VA Mobile Discussion Series

VA FitHeart and CR Pro 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 FitHeart and CR Pro App.

Leah Krynicky: Hello everyone. Welcome and thank you for attending our VA mobile health discussion series webinar. My name is Leah Krynicky and I'm going to run through a few brief technical reminders before we begin the discussion about VA FitHeart and CR Pro. Your phone lines are muted and 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 use the chat and someone will be in touch to offer assistance. To respect everyone's schedules, we'll keep this moving.

Today we welcome Dr. Alexis Beatty, staff cardiologist and core investigator at the VA Puget Sound Healthcare System's Seattle-Denver Center for Innovation for Veteran centered and value-driven research. Dr. Beatty is joined by Dr. Mary Whooley, staff physician from the San Francisco VA Medical Center, and Sarah Magnusson, project coordinator from the VA Puget Sound Healthcare System. As mentioned before, if you have any questions for Dr. Beatty, please use the chat feature. We will stop the presentation intermittently to answer those questions. To download the presentation, please click on the file name below the chat screen. With that, I'll turn it over to you, Dr. Beatty.

Dr. Beatty: Thank you, Leah. Thanks to you and the organizers for the opportunity to present today. And though you will mostly hear me talking today, I'm happy to be presenting on behalf of my mentor and collaborator Mary Whooley and my project coordinator Sarah Magnusson. And I'm really pleased to be telling you about the mobile applications for cardiac rehab VA FitHeart and CR Pro. So an overview of what we'll talk about today, so first a background on cardiac rehabilitation. Then, why we think an app would be helpful. Next, talking about VA FitHeart, the Veteran-facing app, which is currently in limited field testing. Then, talking about CR Pro, which is the provider-facing app, which will soon be entering field testing. And then finally, more information on that field testing and next steps.

So some background on cardiac rehabilitation. So cardiac rehabilitation, which you'll see abbreviated during the presentation as CR, is a twelve-week program of exercise training and health behavior counseling for patients with heart disease. And cardiac rehab is known to improve a number of outcomes in patients with heart disease including quality of life and reducing the number of hospitalizations. And in Veterans with Ischemic heart disease, cardiac rehab is even known to reduce cardiovascular mortality.

Cardiac rehab is a multi-component, multi-disciplinary program for people with heart disease. And it encourages patients to adopt many healthy behaviors including exercise, healthy eating, medication adherence, and smoking cessation. And it also includes psychosocial counseling to

promote emotional wellbeing. And traditionally cardiac rehab programs take place in cardiac rehabilitation centers at hospitals or clinics, and patients travel to these centers three times per week to attend sessions.

Now when we look at the whole population of people who are eligible for cardiac rehab, we see that first of all, not everybody who is eligible for cardiac rehab is referred to cardiac rehab. But then when we look at the whole population of people who actually end up enrolling and attending cardiac rehab, we see that most of our eligible population does not attend. And we recently looked at rates of participation in cardiac rehab amongst Veterans and nationally only about ten percent of Veterans who are eligible for cardiac rehab actually attend cardiac rehab. And what we also noticed was that there was a lot of variation across the nation and participation in cardiac rehab. So there are some areas of the country that do a pretty good job of getting Veterans to attend cardiac rehab and those are the states that are in the darker blue colors. And then there are some areas where we don't do a great job of getting all of our patients into cardiac rehab.

And so looking at this variation, I think it tells us that we need to be doing a better job of trying to get more Veterans to attend cardiac rehab. We know a lot of the barriers to attending. One of the biggest ones is that with the traditional system, we require people to attend these twelve-week programs three times a week at a local cardiac rehab facility. Not all VA facilities have a cardiac rehab program or facility, and then it's oftentimes difficult for those who live particularly in more rural areas, or who have work or caregiving responsibilities, or transportation issues, to make it into these cardiac rehab centers. And it also can be costly to attend cardiac rehab, either through loss of income if you're having to take off from work or due to copays. And so a lot of people around the VA have been doing a lot of work to try to break down these barriers and improve access for Veterans to attend cardiac rehab by making it easier for them to participate and doing so in a way that meets their needs. And we believe that improving participation in cardiac rehab will improve Veteran health.

And the biggest part of the ongoing VA efforts to improve cardiac rehab use is the offering of home cardiac rehab programs. Home cardiac rehab programs have similar efficacy to center-based cardiac rehab programs, but can be more convenient and accessible for many patients. And the Office of Rural Health has been instrumental in sponsoring the development of home cardiac rehab programs within the VA, and there are now about 30 VAs nationwide that either have or are establishing home cardiac rehab programs. In these programs, Veterans usually come in for an in-person assessment, but then they exercise on their own at home and have weekly follow-up telephone calls with the cardiac rehab provider for their cardiac rehab program.

Now on to the core part of the discussion series, how can an app help with cardiac rehab? Well, as providers began delivering home cardiac rehab, they found that there were some challenges with this. And one of the big challenges is within sharing and exchanging data between patients and providers. So patients would record their physical activity and vitals in paper and pencil logbooks and then when they had their phone calls with their providers, they would have to

recite that data back to their providers over the telephone. Now with an app, you can digitize the patient diary, which can make it easier to record and share data. And then an app also offers other opportunities too, like setting reminders and providing patients with a visual display of data and progress.

And so, that brings us to VA FitHeart. VA FitHeart is the patient-facing mobile application for cardiac rehab, and it is currently in limited field testing. And I'll show you some of the screens of VA FitHeart here. So VA FitHeart has a number of functions. One is goal setting. People can set physical activity goals and these goals can be set in minutes, steps, or miles. Veterans can then log their physical activity and other health measures like blood pressure, heart rate, weight, glucose, cholesterol, and mood. There are health education modules, which include relatively short health education snippets that are in a mobile-friendly display. And it also allows Veterans to set reminders to make entries or to review data.

And so when you come to the landing page on VA FitHeart, you see a welcome message button that lets you set your weekly physical activity goals and then a rainbow display of your progress towards those goals. And then the reminders come in through the notifications bell there. And then when you go to log an activity, you can press the 'Add an Activity' green button ,here, and enter a physical activity. And then you also have the ability to see your physical activity displayed in a table format with details about what type of activity you completed and your level of intensity of physical activity. This can also be viewed as a graph so that you can see progress over time, including the ratings of intensity of the physical activity.

Now we conducted usability studies on VA FitHeart in Veterans. And the very first version of the app, when we showed it to Veterans, we demonstrated the function of the mobile application to the Veterans and then we asked them to complete certain tasks with the mobile application. And with the first version of the mobile application we found that Veterans were not able to complete most of the tasks with the mobile application. And this led us to go back to the design of the mobile application and look at opportunities for improvement.

And so we took that feedback from the Veterans on the tasks that they were unable to complete and the things that were difficult for them to use about the mobile application and we made a number of changes. And so one of the changes that I will share with you here as an example is this 'Add an Activity' button. So if you look on the picture on the left, we have now this green 'Add and Activity' button for adding a fitness activity when you have an exercise session. In the original version, there was a plus sign in the upper right hand corner and that was the mechanism for adding an activity. And this plus sign is a pretty standard way of either adding something in an app or adding a contact in an app and so it seemed like something that would be a standard interaction for adding an activity. But when we asked Veterans to try to add an activity with the app, nobody could find it. And so we changed that plus sign to this green 'Add an Activity' button, and we were able to significantly improve our task completion success rate.

And so it's little changes like that, based on the feedback from observing our Veteran users, we were able to significantly improve our task completion success rate and significantly improve the rated usability of the mobile application. And throughout, Veterans were always very enthusiastic about using the mobile application and really interested in being able to use this tool.

During our usability testing, we also conducted interviews with the Veterans and got a lot of great information from the Veterans about how they viewed using the mobile application. And there was a lot of general enthusiasm for the mobile application. People were really interested in being able to track their health measure. But we also learned some things about the expectations of Veterans regarding using a mobile application like this for something like cardiac rehab. One of the first things we learned was that people had the expectation that they would have some sort of introductory training. One of the Veterans gave an example, he said that when he learned how to use Excel spreadsheets, he took a class in order to learn how to use that, and he would basically expect the same thing for an application like VA FitHeart. He would expect someone to sort of walk him through the features and the functions and how to use it.

And then Veterans also very much were interested in sharing data with their providers. They thought that it would be very helpful to share this information with their doctor, and it being something that would be done easily rather than printing out sheets of paper or trying to attach PDFs and sending them through My HealtheVet.

Based on the usability testing and the Veteran feedback, we created a number of tools to help Veterans use the mobile application. So first, we created this SharePoint site that collects all this information and puts it in one place. We also have training materials, and some of these are training materials that we developed and some of these are the user manuals and user guides that the Office of Connected Care and DCG put together. And then we put all of this information into a toolkit to help providers help their patients use VA FitHeart. And I think at this point, we are going to stop and take any questions that people had.

Leah Krynicky: Great, thank you. We have had one question come in so far. So Teresa asked if the patients will be given a tablet.

Dr. Beatty: So for our project, we have not been giving patients tablets. We've been having patients use the mobile application on their own devices. And this also brings up a very good point that I forgot to mention earlier, which is that this app is actually a mobile web app. It's basically a website that is optimized to be viewed on smaller screens like on smartphones and tablets, but it can also just be viewed on a web browser. And so Veterans can use this app either on a smartphone or on a tablet or on a desktop computer even. We haven't been giving people tablets, but I know that there are some programs within the Office of Connected Care where they are giving patients tablets for participating in programs that use mobile apps.

Leah Krynicky: Terrific, thank you. That's it for questions right now. Thanks, Teresa, for sending that in, and other folks on the line, please send in your questions and we will address them at the end of the presentation.

Dr. Beatty: Great. So we took all of this information that we got from our usability testing and we used that to create materials to help us embark upon limited field testing. We conducted limited field testing with Veterans actually using the mobile application out in the real world. And we found that we had generally positive feedback from this limited field testing. People felt like it was actually helping them do what they were supposed to be doing and keeping track of things. They had good feedback about the app usability, but we did learn some lessons from this initial field testing experience.

The first lesson we learned was that the initial training that we had developed based on the usability testing feedback was well-received and it seemed to be able to help the Veterans learn how to use the mobile application. However, we did have some challenges. One of the big challenges was with DS Logon. And if you've never heard of DS Logon before, it's the Logon that was originally used to have Veterans log in to VA mobile apps. And it's a DOD (Department of Defense) logon, and it's a bit of a challenge to get set up with DS Logon. So if the Veteran doesn't already have a DS Logon set up, we found that it took about 45 minutes to sort of walk Veterans through that whole process of getting the DS Logon set up. And then it only took about 10 or 15 minutes to actually train them how to use VA FitHeart. And so we found the DS Logon to be a challenge. We also learned very much that the Veterans really did need to share their data with providers, so we didn't get a whole lot of traction with using the app on an ongoing basis because we didn't have CR Pro available in our initial field testing.

And so we've found that for the next steps, we really needed to be able to test along with the CR Pro, the provider-facing application. And the way I kind of view this whole program is that we have our home cardiac rehab program and then we have a number of extensions to that. So one of the extensions is VA FitHeart, one of the extensions is the VA FitHeart toolkit that helps you be able to use VA FitHeart and undergo the training you need to use VA FitHeart, and then we also have CR Pro as another piece of the puzzle.

CR Pro is a provider-facing mobile application for cardiac rehab. It lets providers view the patient goals that they have set, view the patient's generated fitness and health data, and then take all of that data and create a nice vista-friendly text report that can then be exported to CPRS as a progress note. In the CR Pro app, the provider can come in and can select a patient list or just search for patients using the search text box and the standard first letter of the last name and last four of the social security number fashion. And then you select the patient, and then you can come in and see the patient's dashboard, see their progress towards their goals, see their latest measures of weight, heart rate, blood pressure, etc. And then you can also drill down into the fitness, health, and mood tabs to see additional details and graphs and tables of the fitness, health, and mood data. And then finally, the last section is this report, which you can use to create a cardiac rehabilitation progress note, which can display the physical activity

goals and the physical activity entries for the Veteran. And then you can generate the report and click on the 'Export to CPRS' button and send that report to the electronic health record as a progress note.

As I mentioned earlier, CR Pro is very, very, very close to being in the field testing. It's awaiting some of its final checkoffs and review before being installed in the environment where we can conduct limited national field tests. And so VA FitHeart has already been through its first phase of limited national field test, and then VA FitHeart and CR Pro will be tested together in a limited national field test. I put May 2018, but that's probably me being a little optimistic because it probably won't happen until June. It's going to happen on the horizon here. And then, ultimately, based on the feedback that we get from Veterans and providers from this field testing, we'll make any needed changes to the apps, and then proceed with national release, hopefully in the coming months. And I wanted to share with everybody the resources that we do have out there for this, and some of the links. So these are the links for the FitHeart and CR Pro app on the VA mobile beta app store. And then we also created a SharePoint for VA staff that has a lot of the toolkit materials in it, including the training materials, training protocols, user guides, a few training videos for VA FitHeart, and then also some implementation aids for quick reference, some tools and tips on incorporating the app into home cardiac rehab care and some suggestions for peer support, which we don't do through the app right now.

At this point, I'd be happy to take any questions. Here's my contact information, and I also want to make a number of acknowledgements to all the people who have been instrumental in helping the development of this app, including the Veterans and all of our sponsors here.

Leah Krynicky: Great, thank you Dr. Beatty. We have some questions that have come through, and it looks like some other folks are typing. So first question is from Karen. Does the note go into CPRS under the 'Progress Note' tab or into 'Vista Imaging Display'?

Dr. Beatty: Thanks, Karen. So the note will go into CPRS under the 'Progress Note' tab, just like a progress note and it doesn't go in as a scanned picture into Visa imaging.

Leah Krynicky: Okay great, thank you. We also have a question from Kelly who wants to know if these apps will be moving to NextGen to allow additional sign-ons other than DS Logon.

Dr. Beatty: That's a great question, Kelly. We certainly have been asking to be moved into NextGen to allow additional sign-ons other than DS Logon, but I have not gotten any confirmation that that is definitely going to happen, but I'm hoping that it will. If you have any influence with anybody and want to tell them to make us go into NextGen, I'd be happy to take that influence.

Leah Krynicky: Terrific, thank you. Okay up next, the question from Chris. Do you have a screenshot of what the CPRS note will look like and the document title?

Dr. Beatty: I don't have a screenshot that I can easily share with you at the moment. The note title is set up to be so there is a mechanism within the app for selecting a note title based off of the note titles that you have at your facility. And so if your facility has created a note title that is, "GA FitHeart Progress Notes," then it would go in under that note title. But it can go in under any note title that you select through the app that's one of the available note titles at your facility.

Leah Krynicky: Okay great, thank you. It doesn't look like we have any other questions that are coming in, but I know that Dr. Beatty provided her contact information. So thank you, everyone, for participating in today's webinar, and thanks again to our presenter Dr. Beatty for all the great information about VA FitHeart and CR Pro. To all of the attendees, on the screen and in the chat box, shortly you will see a link for you to tell us how we're doing and if there are any topics that you would like us to cover. Thank you everyone.