

DENISE KENNEDY: My name is Denise, and I'm going to run through a few brief technical reminders before we begin the discussion about VA Video Connect. Your phone lines are muted, but we will be taking questions through the chat feature. We're going to stop intermittently and take some questions, so please use that liberally. If for some reason we don't get to your question, we will follow up with you in an email after this call. To respect everyone's schedules we'll keep this moving so the session ends on time.

Today, we welcome Dr. Rhonda Johnson, Director of Quality Implementation and Development with VA's Office of Connected Care. With that I'll turn it over to you Dr. Johnson.

RHONDA JOHNSON: Thank you. They'll be monitoring your questions as we go along, so we'll go through and take a couple pauses throughout the presentation to answer those questions as we move forward. Thank you again.

Today we are going to talk about VA Video Connect, which we think of as health care beyond the clinic. In Telehealth, we set the technology up so that the patient feels like they're in the clinic, feels like they're going to have a face-to-face meeting with their doctor, but we're using virtual means to conduct that. We have been doing this for the last 10 years, but now we're looking at using technology that moves us beyond what we've done before. This is another example of what the set up looks like, the gentleman is the Veteran. On the screen, you'll see what we call the tele-provider, and helping with the meeting is what we call a tele-presenter. They can be Licensed Practical Nurses (LPN), Telehealth Clinical Technicians (TCT) or technicians.

Let's talk about what a typical Telehealth set up looks like. VA Video Connect allows us to utilize Telehealth anywhere. This means geographically: in the United States, its territories and internationally, as well as in location: in the patient's home, at work, school or even in an RV. It also allows us to involve caretakers and others during the same meeting at any time, 24/7. We're starting to see it used with emergency rooms and with specialists to non-VA sites. Part of the reason is that it is incredibly accessible and is connected through web browsers or 4G connections, Wi-Fi and LAN. We have all those options available to make sure that we can facilitate a connection.

Out of all the many technologies available, there are technically five technologies that VA Video Connect uses. VA uses the TES, the Transportable Exam Station, so the Veteran can be on any video-capable device. We also have what we call Clinical Video Tablets (CVT), which use a lot of clinical peripherals to check blood pressure, exam cameras, EKG machines, you name it, it can be connected to these tablets at home. It helps us to facilitate home care for patients, since we're also seeing ICU at home, so there are many different uses for the CVT tablets.

Then we have the COTS Tablets, which is Commercial Off the Shelf, those simple tablets everybody knows about, which don't really have peripherals, but we're seeing where some technologies can actually adapt to simple tablets. More to come on that one.

We also have what we call VA Video Connect virtual medical room, which are virtual medical rooms. With these, on demand, we have a phone book where one provider can call another provider, an emergency room or a non-VA site, like the judicial system, Veterans center, Department of Corrections or a university. It's very helpful for site-to-site connections. Then we have what we call the typical scheduled event, which we use our Telehealth management platform for.

Who uses the technologies? All types of providers: care coordinators, physicians, nurse practitioners, social workers, therapists, I could go on and on. In our metrics, we have touched all providers within VA that are using some type of Telehealth technology to have video visits with their patients. The TES used to be transported in a suitcase, which was found to be heavy and cumbersome, so the new station comes in a backpack. The backpack was devised from the military, as they took the suitcase piece and they stuffed it in their backpacks, and they rucked it and took it wherever they needed it. We're finding that the backpack is much more flexible, and nurses and those providing home care can put it in their car and transport it wherever they need to go.

The next one is the Veteran Owned Devices, again as we said, any device, anywhere, any place. We can do it on their iPhone or Android, as long as it's a smartphone, iPad, tablet, desktop, etc. The other one is the CVT tablet that we talked about with the peripherals. We also have what looks like a rabbit ear which assists the antenna and helps with Wi-Fi connection. There also is a booster that they can get for really rural, mountainous areas. I live in Colorado, and the minute I leave Denver and head up to about 5,000 feet, I'm going to start to lose connection, and I can actually put a booster on my tablet to help me make my connection. So there's methodologies and ways we can still keep connected with our patients using these devices, even when we're challenged with bandwidth and connection problems.

On the COTS tablets, we somewhat keep it locked down so Veterans can't go surfing on the web with them. We do provide access to My HealthVet, and there are some specific apps that they can get to, but for the most part we try to keep it locked, since we don't want them surfing on the web to places that are inappropriate.

The next one is the one that is going to interplay a lot with the mobile apps. We're beginning to see the development of the use of the Virtual Medical Rooms within many of the apps. For instance, they could be in Patient Viewer, the Patient Viewer App is used by the providers to finish up their charting or to look up records on the patient, but they could generate a virtual medical room visit with that. We will also be talking about an app that Veterans are going to be able to use to track their visits including the planned date, time and location of that visit.

What's making this happen? Well, it's a seamless interface, which currently uses the Telehealth Management platform, which helps to manage the links. It has been vetted and gone through all the security compliances. It does have browser specifics, because it is web real time communication, or what we call web RTC. Web RTC was produced by Google Chrome, so it's native to Google. We all use Internet Explorer in VA, which it can and does work with. It's not

that users would have a bad visit, bad video or bad audio with Internet Explorer or Firefox or another browser, it's just that they would have a better, more fluid visit when using Google Chrome with web RTC.

We schedule the event in TMP, and we send an email link to the patient with the date and time. They receive this email link, and on the day and the time specified, they click on the "Click Here to Join the Virtual Meeting" link in the email, after which they then enter a waiting room. In the waiting room, they can connect and access the virtual medical room. Then there's going to be a point where that disappears, and they click "Enter" and then "Start" and can check their microphone and their camera.

We don't recommend that users change the bandwidth, but they have the capability. They could bump it up or bump it down, but the training and advice given to them as we're orienting to this is to pretty much leave it alone. We check their microphone and their camera and then they push "Start." From "Start," then they move in, and the provider can see the patient and the patient can see them, and they carry on their visit. Also, you can invite others, so there can be multiple patients, or multiple providers with multiple patients, any type of deviation from that. It's very easy to do that and it allows both the patient and provider to be anywhere, so both become quite mobile using the Virtual Medical Room.

As we said, the Virtual Medical Rooms uses Video on Demand, and it is as simple as putting the patient's email in and clicking send. That's it. The provider might have been doing a face to face visit with the Veteran and want to follow up on something such as a wound or a rash that the patient has. They can send the Veteran home and tell them: "I'm going to call you later, so I will send you an email and when you get the email, be sure that you click on the link at about five o'clock and we'll connect. I want to take a look at that wound again to see how you're doing." As I demonstrated before, they'll get the email, click on the link and both will join the visit.

Are there any questions?

DENISE KENNEDY: We have one here: What is the timeline for the migration from Jabber to virtual medical room?

RHONDA JOHNSON: We're sending out notifications to the field. There's no set deadline as of right now. We're encouraging them to move over. Jabber will always be available for administrative purposes, but what's really going away is the ability to schedule those visits and the ability for the Veteran to be able to download the app on their device. You can't use Jabber right now on iOS devices, so it's already starting to deteriorate when it comes to patients. Right now we can't use iOS and the next thing we won't be able to do is schedule visits, and from those two deficits within the system, we're highly encouraging providers to attend the training and start the transition over. We're addressing it right now and have some help and support with the logistics and roll out, so we're sending out invitations to providers. We have about 6,000 providers using it currently for around 25,000 events annually. We know that we've got a lot of work ahead of us, but we also know that that group of providers and Veterans are very

pioneering and tech savvy and they've been doing this for some time, so we feel like the transition won't be that difficult.

DENISE KENNEDY: Excellent. We have a couple more questions coming in. One is: What is TMP?

RHONDA JOHNSON: It's the Telehealth Management Platform, which is a Microsoft product. It helps us to manage our Telehealth visits, because with VistA, you can schedule an appointment, which constitutes a clinic, a provider, a patient and a room. However, in Telehealth, we have to schedule not one event, but two sides of the equation. Both the patient and the provider have to have rooms, technology, exam items and so on. Then you also have to decide on the date and time in which they both are available and will have access to all of the necessary items so you can have a Telehealth visit.

What the Telehealth Management Platform, TMP, does is it pulls all those parts and pieces together and helps coordinate a scheduled event on both sides of the equation. The other thing that the platform does for us is manage the Telehealth Service Agreements and memoranda of understanding (MOUs) that have to be signed and in place for each appointment. It also helps to manage credential and privileging. If I'm providing services at one site, it can share the status of my credential and privileging with the other site, which is all private and maintained within the system. The other thing that the system helps to do is manage our resources. We've got over \$200 million out there in technology that we need to ensure is being used on the system, and it helps us to identify where the capacity is versus the need.

DENISE KENNEDY: Okay, I have three more questions for you, and then we have to move on. The first is: What is the setup time for the Veteran? What type of help would they need to do this?

RHONDA JOHNSON: It is so simple; we send them an email with some instructions, and it's about four steps. If they have an iOS device, they need to download the PEXIT app, and then once they have the PEXIT app they're good to go. If they're on Android, all they have to do is, after they receive the email, click on the link and then walk through setting up their microphone and setting up their video. It really is easy for the Veterans, and they have all been very pleased with it. We also explain the process to them in the quick guide that we send to them. We help Veterans identify what browser they use, and if they can download the Google browser, we encourage them to. If they don't, that's okay. Of the 8,500 visits we've had in the last six months spread out over close to 300 providers and about 63 facilities, we've had a failure rate of about five percent. That's because we've been in a non-production environment, and as we've now moved to a production environment we hope that that decreases significantly. I hope that answered your question.

DENISE KENNEDY: Excellent, thanks, and two more questions and then we can move on. The next is: Could you schedule multiple Veterans into a virtual medical room, for example, a MOVE! class, for those who are not able to attend in person?

RHONDA JOHNSON: There is a way you could do that right now through a work around as it's not really eloquently set up in TMP yet, but it will be. We are getting ready to deploy it in the first part of September, so that's coming. You'll not only be able to have multiple Veterans on a session, but you could have multiple providers. That complete feature will be out in September, but we could also show you how you could set up the same situation right now, it just takes you a couple manual moves to make it happen.

DENISE KENNEDY: Excellent. And then the next question here is kind of a comment followed up by a question: TMP is extremely difficult to navigate from adding resources, Transition Service Agreements (TSA), Master TSAs, clinics, pulling patient data and scheduling. All of these rooms, clinics and technologies have to be available to schedule a visit. Who is going to keep all of that information updated?

RHONDA JOHNSON: We're working on that right now. It was pushed out about a year ago, and it was very resource intensive to get it up and running. We have since, over the last year, revised, refined and looked at other steps to make it more efficient. We had a meeting just yesterday on how we've improved those efficiencies based on the input we have. And you'll see significant changes with that.

The other strategy is connecting the platform to databases where the resources are housed and pulling information from that. We are also pulling information from our National TeleHealth Help Desk and Maximo FMS and Vista integration should be on its way, and mostly done by the beginning of September. Hopefully, with these interconnections and pathways that we've put in place over the last few months, connecting information from various platforms will improve significantly by September.

DENISE KENNEDY: Excellent. We have a couple more questions, but why don't you continue with your presentation and we'll get to them at the end.

RHONDA JOHNSON: No problem. Our next adventure is going to be the VA Video Connect App. We're excited about this because this is really a mechanism for Veterans to manage their video appointment: to know when they're going to happen and be able to click on a link on the date and time of the visit and access it. This chart gives you an idea of the architecture that goes on to make the 'click a link' function happen for users. Over the last year, because of pilot-user input and feedback, we've been able to fix a lot of bugs so this can be as eloquent a solution as possible.

On this chart, you can see three things. One is you're seeing how the Telehealth Management Platform interacts with PEXIT, which creates the visit link, and Biopta, which, on the scheduled date and time, sends the link to the Veteran and activates it. These entities have to work together to make that link work. On the other side of that is the clinical service experience, or the Veteran app. There will also be a patient side experience, in which we're actually connecting the virtual medical room links into things like the Electronic Health Management

Platform (eHMP), Computerized Patient Record System (CPRS) and other provider based apps and tools as we move forward.

This initial experience flow overview is a larger picture of the event and how it works, for those who are on the call that are development savvy and understand the apps. For those who are not, it kind of gives you the complexity of what has to happen to create a simple experience for the end user. I'm amazed at all of what has to happen so that I, as a provider, can click on a link and my patient can click on a link and this all happens. That's what this slide is about, to kind of give you a futuristic look at what we're looking at, as well as what the app structure is on the left hand side.

VA Items and Telehealth Implications: I talked about the Veteran and VA Video Connect App, where they are able to book an appointment, request an appointment, get reminders and collect email. Those are regulated on the Veteran's time zone, and there are some user preferences that can be set. In future versions, the waiting room will be more interactive and Veterans can ask questions that will be answered and they can also enjoy their waiting room event while they're waiting to connect with their providers. There's going to be an advanced waiting room coming around the corner very soon.

Staff are going to see the virtual medical room implications in the Patient Viewer App, eHMP, CPRS and the TMP. This is just going to grow exponentially in terms of clinical use in cases in which we can do this. One of the things we're already looking at is connecting to those patient driven tablets using the virtual medical room to decrease some of the broadband issues that we're having. We're already hearing and getting feedback from the field on other ways we can be innovative with using the virtual medical room. Another one that's not on here is hooking virtual medical rooms to audiology visits, what we call the HADFA Project, in which the virtual medical room is going to help providers have a video visit so that they can test hearing, which is something coming out in the next six months. We're also looking at sleep, and cardiology is looking at some use cases clinically for virtual medical rooms.

This is our graphic of our implementation plan and how we plan to get that out to the wider field. As I said, we've got about 6,000 providers using Jabber right now that we've divided into Group One, Two and Three.

Group One is those that want to switch over right now, so we're going to work with them. This is composed of about 40 facilities with providers within those facilities that want to work with us, as well as the Veterans that are attached to those facilities.

Group Two are high-users of virtual medical room who don't want to be in the first group and would like to wait for various reasons, so they'll switch over in July as part of Group Two.

Group Three are minimal users of virtual medical room or not using at all. We're going to do a lot of training and marketing to them to get them a lot of information so that they're going to be prepared to come online in August.

We have over 25,000 providers who are delivering Telehealth as we speak in about 1.5 million visits a year. This is the group that we're going to start converting them to use virtual medical rooms more readily. We will also be demonstrating the apps to them, show them how virtual medical rooms can be integrated into their work flows and how to support them more readily. By December, we're expecting to have close to 30,000 virtual medical room users throughout VA.

This is just a graphic of the present virtual medical room users right now, and it's actually outdated. We put this together a week ago. We're now up to about 10,000 virtual medical rooms, about 350 provider users and about 1,800 unique Veteran users. We have all 18 VISNs involved right now, and we're up to 64 facilities.

Roll Out Metrics tells you how many encounters they've had: the patient count and the site count. For those who are involved in metrics and how we develop our plan, it kind of helps you understand how we came up with the roll out.

As we push this forward, we will be setting up our forums, our kick offs, as well as our trainings and then our Q & A sessions with the field. We've developed a website, the training and the marketing information for the field. We have a lot of support out there for the field as they adopt this.

You're going to begin to see Virtual Medical Rooms in many apps. virtual medical rooms are going to be instilled in a lot of your work loads and will hopefully become as simple as using a remote control on a TV or picking up the phone to dial somebody. You'll send off a link, click that link and have a visit with that patient – it's actually easier than dialing a phone. Veterans can use it anywhere on any device and because they're outside of VA, they don't have to deal with the VA network. Whenever we test outside VA, the Veterans have a really great experience, so the Veteran side of the equation has been simplified significantly.

Use of the virtual medical rooms do not require any special installation if you're using an Android system, a PC or any laptop, but if you're using an iPhone, or a tablet, you have to download the PEXIT App. That's probably the only cumbersome piece about it, but once you've got that download, you're good to go. You'll receive your appointment email, click on the link and your phone automatically opens the app. Any questions?

DENISE KENNEDY: We have a couple questions here. The first one goes back to a little earlier: What is the specific training required for providers and staff who utilize TMP and virtual medical room? And the follow up to that is: do they have to submit the training to gain access to the VM and TMP?

RHONDA JOHNSON: Yes, but we've modularized the training, and on our website, if you go to Telehealth Services website we actually have a virtual medical room webpage. On the website, go down to VA Video Connect, run over to the Virtual Medical Room and click on the Virtual Medical Room to open it. Now you're in the Virtual Medical Room. We have two really quick

overview videos that are two minutes each. One is "What is a Virtual Medical Room - Virtual Medical Room Encounter", and then we have "Virtual Medical Room Training." We also have the training divided up by provider and scheduler. If I click on the provider training, it will pop up and you should find a list of videos. You're going to pick the one that corresponds to the device you're going to be using.

DENISE KENNEDY: Excellent, thank you. We have quite a few more questions here, so I'm going to ask a bundled question, one of our participants has asked a couple here. The first of that multiple part question is: How are you encrypting the sensitive data on the device and transmitted across non-VA networks?

RHONDA JOHNSON: This is actually IT who has been with us the entire time. Lynn Dickerson has been our engineer on the VA side of this, and the PEXIT server and all the architecture is sitting on a VA server secured system. It's FIPS compliant, and it has met all the security and iOSs so we can ensure that even though it's going outside of the system, it's still encrypted and safe and private for the Veteran.

DENISE KENNEDY: Excellent, and that brings it to the next question: Do you have the Federal Information Processing Standard (FIPS) 140-2 validation number, and also a follow up question from that same participant: Does this system have authority to operate from the VA Chief Information Officer (CIO)?

RHONDA JOHNSON: I don't carry the number with me, but if you want me to send it to you, we absolutely could. I can send you the name of the project CIO, our project manager from IT is Harpreet Sodhi and Bill James has also been involved with this.

DENISE KENNEDY: Excellent. Thank you so much. Will the Patient Viewer App eHMP, TMP, etc. still be compatible with the upcoming change to the Electronic Health Record (EHR), the replacement for CPRS?

RHONDA JOHNSON: Absolutely. Right now, the replacement for CPRS is still in the development phase. We're just now beginning to have conversations and orientation to it. It is called Cerner, and if anybody on the call understands development, it's going to take us a while to activate that. Yes, we're excited that we're moving towards that, but it's down the road right now. With that said, we've been invited to the table and the Department of Defense (DoD) has been working with us and following our footprint when it comes to Telehealth, so not only have they used our training and our guidance, but we're training them right now on TMP, so we're exploring partnerships. When it comes to Telehealth, DoD and Cerner are going to collaborate and share expertise with VA.

DENISE KENNEDY: Excellent, thank you. If a Veteran has an issue with VA Video Connect, who would they contact for assistance?

RHONDA JOHNSON: We are activating our National Telehealth Help Desk right now to be able to support the Veterans. That should be going live July 1. In the past, Telehealth has struggled with this significantly, we've not had a very good Veterans facing help desk like Mobile has had, but we've had a good provider side Veteran help desk, which is what we call the National Telehealth Help Desk. They're trained on all the devices from Home Telehealth and Store-and-Forward, and they know how to trouble shoot them and how to help and support them.

It was a kind of a no-brainer that they would be the ones to help us trouble shoot virtual medical rooms because they also helped us with the development. They've been with us through the entire thing, the development and the pilot, so they are as up to speed as anybody. What they've got to come up to speed on now is Veteran-facing issues, knowing how to assess a patient and getting them the help they need such as suicide prevention. They are identifying that now and the goal is to get them to help the Veterans' side for not only the virtual medical rooms but also for all the Veteran technology, so we're very excited about having that resource available to us. In the past, the TCTs have been the contact for the Veteran, and they've done an awesome job, but they've gotten so busy that attending to the Veterans has been difficult, so having the Help Desk is really going to be very helpful.

DENISE KENNEDY: Okay, the next one: If facilities are scheduling in TMP, how are patient indicated dates reported?

RHONDA JOHNSON: Good question. The provider puts a clinical annotated date in the consult like they typically do. The provider's side knows that because the provider's side scheduler gets that information. The patient side scheduler doesn't get that information, so Tele-providers are trained to make the patient side of the encounter, basically the visit record. The visit record says whatever order you put on the provider side, you've also got to put it on the patient's side. Our providers go through training to put clinical annotated text orders over in on the patient side.

The consult itself is generated to both sides of the equation. The scheduler on one side, as well as the scheduler on the other side, but if you're doing continuity visits, you're going to have to put in a clinically annotated text order on the patient side as well as a clinically ordered text date on the other side. We just sent out training on that over the last month, and hopefully that training will help the field too, and hopefully this guidance will help. In the future, September or October, there will be a clinical annotation field and we will have this automated in the VistA integration when TMP becomes integrated into VistA.

DENISE KENNEDY: Excellent, and the last question unless we get another one in here, is: Is there a way to know if a patient has "checked in" or entered the virtual meeting room?

RHONDA JOHNSON: There is. When you pull up your virtual medical room, providers can shut their camera off and wait for names to show up on the left side. Unless I populate the patients as they come in, you will see their names as they come in, so that's how you know when they're in the room. Then you can activate your camera and join.

DENISE KENNEDY: Excellent. Thank you for that. I think that wraps up the questions, we had quite a bit, I'll give everyone who's still with us here an opportunity to get in any last questions. Dr. Johnson is there anything else you wanted to touch on as we look to wrap up here? We greatly appreciate your time here today, I know how busy it's been and what a crazy week it's been for you as well.

RHONDA JOHNSON: Just some exciting things coming out. We've got a lot of high visibility from the White House, and we've got a planned e-date coming up in the near future where we'll be doing a presentation on Virtual Medical Rooms with the White House and Dr. Shulkin who is actually a Tele-provider. He's delivering care using Telehealth to Oregon, so our leadership is very much involved. I've been involved in VA for the last 10 years and Telehealth's been going on for 18 years, and I can say this executive leadership is very much committed to Telehealth and digital care. We're excited about the future and moving forward.

DENISE KENNEDY: We do have one last question that came in here: Any update on providers crossing state lines?

RHONDA JOHNSON: There was a memo sent out for mental health and MDs that the administration is strongly in support of you providing care regardless of location and they're committed to supporting you to do that. There is significant work, if not, it feels like 24/7 work going on about getting the laws defined and then voted on and passed so that VA can have the ability to provide anywhere so that providers don't have to worry about crossing state lines. We're working feverishly on that, but in the meantime, it's kind of still the same, it's the providers license, and you really need to confirm not only with your state where that patient is, but the state where you're licensed, as well as regional council. As a provider myself, I totally can relate with that anxiety.

DENISE KENNEDY: Excellent, and thank you so much. Well, I mean, that was an absolutely full presentation, Dr. Johnson. Thank you so much for that. For those of you looking at the screen here, we have a link to provide us some feedback, let us know how we did today. If there is anything you'd like to see in the future, or any additional questions that you have, please let us know. We will work to answer any of those concerns. Thanks for joining, everyone.