

VA Mobile Discussion Series

VA's Patient Viewer App

VA's Mobile Discussion Series is a monthly webinar featuring a variety of topics focused around app development and mobile health at VA. This discussion covers VA's Patient Viewer App.

Denise Kennedy: Hello everyone. Welcome and thank you for attending our VA Mobile Health Discussion Series webinar. My name is Denise, and I'm going to run through a few reminders before we begin the discussion about Patient Viewer. Your phone lines are muted. We will be taking questions through the chat feature. The chat function is available to you in the middle right of your screen. If you're experiencing any technical difficulties, please use that chat window and someone will be in touch to help.

Today we welcome Gerry Markowitz, project manager at Booz Allen Hamilton, as well as Dr. Derek Juang, hospitalist at VA San Diego and acting Chief Health Informatics Officer for VISN 22. As I mentioned before, if you have any questions, please use the chat window. We're going to stop the presentation intermittently to answer any of those questions. To download a copy of the presentation, please click on the file name before the chat screen. It's titled VMH-283. With that, I'll turn it over to you, Gerry.

Gerry Markowitz: Thank you, Denise. Appreciate that.

So, this morning, or this afternoon, we're going to talk about what is Patient Viewer? We're going to talk about this app that was specifically designed to be used with mobile devices on your GFE iPhone or your GFE iPad. It also works on your desktop, but the screen design and the collection of data that's available was specifically designed to be used on a mobile device.

We're going to talk about how you'll be able to use the information that is presented on this device to help you take care of your patients. A lot of folks have called it the mobile version of CPRS, but let's be clear. It doesn't have all the features and functions of CPRS, but it has some things that CPRS doesn't have, and we're going to talk about that too.

What we're going to do on this discussion series is talk about the best use cases for this application. In other words, where am I going to get the most benefit out of using Patient Viewer on a mobile device? We'll show you how you access that application, how you provide feedback to VA, and how you report any potential or what you think might be patient safety issues because of what you see or how you may have issues using this app.

Let's talk about how Patient Viewer helps the hospitalist on rounds. If they always have all that information about all their patients with them, they have it right there on the palm of their hand. As you can see, the example here is you could look at a patient's vitals and labs right outside the patient's door or while you're at the patient's bedside. The intent or the hope is that having this information at your fingertips increases your efficiency of making rounds. And of course, it also helps with the shift handoffs and teaching rounds. So here it is. It's in your hand and you don't have to go searching for a desktop to log into and log into CPRS when you can have this at your fingertips.



Here's a couple of situations. You need a quick response or someone's asking for a quick response from a doctor for a patient that's in the hospital. Think of it. You can get their vital signs. You do a quick search on the patient's name, or social security number, or part of their name, or part of their social security number. All those same types of quick look ups that you can do in CPRS are in this app. You can look at notes, you can look at medical history, you can look at treatment plans. You just have access to an enormous amount of data that's in Vista that you can see right here on your handheld device. In a few minutes, once we go through these different case situations, or these use cases, we'll look at all of the things, not in detail but in general, all the things that you do have access to using the Patient Viewer app.

Here's another use case. Answering an urgent consult. Your team is called about a patient with a respiratory distress. The ABG has already been ordered. So, without going back to your office or finding a computer, this same information and the patient's history can be viewed on the go. And as you can see in this example, what you see is exactly the same information that you would see if you were using CPRS and going directly into Vista.

Say you're on call and have been paged to see a patient with, for example, abdominal pain. You're interested in the consulting the team's prior workup. You want to see the x-ray. You want full radiology reports. It's all available within this app. In this picture, you can see we're showing using this with an iPad. So, if you're on an iPad it looks like this. If you're on an iPhone, you have to flip from this side, narrow side, to this side and then you would see all the information on the handheld device.

Then the after-hours follow up. You're called by a triage nurse because your patient is having chest pain. So, you can see that cardiology recently scheduled a catheterization, so you refer the patient to the nearest emergency room. This is just a handful of examples of how having this information either in your hand, walking around, or doing your job in a hospital, or being off premises at home or just away from the office, where you have remote access using these mobile devices where you can get the information you need to do what you need to do.

Denise Kennedy: Excellent! Thanks, Gerry, and just a reminder for everyone listening, if you use the chat box to ask any questions that you have about Patient Viewer, about its uses and any other technology or clinical questions, please do so. Gerry, why don't you go ahead and continue.

Gerry Markowitz: Thank you, Denise. What you see here on this screen is a list of all the features and functions of Patient Viewer. In other words, when you go into Patient Viewer these are all menu items of things that you can see. Some of them are obvious and straightforward because we've talked about them: patient search, the vital signs, the cover sheet where it has contact information and so forth. We'll show the cover sheet in a minute. You can see all the medications that have been ordered for the patient. You can see all the documents, which we've talked about already, progress notes and radiology reports, and surgery reports, and all the different documents that are contained in Vista for a patient. You can see the consults that have been ordered for a patient. You can see the lab results. We already talked about radiology reports, but that's a whole separate section by itself.

Then there's something that is not contained in CPRS, and that's the video visit. Within Patient Viewer, you can schedule a video visit for a patient right there in the app. That would include setting up the video visit with a date and time, and you put in the patient's email address, and the patient gets an email. In that email is a link to start the video session. And then in Patient Viewer, you would be able to



see all the video sessions that you have scheduled, and you can initiate them right there. The whole idea of doing video visits with a patient is now something that can be initiated from the Patient Viewer app.

There's an orders view with a list of recent orders for the patient. There are consults by staff, which is a different view on the consults. In other words, now you are looking at consults that have been ordered for all of your patients, not just the ones for a particular patient. There's a staff view within Patient Viewer where you switch from looking at a patient to looking at the staff level.

Then lastly, there is another component added to Patient Viewer called custom data view. Think of custom data view as a way for the provider to be able to see data that has been entered by the patient. Patient generated data. Patient generated data comes from Veteran-facing apps, apps that the Veterans can use to help them manage their own care and enter data about whatever their particular situation is. We're not going to dwell on My VA Health Journal, which is one of the apps that does that, or Mobile Kidney, but suffice it for this presentation to understand that the patient generated data, which includes assessments and health messages, being able to send a message to the patient, looking at meds and allergies entered by the patient on a regular basis.

For example, the patient could enter, not meds or allergies, but the patient could enter their glucose readings if they're diabetic and they're taking regular reading of their glucose. They could go into My VA Health Journal and enter those readings every day, twice a day, whatever they're supposed to do, and their care team will be able to go into Patient Viewer and go over that information when they have a face-to-face engagement with the patient during an appointment. Once again, that's another discussion series down the road where we'll talk about how you use both. How you introduce the patient-facing apps and then use that information that they enter in Patient Viewer.

I don't want to dwell more on Patient Viewer because there's a link in here that would take you to the Patient Viewer page in the Enterprise app store. There are videos in there on how to use each one of these sections in the app. There's an enormous amount of training material, documentation, there's a user manual and so forth, and all of that is in the VA app store on the Patient Viewer page.

Here are some sample screens that we didn't show earlier that you would see in Patient Viewer. As you can see, this is the main menu down here, and you know we talked about vitals and medications and documents, and here's the custom data view. Here's video visits, so you would go to this selection on the menu in order to set up the video visit for your patient.

This is just an example of the medication screen. There's only one thing in here. This is the cover sheet, and the cover sheet gives you access to contact information. In this particular screen we highlighted the problem with an allergy screen. There's a short list of medications. When I say short list, I mean a limited amount of information about the medications. There's a whole medications section by itself where you can select dates and date ranges, and VA versus non-VA meds, and so forth. Medications comes in two forms in Patient Viewer.

Here's another special feature of Patient Viewer, which are the graphs. Not only can you look at vitals in the form of a table, but you can look at all of the vitals in the form of graphs so that you can visually see how things have changed over time. You can simply select what you want to see. This is the blood pressure one. Here the blood pressure is showing over this span of time. We've created a custom range. As you see, we went from 2006 to 2012, so in this particular screen, we're looking at blood pressure



readings taken over a six-year period. This is for demonstration purposes. How you choose to use this, it's all controllable by you as the user and you can pick a one-year time frame, a two-year timeframe. Or if you click on custom range, you would be able to enter any range of time as long as it falls into some six-year period.

Same with lab results. You get the same graphing capability to see results over a specified period of time. Works exactly like the vitals.

Denise Kennedy: And Gerry, I don't see any questions, although there are a few people typing, so I'm sure at the end of the presentation we can get to any additional questions that people have.

Gerry Markowitz: Okay. Let's go to how do I get to this app? What do I do? How do I get there? What you see on the screen is the link to the most current version of Patient Viewer, which is Patient Viewer 3.2, which you're invited to test. You're invited to go out and use this app in your day-to-day work, and if you have any issues with it, then we want them reported back to us. And I'll explain how you report those issues in a minute. But if you have a GFE iPhone or iPad, then you should be seeing this icon there. When you click on that icon, it will open up this Patient Viewer app, version 3.2.

If you don't have the icon, you can just enter this URL into your browser. It is a browser-based application, but you have to use Safari on your iPad or your iPhone. On the VA app store, we have provided for a place specifically designed for you to give us your feedback on the use of the app. There's a link for that, but that page, the app review page, will be on the main page of the Patient Viewer in the app store. Any issues, any issues related to the use of the app, you're having issues logging into the app. We're going to talk about logging into the app in a minute, but any issues logging into the app or using the app, you can call the mobile services help desk or email the mobile services help desk. Or if you're familiar with the mobile services help desk, you can even log in and enter your ticket directly.

Now I want to take a moment and talk about accessing the app from outside, because some people understand this completely and some people do not understand this. That is: what am I doing or how do I access this app from outside of the VA? I'm going to use the example of being at home and saying, "I'm at home. I have my GFE iPad or my GFE iPhone with me, but I got a phone call," one of those use cases that we talked about earlier, "and I need to access Vista. I need to use Patient Viewer." In order to do that, two things have to happen. Well, three things have to happen.

The first is, you have to create a virtual private network between yourself and your house and your VA environment. That virtual private network requires that you use the Any Connect app on your Apple device, and it requires remote access approval. When you have the approval and you open up Any Connect, and you create this, Any Connect is what actually creates that yellow line. The yellow line is your encrypted tunnel which allows you to access all of that private and secure data that's contained in the VA. That tunnel is what needs to be built. Any Connect builds it, but you've got to have the proper tools in place in order for that to function properly. That link, down the bottom, is how do I install and use Cisco Any Connect? That goes through the different various steps that you have to do in order to get your device set up so that you can do this, so that it will function outside of the VA. It doesn't matter what the internet connection is. You could be in Starbucks, or you can be in somebody else's house. It doesn't matter where you are, as long as you have an internet connection and remote access approval and you can run Any Connect on your GFE device. You have access to the app as if you were sitting inside the VA.



If you want help, search VAmobile.us in order to enter a support ticket for Patient Viewer. It's hard to see on this screen, but you have to pick the app that you're going to use. Right in here we've picked Patient Viewer. You actually get a special screen in which you can enter whether or not this is a patient safety issue or whether you feel that you've discovered a problem with the app that's a patient safety issue. In fact, determining whether it's a patient safety issue is a required yes or no field on here. Then you can describe what that issue is and so forth.

But I want to be clear that not being able to log into the app because you have some credential issue, or it's not accepting your Vista access and verify code, we don't consider that a patient safety issue. It's an operational issue that needs to get resolved, but we're looking for patient safety issues that you feel are because the data is incorrect, or you don't see something right, or you feel that it's missing some information that's vital based on what you're doing. Things that you feel are direct patient safety issues by using the app, not if you have an issue getting into the app. Obviously that needs to be resolved, but we don't put that in a patient safety category.

We're getting towards the end here, and these are all of the places where you have information about Patient Viewer. This is the link to the Patient Viewer page on the VA app store, where it has all of the manuals and things that I mentioned before, and all of the training materials and the training videos. There's a toolkit with a variety of communications information that was created by the Office of Connected Care communications team. That's for your use. Then there's a SharePoint site with Patient Viewer information that would include, if you remember I spoke about using custom data view and how you would use that with your patient. I'll go back to my diabetic patient. Well, there's a handout in there that you can give to the patient and say, "Here. Here's instructions on how to use My VA Health Journal for you to enter your glucose readings, and the next time you come in for an appointment we're going to look at the information that you entered together." These are some videos that were created by the Houston facility, and they're quite excellent. They show a complete run of every feature and function of Patient Viewer on this video. These two show how to use the video visit component in Patient Viewer to both set up a video visit, as well as execute that video visit. This page alone, right here, has a wealth of information at these different locations.

Denise Kennedy: Excellent! Before we get to our last slide here, we do have a couple of questions, and it looks like a few more people typing. The first one is, you mention patient driven slash patient input options. Can you elaborate on this, and are there any of these modalities approved for research?

Dr. Derek Juang: Let me just, hey this is Derek, let me just address some of the questions that have been proposed. I just want to also mention to everyone as part of my role, I'm the new project owner for Patient Viewer. It's something that I'm very passionate about. Hoping that it's one the steps we can take into modernizing our current workflow as we await our next EHR.

Answer the questions, in terms of patient driven, patient generated data, to be honest it's kind of in the early stages right now. We're working on methods in terms of accepting blood pressure results, heart rate results, other vitals, and also kind of surveys to patients in terms of their mood and things like that. I think we are trying to figure out ways, and part of what we're doing in this effort is also developing policies behind this. I would say it's in very early stages, but one of the avenues in which case this could be incorporated is inside Patient Viewer.



In terms of Nurse to-do, that's a good question. There was work on Nurse-to-Do to be included in Patient Viewer. The issue that we noticed when I went over the current product that they have with nursing informatics leadership was that mostly we didn't really find how it would fit into the workflow. Patient Viewer itself doesn't have, in terms of the note writing capabilities that will be there, doesn't currently bring in the current templates for minor dialogues and things like that that have a lot of our health factors and things we use for tracking for nursing admission assessments and those types of things. In addition, the iPad or iPhone device that this would be on doesn't have all functions connected. So, we weren't quite sure yet whether this really fits into the workflow in terms of carrying another device with them that's not really synced up with all of the other things that they already need for their shifts. In addition, on top of that, honestly the development just wasn't that great in terms of what they had made so far for Nurse to do. So that's still in the process and we're still working on it.

How do users log into the app? You just use your CPRS access verify codes. It's not connected with the PIV setup right now, and it does require an exemption, but using this mobile device is one of the places where you can get an exemption for that.

Can we view radiology images through Patient Viewer? Not yet. There's a separate app called Image Viewing Solution that offers that ability, but what we're trying to do is incorporate directly into Patient Viewer. If you've already found your patient, you go to radiology and you read the report or at least see the images that are being done. You can just click on the image and it'll open up the image that you're looking for. You won't have to open a separate app like we do right now in our desktops, where you log on to the app, and then you've got to re-login and find your patient. That should all kind of be connected in the future. So that's our plan.

What I'm most excited about in general about this app is again, I think, especially in the use cases we presented or at least for inpatient rounders especially, we're not intending it necessarily to replace CPRS at all, but I think it will be a great supplement in terms of increasing efficiency, having something in your palm of your hand that you can work with directly with the patient in front of you. So, I think in terms of the capabilities it provides, while it doesn't do all of the things that CPRS does by any means, I think the core features can really enhance the workflow and make it a lot more efficient for almost any staff who need to access patient information.

Denise Kennedy: Excellent. Thank you. I know you just covered a lot of questions there. Did we get to the radiology images through Patient Viewer?

Dr. Derek Juang: Yes, I did. That's where I mentioned a separate app called Image Viewing Solution that's already also available. For anybody who's looking for these apps, you could also just Google either Patient Viewer or Image Viewing Solutions space VA and you'll get directed to the app page. These aren't native apps, so they aren't available in the iOS app store right now. Part of the reason for this is it's been difficult to update as much as we want the apps that we're doing with the submission process that Apple has. So at least for right now, this helps us move forward a little bit quicker, but it does require a VA device. That is, again, one limitation we mentioned, a VA iPhone or iPad.



Denise Kennedy: Excellent! I do not see any additional questions coming in currently. I'll give a last call for any comments, Dr. Juang, or Gerry, that you have and with that we can wrap it up if you have nothing further.

Gerry Markowitz: This is Gerry. I only want to say one thing, and that is go use the app. You know, you've got the links and even if you don't have at your fingertips today a government issued iPad or iPhone, use it on your desktop and see if there's a reason for you to have a remote device because this would help you do your job.

Denise Kennedy: Excellent, we have one more. Oh, I'm sorry. Go ahead Dr. Juang.

Dr. Derek Juang: Yeah, I think I just want to reiterate that. One of the things that I think we really want to get out there, this is live and available to use right now. If you need a device, also for a lot of local IT's might be able to support if you just put in a request. If you don't have an iPhone there, saying this could really benefit my clinical workflow. Could you consider giving me an iPhone? Often it may just require approval from your service chief, and we have been distributing iPads through VA office of Connected Care. I'm not sure what the latest process for that is, but you guys can send me an email if there's any interest in getting more information about that. In terms of live demos, we don't have one right now, but again you're welcome to just try the app out. Again, the link will work, especially if you're just on a VA computer. You can open it there, just check it out, and think about, "Wow, if I could use this on a mobile device, how would that change things for me?"

Gerry Markowitz: As far as the live demo goes, this video right here, this one, it goes through the entire app. It takes a long time, because if you remember that other screen there's a lot of pieces and parts to this app. It would be easier to watch this on VA Pulse at your own pace because the fella who does this does an excellent job. He goes through every piece of the app. He's got the data to support it, so that's what's also important because it's all set up with the proper data so that you see meaningful information as he goes through all the pieces and parts. That's my suggestion is that you look at these videos.

Dr. Derek Juang: And last comments, again if anyone has any questions, feedback, if you use the app I can promise you we are actively working on this. It's something we're actively building and working on, so especially if you try it and have some feedback, definitely let me know and I really appreciate it.

Denise Kennedy: Excellent! Thank you both so much, and there are several links to these in the deck, which is downloadable underneath the chat box as well as in the chat box themselves. The last link we will ask you to look at today is providing some feedback. Let us know what you thought of today's presentation and any future presentations that you would like to see for the VA Mobile Discussion Series. We are right up here, almost at 4th of July, so I hope everyone has a great holiday. A special thanks to our presenters. Thank you for a comprehensive and thorough presentation. With that, we'll call it a day. Thanks, everyone.

