagnosis rates in the VA electronic health records show a sevenfold or 650% relative increase in insomnia from 2000 to 2010. So it's important to note that the impact of insomnia disorder expands well beyond just impaired quality of life.



Insomnia is predictive of the most common conditions seen among veterans including depression, PTSD, suicide, hypertension, cardiovascular disease and all-cause mortality. For example, in veterans completing suicide, the time lapse between the last VA visit and death was shorter for those having comorbid insomnia relative to those without.

Insomnia is associated with impaired functioning as well, including more days of restricted activity due to illness, impaired activities of daily living, decreased ability to enjoy interpersonal relationships, lower activity levels, increased risk of industrial accidents and increased risk of falling.

Cognitive behavior therapy for insomnia is recommended by the Society of Behavioral Sleep Medicine, the American Academy of Sleep Medicine, the American College of Physicians and the National Institute of Health as the first-line treatment for insomnia. Findings of a recent literature review reveal that CBT-i was superior of benzodiazepines and non-benzodiazepines for long-term outcomes.

And clinical practice guidelines advise practitioners to defer to CBT-i as the standard treatment for insomnia among those with chronic insomnia, older adults, and among chronic hypnotic users.

Internet-delivered CBT-i could help bridge the gap between these limited professional resources and treatment needs and allow veterans who are unable to engage in clinic-based treatments to receive CBT-i. In a recent meta-analysis, internet-based CBT-i was more effective than usual care for decreasing time to fall asleep, time awake in the middle of the night, and sleep efficiency. And these effects were sustained over time.

So, the problem is that ... Oh, I'm sorry. So, for several years, the VA has been disseminating training and face-to-face individual CBT-i therapy, and veterans treated by these trainees realized clinically significant decreases in insomnia severity, depression symptoms, suicidality, and improved quality of life. In fact, for each self-reported insomnia severity across treatment, the odds of suicidal ideation reduced by 65%.

Other research finds similar outcomes with veterans having PTSD. So we know that CBT-i is really effective, it has a strong research base and even with veterans having mental health conditions and comorbid medical conditions. The problem is that the VA is not equipped to treat insomnia at a rate of 50% of veterans enrolling in care.

In part, this is because CBT-i trained providers, and there are more than 700 at this time, typically, they are mental health providers assigned to mental health clinics. And they tend to focus predominantly on treating mental health conditions other than insomnia. In many VA clinics, inadequate resources are leading to long wait times for CBT-i. For example, in our clinic, at the Durham VA in our behavioral sleep medicine clinic, our referrals for insomnia treatment rose from about 100 to 600 from 2008 to 2015 while our professional resources remained unchanged.

And our referral rates have continued to increase since 2015. And yet, our facility arguably has more FTE devoted to behavioral sleep medicine than any other VA facility in the country.

Micah Azzano: Thanks Christi. And real quick, I just have a couple of questions here on this issue. Can you expand on why insomnia is so prevalent in this population and the issues we're seeing as a result?

Dr. Ulmer: Yeah. Well, so the prevalence has to do with really just the way military training unfolds. We don't talk about them as such but they're really like shift workers. Shift workers who are also stressed at the same time, I think. And so, after years of very erratic sleep patterns, it's understandable why military persons come home and become veterans with insomnia.

And then as far as, behavioral sleep medicine is sort of a subcategory of behavioral medicine and health psychology. And that's typically where people learn this intervention. But they're just really aren't that many of us, I guess, you could say. And we're doing things in our field to expand that and create more access. But it's been a slow process and we can't keep up with it at this kind of rate either.

Micah Azzano: Yeah, it is an issue. And considering how big of an issue this is, within not just veterans, but nation-wide, can you explain a little bit why there is such a shortage of CBT-i specialists?

Dr. Ulmer: Yeah. I mean, that's kind of what I was getting at. We just haven't caught up with... We haven't trained as many people in this as we could. And I think it can be expanded to nonmental health providers as well and there is research suggesting that. So, one of my research projects deals with that specifically.

So, there are these other barriers as well. You know, obviously not everyone can drive into a VA facility for a weekly treatment. Many people don't know, providers don't really even know about CBT-i, they don't know that it's a standard of care and they don't necessarily understand how it differs from sleep hygiene.

Oftentimes, insomnia is perceived as a symptom, meaning that people feel that the underlying condition needs to be treated first which largely is not typically the case. Insomnia is actually under-reported by patients. Providers, because they tend to think of it as a symptom, it's typically not documented in the medical record. Or at least it's under-documented. So we don't really have a good sense of the prevalence, which has the relationship with the resources that we need.

And then finally, again, providers often think of sleep hygiene education as a treatment for insomnia and there is really very little evidence to suggest that it's helpful.

So, the Path to Better Sleep is an online CBT-i course and it has a number of features that we believe that set it apart from other online CBT-i courses, especially if you're a veteran. First is,



it's free, it's confidential, there is no login required to access these resources. It's accessible from the comfort of the user's own home, it can be completed at the time and pace of their choosing. It's a self-guided resource. Some people need a little bit more time to learn the skills in these courses so they can go back and practice as much as necessary.

And Path to Better Sleep was developed with different kinds of learners and users in mind. So the resources include videos, games and quizzes, and other interactive activities to cater to different learning styles. And Path to Better Sleep was also developed with veterans in mind. So, veteran mentors and focus groups were involved in the development of the course and their testimonials are shared throughout the course.

Path to Better Sleep contains two essential elements. The first is the sleep checkup tool and the other is the insomnia treatment course itself. Sleep checkup is a sleep disorder screening tool and it starts with a brief video of how it works and then asks the users to complete a series of questions to understand their sleep problem. Since sleep apnea is such a prevalent condition among veterans and is often undiagnosed, sleep checkup begins with a sleep apnea screener.

Veterans are then provided with information about sleep disorders that are consistent with their symptoms. They are then encouraged to print out those fact sheets about their symptoms and take them to their provider to discuss further. And it is emphasized in the tool that the screener is not intended to replace assessment by a healthcare provider. But it can give veterans a place to learn more about their symptoms and was originally developed as a way to kind of ensure that we get the right people taking the Path to Better Sleep insomnia treatment course.

If the user has symptoms consistent with insomnia, the course will encourage them to begin CBT-i. And then at the start of CBT-i, they'll be screened for additional conditions that should be addressed with a face-to-face treatment instead of online.

So Path to Better Sleep includes all the same components as typical CBT-i. As depicted here, users are guided through a series of six weekly sessions, with each session involving an educational component and a sleep diary review component. And the layout all throughout the course is set in kind of a road guide format. The course map allows the veteran to track the progress across the course and users can complete the course at their own pace.

Tracking sleep on diaries is an essential element of CBT-i. So veterans using the Path to Better Sleep can choose from one of several approaches to keep their sleep diary. In addition to our online Path to Better Sleep tracking approach, veterans could also choose to use CBT-i coach diary, a spreadsheet diary or even paper-based diary. But regardless of which they choose, they can use the Path to Better Sleep calculator to determine their sleep prescription, which is part of the course involving planning sleep timing. Users can also download their diaries to share with providers.

So in addition to the insomnia treatment course, Path to Better Sleep offers several tools which can be used in a standalone fashion. For example, some providers may want to ask their



patients to track their sleep and veterans can track their sleep on either the diaries and then download an output and bring those with them to the clinic. And as I mentioned before, the sleep checkup tool includes downloadable fact sheets that veterans can use to discuss their symptoms with their provider.

So we have fact sheets for both providers and patients available upon request and also, I see that they're attached here as the available download. And if you have questions or would like additional information, you can reach out to me through Dr. Carolyn Green who is really the owner of this project. Or you can access the resources posted here. So I'll be happy to take any questions that you have.

Micah Azzano: Yeah, thank you. And real quick before we jump into REVAMP, I just have a quick question on Path to Better Sleep. And you touched on this several times when you were presenting, but can you expand on why internet-based delivery is a good option for this audience and how providers can use this tool to help their patients?

Dr. Ulmer: Yeah. So, the thing that's nice about cognitive behavioral therapy for insomnia is that it's probably a little bit more didactic and systematic, I guess, in the way that it's delivered. It's very much related to sleep diaries, meaning that people are doing calculations on the timing of their sleep and how much wake time they get, how much sleep time they get. And those calculations are really essential to an important component of the treatment called sleep restriction therapy or sleep efficiency training.

And because of that, I think it really lends itself nicely to an online format. And, again, I think that the thing that in some ways may be even better is that you can see videos of veterans who've already completed the course while you're going through it which you obviously don't have that available to you if you're doing face-to-face treatment. So it kind of builds in some things that you wouldn't get otherwise. But I think it really lends itself nicely to that.

Micah Azzano: I agree. And I have one other question that we have to get to really quick and then we'll take others at the end. Would this be available, accessible via smartphones, tablets or desktop?

Dr. Ulmer: Yeah. You can access it through a tablet and a desktop. You can see it on a smartphone but there is no app associated with it at this point. So it would be like looking at a website on a URL through a smartphone. And yes, I see the questions about being free. Yes, this is publicly available, it's out there now. Yeah, anybody can access it, literally anybody. And in fact, that particular website was developed with that idea in mind, that for veterans who don't come into the VA, the URL that starts it ... Actually, I'm missing on the name of that right now but that whole suite of tools is intended for veterans who may not come into the VA. Veterantraining.gov.

Micah Azzano: Thank you. Okay. Perfect. Okay. At this time, I would like to turn it over to our next two presenters, Dr. Sam Kuna and Jill Reichert to introduce themselves and to talk about REVAMP.

Dr. Kuna: Thank you very much, Micah. REVAMP stands for Remove Veteran Apnea Management Platform. I'm Sam Kuna, I'm the Chief of the Sleep Medicine Section at the Crescenz VA Medical Center in Philadelphia and I'll introduce Jill Reichert, who is the Implementation Manager of REVAMP and she is also the Program Manager of the VA Telesleep program. Jill is in Sacramento, California.

Obstructed sleep apnea is another highly prevalent sleep disorder in veterans. It's characterized by intermittent closure of the throat of the upper airway during sleep. And it's usually associated with snoring.

It has significant medical consequences and Jill is going to tell you a little bit more about REVAMP content.

Jill Reichert: Thank you Dr. Kuna. Just a little bit about REVAMP. REVAMP was developed as two web apps, they are available on the mobile app store. It is an interactive veteran and provider-facing web app. So veterans and providers have the ability to view data, complete questionnaires and such, and essentially helps facilitate the remote diagnosis and management of obstructive sleep apnea. It is targeted towards rural veterans, although we do have a large population of non-rural veterans using the app. A definite benefit to both of those populations.

Some of the key features of REVAMP for the veteran is that they're able to complete their intake and follow-up questionnaires remotely, as well as the practitioner is able to collect those questionnaires and they can be scored and interpreted without the veteran having to be onsite to complete those questionnaires.

Veterans can also view their PAP data on REVAMP and there are links out to OSA education and we also have secure messaging built into the app, which we do eventually look to transition over to My Health, but that is functionality that is available at this time.

For the practitioner, a great benefit that we see is that we do have templated progress notes that can be copied and pasted into CPRS. It gives a little bit of streamlining of workflow and allowing for that information to be templated. It can be edited and then just copy and paste it over.

As well as the veteran, the practitioner has the ability to view PAP data and develop reports. We also have a new feature on the platform that allows for tracking of home sleep equipment inventory. Dr. Kuna will go into a little bit more detail on some of these key features in future slides.

Just a little bit about our integrations. You'll see that in the upper right hand corner, REVAMP does integrate with the Master Veteran Index. So once a veteran has been added to the



platform by a clinician, it will go out and import the patient profile and demographics directly into REVAMP. We also are utilizing Identity Management. Veterans have the ability to access REVAMP with DS Logon, My HealtheVet and CAC and ID.me. And clinicians have the ability to utilize their PIV to access the provider platform.

We've also integrated with two CPAP vendors, you'll see that on the left hand side of the screen. So we are able to pull in CPAP data for those veterans who are on the platform and we are working with deliverables on a future integration with them.

I'll turn it over to Dr. Kuna to go into a little bit more depth on the key features.

Dr. Kuna: Thanks Jill. As Jill mentioned, we have questionnaires on the REVAMP platform that are collecting information from the patient and/or sharing that with the patient and the practitioner. So they're filling out these questionnaires online, telling us about their sleep symptoms, and then we can use that in their management. They're filling these out at the time of intake, just prior to their first presentation and then we also have them fill it out at follow-up after they've been diagnosed and are on treatment with CPAP so that we can evaluate patient-centered outcomes and show them the improvement that they've made in their symptoms.

As Jill mentioned, we also have a tracking system on REVAMP that is there to help practitioners. So if someone is seen in their initial evaluation and felt he needs sleep testing, the normal standard procedure in the past has been to bring them into a sleep center for a polysomnogram. However, many sleep VA centers do not have sleep centers and we now are relying heavily upon portable monitor testing, which is another accepted way of diagnosing sleep apnea.

And these monitors can be distributed to patients if they come in to their local VA facility. Or they can even be mailed out to patients. So you can imagine with the volume that we have monitors coming in and out of the VAs day by day, we need to track these monitors in order to make sure that they're coming back. And so this tracking system on REVAMP allows us to do that.

And it includes people not only who are enrolled in the REVAMP platform, but the practitioners can also use it for all the patients that they have in their sleep center that are undergoing testing. It's proved very valuable in allowing us to get these monitors back so that they can be given out to the next veteran who needs testing.

Now if a veteran is diagnosed with sleep apnea, they're most commonly started on CPAP, continuous positive airway pressure, the primary treatment. It's safe and highly efficacious. And the CPAP machines that are distributed by the VA have wireless modems that transmit information daily to the manufacturer's website and we have, as Jill mentioned, agreements with the major manufacturers. They will share that information daily and send it to our platform where it can be displayed in graphic format so that the patients and the practitioners can see the results.



This information includes how much the veteran is using the treatment every day, how well the treatment is working to control their sleep apnea, as well as the amount of air leak through the circuit that is an index of their quality of their mask fitting. We have evidence showing that just by providing the veteran with this type of information, their average use of the CPAP increases by one hour per night.

Jill, I'll hand it over to you.

Jill Reichert: Thank you Dr. Kuna. I just wanted to give a little bit of background on our REVAMP implementation. Back in September 2017, we started with our 10 initial pilot sites and have been expanding in waves since. We're currently in wave five launch. We've reached 55 sites across the nation and are expecting to have our final launch this fall, with wave six in September. We are accepting new sites on the platform during that wave and are looking forward to expanding further into the center of the nation with that wave.

And a little bit about what we've achieved so far. So what you see here is our March metrics and our cumulative to date metrics. That 3,530 that you see off to the side there should actually be under the cumulative. So we have enrolled just over 3,500 patients onto the platform as of the end of March. We are quite pleased with our engagement rate. Once patients have been enrolled by clinicians, we are seeing about a 46% activation rate of those accounts. And of those patients who are activating their account, we're seeing 83% of them completing their questionnaires.

So once they are on the platform, we do see quite a high level of engagement. One of the things that we kicked off in February was a REVAMP challenge. Our goal was to reach a million nights of sleep in the next year, so by January 31st of 2020. So far, we have reached over 200,000 nights of sleep. And we've challenged each of the sites that have launched to enroll a minimum of 10 patients consistently every month over that year period onto the platform. So we're just starting into our second month on the challenge and are looking forward to our numbers growing and continuing to grow. So we've been quite excited about this.

And then I'll go ahead and turn it back over to Dr. Kuna to talk about how REVAMP fits into our Telemedicine pathways.

Dr. Kuna: Thanks, Jill. So REVAMP, again, is collecting information from the patient and sharing that with the veteran and the practitioner. And it's being incorporated in with other telehealth technologies in order to provide a pathway that allows remote management and diagnosis of veterans with sleep apnea who don't have access to a sleep center. So in addition to REVAMP, you can include in this program clinical video teleconferencing, VA video connect, phone-to-phone sessions to conduct the evaluations using the home sleep apnea testing with the portable monitors, and the wireless transmission of PAP data.

So you essentially have a virtual sleep center that can then allow the comprehensive sleep center to reach out to Cbox, so patients don't have to travel to the main VA medical center, to



sites that have no sleep program, to veterans in rural areas and to disabled veterans who have difficulty traveling to the VA.

The ORH, the Office of Rural Health, has funded six hub sites, comprehensive sleep centers across the nation at Phoenix, San Francisco, Portland, Pittsburgh, Philadelphia, and Spokane to adapt this model and reach out to veterans in rural areas to provide this care, including REVAMP, as part of the pathway.

So thank you. I appreciate this opportunity to introduce you to REVAMP. We have a TMS site which provides very detailed information about the features on REVAMP. And then in addition, there are videos for patients and clinicians to show them the different features. We have a website on VA Pulse with REVAMP which has a great deal of information. And if you have questions, you can send us an email through REVAMP@va.gov. So thank you very much and I appreciate taking your questions.

Micah Azzano: Okay great. Thank you Dr. Kuna and Jill. There was a lot of great information there and I just have a couple quick questions and then we'll take questions again at the end. The first one is just trying to clarify, is this a clinical intervention or a research study?

Dr. Kuna: No, this is a clinical intervention. So it's a clinical program, it's open to any veteran that is being evaluated or managed with sleep apnea. They do have to have the secure logon with My HealtheVet or TS logon in order to access the platform because it is within the VA firewall.

We are doing an HSR&D-funded research study in Philadelphia, Atlanta and San Diego, which is comparing the REVAMP management, base management, versus in person care. Now, that study is about halfway through. But currently, the platform is available for any veteran.

Micah Azzano: And just to kind of ask a question on what you just mentioned, can you expand on how REVAMP isn't designed to replace appointments with practitioners but instead, use the supplement care. Can you expand on that a little bit?

Dr. Kuna: So, it's not meant to replace anything. We really designed it to facilitate current management. So REVAMP, by collecting all of this information, making it available, not only to the veteran but also the practitioner, saves the practitioner a great deal of time. They can continue with the clinical pathway that they have if they're doing in-person care. They can use it in their clinics when they're seeing the patients face-to-face. Alternatively, if the veterans are having trouble getting into the medical center, they can do phone clinics or CVT and use REVAMP to provide the information that is needed.

The great value of REVAMP is that it, by collecting all of this information and having an auto export of the data out into a templated progress note, it saves the practitioner a great deal of time in documentation.

Micah Azzano: Great. And one last question before we move on here. Are we able to offer this to caregivers, non-veterans?

Dr. Kuna: I'm sorry, I didn't get that... Offer it to caregivers?

Micah Azzano: Who are non-veterans?

Dr. Kuna: Yeah, no, the veterans would need to be enrolled within the VA because it is in the VA firewall. So they would have to be enrolled in a VA that is currently active on REVAMP and as Jill mentioned, we have over 50 sites that now have REVAMP and we're adding more. But it's only for veterans who are enrolled and receiving care at a VA medical center.

Micah Azzano: Wonderful. Thank you for clarifying that.

I want to remind our participants that if you have any questions for our presenters to please enter them into the chat at any point. We will be taking them at the end, again, as well for all of our presenters. We are now going to move on to CTB-i Coach with Kelly Ramsey.

Kelly Ramsey: Good afternoon. So, this is app CBT-i coach. We've had this app running since mid-2013 for both iOS and Android, and we're still keeping it maintained, we're still keeping it rolling along. It is, depending on the month, it is our second most popular app, behind PTSD Coach. We get maybe 14,000 active users on the iOS site and I would guess half to two-thirds of that on Android.

This is our app from the National Center for PTSD to support patients who are in targeted behavioral therapy for insomnia with a therapist. It is a backup for the patients so that they can use the app to enter their sleep diary entries, they can review their progress, they can read psycho-education to complement what they're receiving in therapy. They can set reminders for various therapy-related tasks. It is not a self-help aid, although we do have some interesting products in production.

At the same time, though, the app is user-friendly enough that we do receive a lot of recommendations to use it off label, essentially for personal sleep tracking. The alternative to a lot of the very expensive paid sleep apps out there. And we routinely receive recommendations in major media such as NPR publications suggesting the kind of use which is interesting.

You can use this app to review... You can see your diary entries, the sleep diary is set up designed for compatibility with the VA CBT-i rollout. And you can review your various... You see your sleep patterns. It does generate a recommendation for bedtime, based on the previous sleep diary entries. And it has a variety of relaxation tools to help you out there.

We are actively maintaining this and it is actively maintained for modern devices and modern operating systems. We are working on the iOS 9 compatibility right now, working on some iPhone X updates to tweak little bits, working on including the data handling and so forth. And



we do have a major plan for the current project year. So, keep an eye out for that and we'll be fleshing it up a bit for the current year.

Micah Azzano: Okay, thanks Kelly. And I just wanted to jump in real quick here and see if you have any real life examples or success stories that you can share that demonstrate the benefits of CBT-i coach for veterans with insomnia.

Kelly Ramsey: Oh, that's a...hm. I'm afraid I'm not up on that. I would have to check back and see if our sleep colleagues have any stories to tell. I'm afraid I can only offer generalities but we do receive recommendations and email but I'm afraid, I don't have a good story to tell.

Micah Azzano: That's totally fine. And also, I wanted to touch base on some of the features. You went through them but I wanted to see if there are any features that stand out as being the most used or most helpful, or ones that you really think some of our attendees on this webinar will be interested in.

Kelly Ramsey: If you are working with providing sleep therapy, then the sleep diary is probably going to be of interest. You know, it does offer, the form allows the user to get in the habit of filling out the sleep diary every day. And allows them to then view their results and see their sleep efficiency scores. I kind of buzzed through the graphs there. And I should probably make some interesting graphs. But there are actually six different graphs that you can swipe through to see various calculations of your sleep information on display.

People seem to like viewing information, even if they're not qualified to take people. We do sometimes get requests, "Can you expand the graphs? Make them viewable over a longer period of time so I can see my progress over time." That's something on our development agenda as well.

Micah Azzano: Okay. Thank you for that Kelly, and I'm about to jump into another question from one of our participants and I'm hoping that I'm understanding this correctly. With CBT-i coach, has there been any way yet to have the input on the appointment sleep diary interface with the actual sleep diary that are used during sessions?

Kelly Ramsey: I'm not sure I follow.

Micah Azzano: Sorry, they just clarified.

Kelly Ramsey: Yeah, the app in sessions. Are you referring to say that the provider spreadsheet that all the providers get from VA or the ... Yeah, I mean, there's no transmission setup and I'm afraid, this is not a connected project so it does not send any information anywhere as such that you could pull it on to say a dashboard and then pull it into your provider calculation spreadsheet.

We do have some prototype projects in development that we also expect to be moving forward over the current year to prototype it out so that there is... We're essentially working to create a



prototype of the dashboard on which somebody could actually do that. And then hopefully view the data in a secure manner.

Micah Azzano: Okay, great, thank you Kelly. And we'll be taking additional questions on CBT-i coach and all other technologies at the end of the presentation. We do have one last presenter with us today. And at this time, I would like to go ahead and turn it over to Dr. Julie Kinn. Dr. Kinn, can you please go ahead and introduce yourself and take it away.

Dr. Kinn: Sure, good afternoon everyone. It's such a pleasure to be here. I'm at Joint Base Lewis McChord and I'm in the Defense Health Agency. My office is the DHA Connected Health branch and I do a variety of things, including training and educating providers such as yourself, producing podcasts, and working on a variety of other areas to promote service member veteran and family health.

So today, I want to talk about just a few additional resources that we have in the DoD that are all publicly available. And frankly, when we develop these, we assume that many if not most of our users are going to be veterans as well. So I'm going to be talking about a couple of podcasts and then another interesting mobile app.

So could you go to the next slide, please? Okay, so if you could take a second and in the chat pod, write what your favorite podcast is. This will be a nice check to see how many of you are using the chat pod as well. If you listen to podcasts, what's your favorite podcast? I'm seeing a lot of NPR podcasts, some educational ones, one brave individual indicated she's never listened to one.

You know, a lot of these are educational but often very entertaining, too. Oh, there's some that I haven't heard of on here. That's great. Oh, okay, I'm going to have to check back to this feed later and download some of these. I take it that you all have some... This is like curating a neat little listening list here.

So podcasts, for those of you who haven't listened yet such as, these are basically internet audio files. They're like radio that you can listen to whenever, wherever you want. They're available online, on computer, you could stream them, you could download them, and they're also available for your mobile phone. Most podcasts, including ours, we put out on YouTube as well, to make it a little bit easier to access, especially for VA providers.

And what's neat about podcasts is that they are available for pretty much any topic you can possibly think of. If you are really into knitting and Dungeons and Dragons, there is going to be a knitting and Dungeons and Dragons podcast out there for you. But especially for education, it's really fantastic because frankly, they don't cost very much money to produce. And we can make them quickly.

So what we've been working on for the past year here at the Defense Health Agency is trying a few different kinds of podcasts to see if this is yet another way of helping reach our beneficiaries and our providers. Podcasts, only about 25% of people regularly listen to them,



and it tends to be when commuting or when doing housework. So the ones we've made, we try to make really short, easily accessible, so folks could listen to them during their busy day.

One of the best ones that we've got so far is A Better Night's Sleep. This one won the award for best health podcast in the People's Choice Podcast Awards this past year. And essentially, it's me interviewing a variety of experts about sleep, sleep conditions, insomnia, children sleep issues, pain, allergies. A whole variety of experts. And making it very simple for our beneficiaries to understand.

I stand in the place of the listener, I'm often asking follow-up questions, including the important things like when you're getting your sleep apnea test, how do you get up and go to the bathroom? All the kinds of things like that that might not be so easy to find out. What's neat about podcasts is, just like mobile apps, it's another nice confidential and often anonymous way to dip your toe into healthcare. It's a lot easier to download a podcast and listen to it than to make that first appointment for some of our beneficiaries.

The goal of this is to help increase the education for our beneficiaries and also shift them into help seeking. Once they know what the treatment looks like, what the options are, why the research supports it. Hopefully, that will make it that much easier to go and talk to a provider.

So A Better Night's Sleep, so far we have, I think, about 20 episodes out there with several more coming. And just today I recorded an episode about should you let pets on the bed and what if it's a very, very good dog, does that make a difference? Spoiler alert: no it doesn't make a difference.

We answer listener questions, we also go over some of the basics of CBT-i and sleep apnea, and the most common health conditions that we see that relate to sleep. And I'd love to take more questions offline, if you have questions you'd like to submit to our experts, please let us know the kinds of things that you feel your beneficiaries should know we'd love to answer those.

And as you see here, it's available for free pretty much everywhere that you can get podcasts. But also, you can just go to our website and download it. On the next slide, slide 31, I'll briefly talk about one of the podcast series we have that I think can also be pretty useful for health, which is the Military Medication Coach. This podcast just shows the huge variety of different meditations and relaxation exercises.

What we did is we reached out to many, many folks around the military healthy systems who do meditations, and we recorded just a huge array. So some of these are three minutes long, I think the longest one is about 40 minutes. There is a huge variety. We just recently had Buddhist monk submit a kindness meditation. We've got progressive muscle relaxation, guided imagery, four-square breathing, simple, complex, male, female presenters, just a big array.

The idea here is, and one of those initial steps that CBT-i are figuring out other ways to help you relax and get ready for sleep. The idea is help our beneficiaries to try a whole variety and then see what hits the mark for them. I think as providers we've all heard folks say, "Oh, I've tried



meditation, it doesn't work for me." Well, there is a lot of different varieties out there and we wanted to give just a big array. And if any of you are interested in recording and being part of this podcast, again, please reach out to me. On to the next slide.

I'll briefly speak about an app that is ancillary to sleep. Dream EZ is an app to support that evidence-based treatment, the manualized treatment for imagery rehearsal therapy, and this is specifically for nightmares. Nightmares that are associated with post-traumatic stress or other kinds of nightmares. So I know this isn't particularly about sleep, but one thing we've noticed is that for a beneficiary with nightmares, they have more fear of sleep. And it's much harder to settle down at the end of the night and of course, as a result, you might see more self-medicating, more use of alcohol and other medications, over-the-counter and prescription, in order to avoid having to think too much and trying to avoid dreaming.

So, Dream EZ is just a terrific app that walks you through supporting your patient with imagery rehearsal therapy. Now, this isn't an app I recommend unless you're trained in imagery rehearsal therapy. The app is available on the public market. As our beneficiary downloads it and they're not working with a provider who uses IRT, it does have information about the treatment to learn what it would be like. Again, you know, that first step of dipping their toe into the water, what is treatment like, knowing what to expect.

And then for those of you who do use imagery rehearsal therapy, I recommend testing out the app, see what you think. Apps aren't for everyone, we don't recommend that 100% of providers use apps with 100% of their patients. But if you've got a patient who's already using mental health apps to track their steps, to track their weight lifting, to track their diet, additionally tracking a few more health areas can feel like a natural fit and it's really reaching them where they are.

So, I will leave it there but I'm looking forward to getting questions if there are any. Over.

Micah Azzano: Thank you Dr. Kinn and we're going to take questions from the audience right now for the next nine minutes. I will start with you, Julie, I have a couple of quick questions. Although these are DoD resources, can anyone listen to and benefit from the podcast and use the app as well?

Dr. Kinn: Absolutely. Yeah. For sure. Please tell all your friends.

Micah Azzano: Great. And then what are some of the trends that you're seeing currently at DoD in regards with sleep?

Dr. Kinn: A couple things. One is a recognition that energy drinks are a major problem. I expect we'll see much more research about that in the coming year or two. One thing is just the assumption that sleep problems are normal. I'm guessing this is true in the veteran population as well. But, I'm seeing more and more folks who are not sleeping well. They are waking up, not feeling refreshed. But they're not speaking with their providers about it because there's this sense of, well, I'm an adult, this is just what adulthood is, you're always tired.

And if all your peers are always tired as well, it also impedes that instinct to go seek help. So as much as we can break down that barrier to care, I think we'll all be in better. If someone assumes that their experience is just normal and nothing can help it then they're not going to talk and talk to you about it.

Micah Azzano: Okay, great, excellent. Thank you so much for that. I have a couple of additional questions but I want to encourage everyone that if you do have questions to please add them into the chat feature. We will be taking them for the next couple of minutes. My first question, though, is going to go to Christi. I just wanted to quickly touch base and ask you, with Path to Better Sleep, there is all these other sleep apps available out there, how does Path to Better Sleep compare to some of the other sleep tools?

Dr. Ulmer: Well, so, yeah, you're absolutely right. There are just all kinds of things out there for sleep. Personally, as far as a course that's specific to in treating insomnia and CBT-i specifically, I would say, there are only about... Well, there are really only two that have good evidence base and we're actually in the process of collecting data on our course as well. But Sleepio and Shuteye are the two that were developed by very well-known insomnia researchers and neither one of those are free, nor are they specific to veterans. So I would say that that's definitely an advantage of ours over that.

But yeah, there are certainly... My sense is there is a whole lot of misinformation out there about sleep in general. And I think there are numerous apps out there, and I would say CBT-i coach is actually the only one that I know of that actually is based in the research and really based in what we would recommend as clinicians.

Micah Azzano: Yeah, that goes into my next question, we have Path to Better Sleep which is CBT-i and then you have CBT-i Coach as well. Can you kind of go into the differences between the two a little bit?

Dr. Ulmer: Yeah, I mean I think people sometimes may not be that clear about how they're different. But so my usage of CBT-i Coach, again, as a clinician, I might send people home to use certain pieces of the course. But in general, the app itself doesn't take you through step one, step two, step three. Now, it does kind of keep you going through weekly sleep diaries and things. And so it's kind of got all the components of it in there. But it's not structured in a sequenced way.

Whereas CBT for insomnia course, Path to Better Sleep, is actually really intended to allow people to just go through completely by themselves. You know, with the caveat that, I guess, as someone who spoke to clinicians as a researcher and given, we don't actually have data to say whether Path to Better Sleep, at this point, improves people's sleep. My feeling is, I don't think it's unsafe, one, and I don't think it's ... It certainly feels better to me than doing nothing until such time as we actually have some data.

But, yeah, they are both, I think, very helpful, good products. It's just that one ... I know CBT-i coach, I think they're working on developing it to turn it into something that is more



standalone. But at the moment, CBT-i Coach, I think, is intended only to be used with a clinician helping. So that's the main difference.

Micah Azzano: It's pretty big that there is the data piece. And I actually want to turn this question though over to Jill and Sam. With data collection that can sometimes, be something, that is sensitive for people. Can you discuss how the data is collected and used in regards to REVAMP?

Dr. Kuna: Yes. The data that is coming into REVAMP is coming from two sources. One is the veteran, in terms of the questionnaires that they are completing. And then in addition, it's also coming from the veteran through the manufacturer of the CPAP machine, the veteran's data of usage and treatment efficacy.

So, REVAMP, as mentioned, was deployed at over 50 VA medical centers throughout the nation. Each site, however, only has access to the data of the veterans that are enrolled at their particular VA medical center. I think the question is important, though, because we are creating essentially a national sleep network where we are collecting a uniform amount, a uniform information in terms of patient outcomes, treatment use and treatment efficacy.

And it has the potential of being able to use those data to look at different programs, to assess which are more effective than others, to perhaps perform some research studies to try new methods of delivery and seeing how that affects patient use and patient outcomes. That, however, would require another level of information security, probably going through essential IOV or IOVs at particular sites to make sure that the patient's personal information is protected.

Micah Azzano: Okay great. Thanks for the information. We are coming up right at the end of our hour. So, at this time, though, I will because Dr. Kinn has a podcast, I'm going to give her an opportunity to plug anything she wants to for her podcast. Really quick, Dr. Kinn.

Dr. Kinn: Sure, as you're thinking about what additional resources you can get to your patients between sessions, consider apps and podcasts. It's a nice thing to be able to give to them to take away that they can listen to repeatedly. Also, if any of you are interested in appearing on the podcast, please let me know. I'd love to hear from you. Over.

Micah Azzano: Great, thank you so much. At this time, I want to call attention to your screen. There is a link there that you can tell us how we're doing, submit other topics that you would like us to cover in the future on the discussion series and really, just for a few minutes, after the webinar has ended, for those who are interested in providing feedback.

Again, I want to thank our presenters for taking the time to present today and thank all of you for participating in today's webinar. I hope you will all join us next month as we continue our VA Mobile Discussion series webinar. Thank you everyone and have a great day.

Dr. Ulmer: Thank you.



