

DENISE Hello, everyone. Thank you for joining us. It is right at 2 o'clock. However, we still have a few
KENNEDY: people signing on so we're going to give it two more minutes and we'll be right back with you.
Thanks so much.

Hello, everyone. Welcome and thank you for attending our VA Mobile Health Discussion series webinar about the VA Immunization Campaign. My name is Denise Kennedy and I'll be your moderator today. You have the option to use your computer or your phone. If you want to dial in using your phone, please dial 201-479-4595 and enter passcode 302-79-410. This information is on your screen.

It's also pasted into the chat feature which is on the lower right hand side of your screen. If the chat option is not visible, click the blue chat bubble located at the bottom of your screen and the chat box will appear. Your phone lines are muted, but if you're experiencing any technical difficulties use this chat function and someone will be in touch.

Today, our presenter is Dr. Shaman Singh, a member of the clinical team in Connected Health. Also joining us today is Donald Raleigh, a member of the mobile app development team and Troy Knight, a member of VA's immunization team. To respect everyone's schedules, we'll keep this moving so the session ends on time. If you have any questions for Dr. Singh please use the chat feature and we will get to them as time allows.

If we don't get to your questions, we will send out an email following this webinar with any relevant answers. If you'd like to participate on Twitter, please use the hashtag VAmobilehealth. To download this presentation, we will place a copy of the link in the chat feature. And with that, I'll turn this over to you, Dr. Singh.

SHAMAN SINGH: Thank you. Good morning, everyone. My name is Shaman Singh, and as was mentioned I'm a member of the clinical team over at Connected Health, which is part of the Office of Informatics and Analytics. For now, at least. So today, we're going to be talking about the VA Immunization Campaign app. I just wanted to give you a quick overview, and then we'll dive into a video demonstration of the app and field any questions afterwards.

What's the immunization campaign app? Well, this mobile app was first conceived a couple years ago. It's come a long way, and there's been a lot of people helping out with this. Folks

from the National Center for Health Promotion and Disease Prevention or NCP, folks from the Office of Public Health, Pharmacy Benefits Management, key stakeholders across our organization to help us guide the development of this app.

When you're talking about mobile apps, they're supposed to be intuitive and understandable. And they're user friendly applications, right? They give us some aspect of desktop functionality that we can conveniently use when we're on the go, right in the palm of our hands. So we took a look at the influenza campaigns that we have across all of our facilities usually around this time of year, and thought, could a mobile application help us streamline the campaign work flow and give us more mobility and really help us reach a broader patient population?

That was the intent of this app. So it's a first version, and it's just specifically targeting our influenza campaigns. And we want to streamline that process by giving our immunization staff this on-the-go, in the palm of their hand access to a Veteran's immunization history, the ability to capture the results of the screening questionnaire, use a time saving template to help document the vaccination, which is then stored back to VistA, and also timely access to some curated vaccination resources.

But most of the time we use CPRS. We might be saying, well, we already have CPRS. Just use CPRS when you're giving Veterans the vaccinations. I mean that's what we currently do now in our campaign. And that's great if it were always true, but sometimes it's not.

Here we're looking at why. We partnered with a team of analysts from Booz Allen Hamilton, and they went out to seven sites, interviewed almost 30 of our on-the-ground front line immunization staff to learn what's your as-is workflow challenges, and is there potentially a need here that a mobile solution could fill? We talked to them and let me just recite a couple things about what they said.

One user said right now, you write everything down and it'll go into pile. And typically, there's one person who will put everything in, then I'll take them and document them in my clinic. Another said we can process 200 to 300 Veterans a day with this system, and CPRS is relatively slow, which means that screening forms pile up, and we have to distribute the paperwork for different people to document.

And another said, when I give the flu shot it's hard to remember the lot number and location. I just usually keep a sticker in my pocket for the lot number. Another said, once I collected all the sheets from each Vet, it was my responsibility at the end of the day to enter in all that

information.

Another said, if there were 300 Veterans it could take multiple days to document the vaccines. And in this case, a Veteran could get multiple vaccines if they came back the next day. And another said, I don't even have an exam room, so I see this is a big benefit. If I can take this with me and do my charting wherever I go.

Just a couple final statements. You should walk through our atrium and see how many people are sitting there. If they could go to the patients we could probably vaccinate more people. Another said we talked about doing a drive-through clinic because our objective was to pull in as many people as possible. But a lot of concern-- there's the ability to chart, and make sure that they're a Veteran, et cetera.

So that's really the experience of folks on the ground who are trying to maximize the vaccination outreach potential all of our facilities. To help address these challenges, an Immunization Campaign app was developed. And it's an HTML5 solution. So even though it's designed and developed to run from mobile devices, it can be run through your desktop web browsers if you chose to.

If you're intending to use it from a mobile device, you have to be using a government furnished mobile device like one of over 11,000 cellular enabled iPads that have been delivered to our health care teams at over 20 sites in the last 18 months. And since you're going to be accessing VistA data, the device needs to be on the VA network, and the only devices that are on the VA network are the ones that VA issues themselves.

To be on the network, your device needs to be connected to your hospital's WiFi. But if your WiFi signal is horrible, you could use an external WiFi network or even the cellular data plan like I alluded to earlier, and tunnel back into the VA using an app called Cisco AnyConnect that allows you to establish that virtual private network connection back into VA. So as I briefly mentioned, the project's come a long way in the last two years.

There were some software environment issues that needed to be fixed prior to us attempting field testing later this month. We're going to be going to three sites in this field test-- Washington DC, Orlando, and Pittsburgh. For those of you on the call, if you're interested in finding out more about that, your PoCs at those facilities. DC would be Nancy Dudash, Orlando would be Gloria Gomez, and Pittsburgh, Brooke Decker.

And those are the folks that we've been talking to as we're planning our field testing later this month. So we hope to have a rapid turnaround from the results of that field testing so that we can release a national app during this current influenza campaign season. And before we get to a short demonstration of the Immunization Campaign app, I'm just going to turn it back over to our moderators here for a second if they need to field any questions.

DENISE

Sure, yes. Thanks, Dr. Singh. I have one question here that I think we'll table until the end. But with that, we are going to go to a video, and so I wanted to remind everybody to mute your phone. Well, your phone lines are muted, but to unmute your speakers on your computer so that you can hear the video over the phone.

KENNEDY:

Keep those questions coming. I see a couple of people have asked questions. I will respond and we'll [INAUDIBLE] a few up after you walk through the demonstration. Back to you, Dr. Singh.

SHAMAN SINGH:

So let's take a look at an example of using the Immunization Campaign app using test-- So let's take a look at an example of using the Immunization Campaign app using test data in a test instance of VistA. So after logging in with your credentials, set your VistA access and verify codes--

AUDIENCE:

Are you able to start the video for us from the beginning? I don't actually have the controls for that.

DENISE

Yeah, we had started it. Can we restart the video please?

KENNEDY:

SHAMAN SINGH:

So let's take a look at an example of using the Immunization Campaign app using test data in a test instance of VistA. So after logging in with your credentials set to your VistA access and verify codes as well as your site, you're brought to the first screen. We're going to take a minute here to orient ourselves a little bit.

Working from top left to bottom right, you see the patient identifiers on the top left. There's a magnifying glass there that takes you to patient search. You can use similar criteria that you would in CPRS. So we're just going to go ahead and select a test patient for this demonstration and confirm our selection. So let's take a look at an example.

Below that is the immunization template that you can set up from this app. We'll tap on that in a second, but here we at least see some summary details. The vaccinator-- that's me. The

clinic is empty. We'll take care of that in a moment. The current campaign vaccinations. You can see the vaccination.

So let's take a look at an example of using the Immunization Campaign app using test data in a test instance of VistA. So after logging in with your credentials set to your VistA access and verify codes as well as your site, you're brought to the first screen. We're going to take a minute here to orient ourselves a little bit. Working from top left to bottom right, you see the patient identifiers on the top left.

There's a magnifying glass there that takes you to patient search, and you can use similar criteria that you would in CPRS. So we're just going to go ahead and select a test patient for this demonstration and confirm our selection. We can also tap on the patient to give us additional information about them.

Below that is the immunization template that you can set up from this app. We'll tap on that in a second, but here we at least see some summary details. The vaccinator-- that's me. The clinic is empty. We'll take care of that in a moment.

The current campaign vaccinations. You can see the vaccinations we've already set up including the lot numbers. They're off to the right of the name. And then the note title that I want to associate the documentation for this vaccination with.

So now, with this template, all my encounters will have this information pre-populated for me sparing me from having to perform the same actions every single time I go to document an immunization. Speaking of that, below that is the immunization documentation that takes me to the part of the app that allows me to complete that part of my workflow. Resources provides me links to authoritative sources of information for vaccinations, so sites you can trust like our internal websites and the CDC.

About is pretty much self-explanatory. Down below the tab bar you can go back to the launch pad. That's the application launcher or springboard for our VA developed apps. The thought is once you've logged in with your VistA credentials and if you're using an app and have a patient or brought a patient into context, the beauty of the LaunchPad is now that when you switch to different apps, you're going to pass your credentials and the patient context to make sure your workflow is more efficient so you don't have to keep logging in or selecting a patient.

The home selection will bring you back to this screen. And log out will-- wait for it-- log you out.

Below the tab bar you'll see a ribbon that has the app name and the version on the left hand side, and the user and the site name on the right hand side.

So back to immunization template. Let's tap on that. So I see my template form here. Under the Vaccinator heading, I can select the user and add a title if I need to. You can see the location and note title heading. Those were the two empty fields that we had before. I can begin a query and after the third character, I'll jump to that point in the list of results and can scroll down further and select a clinic of my choice.

Similarly for note title, my query results will be displayed and I'll select a note title. So now when I go to Document and Immunization, it will always have immunization PPD documentation note titles associated to the clinic SCV clinic seven. Under the header vaccine profiles, you see just influenza as a subheading under vaccine profiles because that's the only vaccine being targeted with this version of the immunization campaign app.

You can see I've already added four vaccines-- Fluorix, FluMist, Fluzone, and FluLaval. You can see additional information about those vaccines such as route, the dose, and the lot number. The right arrow header chevron at the end of each vaccine row will take me to further details about that vaccine including the ability to edit that profile, say if I need to update the lot number.

I can delete the vaccines using the Delete button on the left. Let's clean up the list here. Now, you can see we're just down to two. So let's go ahead and add another one. When I click the plus button I see new vaccine details pop up.

Here, again, vaccine group only contains the vaccine influenza in this version. Under vaccine type, I can tap and select from the list the inactivated trivalent. You'll see the vaccine information statement-- or VIS-- version and website is automatically populated. So this is caveat number one. We are correcting the version of the VIS as documented here. It says 2013, but the link does take us to be updated VIS. So let's go ahead and take a real quick look at that.

You can see that this is the version from August 2015. And like I mentioned before this correction's going to be made. Continuing on, to product information, I can tap on the trade name and select one. Information of the manufacturer, dose, and route will be auto-populated. Lastly, I have to enter the lot number and expiration date.

As a second check, I would be prompted to reenter the lot number. Now, we can go ahead and save the vaccine profile and go back to this previous screen. So you can see the check box using campaign when selected allows for those options to be used during documentation. So if we go back to the home screen you'll see the clinic and note title information has been captured. We see two vaccines under the vaccine profile, so let's go back and add that third vaccine to this campaign.

So now let's complete our vaccination encounter for Mr. Hiker. Tapping on immunization documentation, we have two tabs to toggle between-- immunization campaign, which is our current screen, and immunization history, which would give us that extra information about the patient's immunization history. But under the influenza heading I can see that we have no prior vaccine records.

Now, before I go on I want to point out of the second caveat. You'll quickly notice that allergy information is absent. We do plan to include that information with the next version of this app, however, a couple of comments. If you're running an iPad, our iPad users can get access to CPRS. Definitely, if you're running this as a web app from a desktop or laptop, you'll have access to CPRS as well.

I'm hopeful that a different mobile app called Patient Viewer, which gives you that mobile access into the patient's chart will also be field tested at the same time to mitigate this lack of functionality. But I just want to point out we do, in fact, vaccinate patients without electronic availability of their allergy history, and have to rely on the patient's own recollection prior to vaccinating them. That's often the case with employers or university led vaccination campaigns. So we definitely have to exercise sound clinical judgment as we already do across the country in similar situations where we don't tie our flu clinics with real time EHR access.

So continuing on, we have our screening questionnaire for the influenza vaccine. Is the patient pregnant? And if you were to select the yes, where relevant, additional guidance is presented. Is the patient moderately or acutely ill with the recommendation in gray below for mild illnesses.

Is the patient allergic to eggs? Again, with recommendations in gray before that. Is the patient allergic to latex? Has the patient ever had a severe reaction to any influenza vaccine? Has the patient ever had Guillain-Barre syndrome?

So caveat number three. Let's read the directions before proceeding here. If a patient does

not have any contraindication, all of the above responses will be submitted as part of the patient's record. However, if the patient does have a contraindication and the vaccine will not be given at this time, close the application and document those contraindications in CPRS instead. Do not select No below, but instead continue to CPRS.

So this is another limitation to the workflow in that if we have to capture a contraindication like add an unknown egg allergy, this app does not have the ability to capture allergies or postpone a reminder due to a contraindication currently. So in those few instances, we would have to go back to CPRS to complete our documentation.

So say Mr. Hiker were to say no or perhaps he received the influenza vaccine elsewhere. We would select No, and choose the reason for why. If you receive a vaccination elsewhere, I can select that and I'm taken to an entry screen to provide the vaccination information, the date it was administered, what was administered, the dose, any comments or notes, and we'd still be bringing in our screening questionnaire information. We could sign and submit that to VistA.

If Mr. Hiker refused, we can enter comments or notes about the refusal. Lucky for us today, Mr. Hiker said yes. So scrolling down I see additional vaccination information around details and exceptions for specific vaccine types, and how to get to our VHA influence and guidance statement. Picking a vaccine, let's continue with the administration.

So as you know, first step is providing the patient with the vaccine information statement. As we mentioned before we're updating those currently and you can see here we have a link to the PDF in other languages if necessary. Down below that we have the ability to actually email the vaccine information statement directly to the patient from a no reply arbitrary email address.

So now let's document the vaccine record. We have the ability to complete the encounter information if this visit is related to any of those above. We see the pre-populated information from the selected vaccine according to the profile we set up earlier. Also if needed we can change the dose and lot number within this part of the workflow.

Under immunization notes we can select the injection site, so let's say we choose the left deltoid. We now say that we have given the vaccine and after an appropriate amount of time we see no reaction, we can document those underneath comments and notes. We can sign and submit that to VistA. We can see the screening questionnaire information that will also be included in the note and at the very bottom we see our information, the date, clinic, and note

title once more. We can tap on Sign and then be prompted to enter in our signature code.

Before we end, let's go back quickly and take a look at the Resources tab once again. You'll see links for the VHA intranet site publichealth.va.gov/flu in the guidance statement as well as the CDC seasonal influenza site. So there you have it. That's the immunization campaign add in all of its glory, and I'm going to kick it back our moderators now.

DENISE

Excellent. Thank you so much for that. We do have a couple of questions, Dr. Singh, that now

KENNEDY:

is probably a good time to ask. The first is from Nancy who wants to know how we can get-- the app sounds like it's a great app-- and wants to know how we can get WiFi at our facility and government issued iPads.

SHAMAN SINGH:

So Nancy, if you could send me an email just so I know which facility you are at, I can put you in contact perhaps with the right individual at your facility to make this pitch to. But all of our facilities across the country can go into our mobile health provider program. That's our program where we've procured all of these iPads with data plans to then distribute back to our facilities.

So the facilities can use some of their medical dollars to procure these iPads from us. And when they get sent out to your facilities, we enroll them in something called our mobile device management platform. It's the platform that governs all of our mobile devices and it can give those devices the authority to be able to be on the VA network.

So when those devices get sent out to your facility, to a particular user, it has all that information already. Then once the user's able to log in, they'll have that certificate that allows them to jump on their facility's WiFi network. So all of these iPads, as long as your facility is using, most of our facilities are using mobile 1SD as their WiFi networks for a lot of our [INAUDIBLE] and for these devices.

So I'm assuming that would be the network that your facility uses. There's pockets around the country that use different networks. But we can definitely get all these iPads on your hospital network.

DENISE

Excellent. Thank you. And Nancy, I just pasted Dr. Singh's email in your chat window question

KENNEDY:

to us so hopefully you can connect there. Our next question is from Sally. Sally wants to know will this program be able to see if a vaccine was done by an outside provider such as Walgreens?

SHAMAN SINGH: That's actually a perfect question, and I'll answer it in just a second. But for those of you who don't know, VA and Walgreens has partnered together to give our Veteran population no cost flu shots to any Veteran that's enrolled in the VA health care system. I think they've partnered with Walgreens for upwards of 30,000 flu shots.

Our Veterans can walk in a Walgreens. There's information online about this program at ehealth.va.gov/immunizations.asp and we can definitely distribute that link to every one. But the Veteran basically goes in, they have their name, some of their patient identifiers on the form. There is a group ID number.

So if you're familiar with insurance companies, there's always a group ID number affiliated when you're having your services paid for. So that group ID number comes on the form. They just let the pharmacist know that they're a Veteran, and when the pharmacist captures all of that information, working with our awesome team at the VLER, the Virtual Lifetime Electronic Record Health Exchange folks who partner with the eHealth Exchange and [? Healthy Way, ?] will actually be able to get all of this data back in to VistA within 24 hours so that providers will not only be able to see this as part of Veteran's regular immunization history in VistA CPRS, but in that immunization history in our mobile application because it's pulling the information the same way that CPRS does.

All that matters is that the data source has been updated. So after 24 hours things that are coming external from like Walgreens are going to be in VistA and will be serviced up to our providers using CPRS in this mobile application.

DENISE KENNEDY: Excellent. And that is all of the questions that we have for right now. I think you have a few more slides. I did want to let everyone know, please remember if you do have any questions for the team to use the chat feature. Also, we've pasted the link for the download and the video will be included on the VA mobile site after the presentation today. So I know that some of you might want to get another look at that. But Dr. Singh, do you want to go ahead and continue?

SHAMAN SINGH: Yup. So just some of our resources for those of you who aren't familiar with our mobile program. So it's the secure HTTP. So it's <https://mobile.va.gov> if you want to find more information about all of our mobile projects, you can go there. And certainly, for all of our provider and patient and caregiver facing apps if you'd like to learn some more training resources, just go to mobile.va.gov/training.

Like I mentioned, my name's Shaman. I'm with the Connected Health office. And that is my email address. Feel free to email me any time if you have any questions about anything we've talked about here today or just about mobile in general, and I would be happy to field them, or at least put you in contact with the right members of our team who can help you out.

DENISE
KENNEDY: Excellent. I don't know if you have seen this, Dr. Singh, but Troy, I think we've unmuted your line, and I see here that you had a note about vaccination records in OHRS, so I was wondering if you wanted to chime in since we have a little time.

TROY KNIGHT: All right. Thanks. I so enjoy seeing the evolution of this app, and you guys have done such a great job on it. One thing I wanted to make clear is I don't think it communicates with the Occupational Health Record-keeping System, which is where we keep all the employee health records and information. So I just wanted to reiterate that at this time it goes into VistA and CPRS, but it doesn't work with vaccinations of our employees. That's all.

DENISE
KENNEDY: Excellent. Thank you for that. And we have a question from Lana, who wants to know when the app is going to be available for use.

SHAMAN SINGH: So we are getting the app ready for field testing, and so the field testing will hopefully kick off by the end of this month. Typically, that's about a two to four week period. I'm thinking it's going to be about a four week period. Takes us to about the third into the fourth week of October.

Now, as long as the app meets our field test users expectations and they haven't discovered any bugs or anything that needs to be fixed, hopefully shortly thereafter in the late November time frame or mid to late November timeframe, it can be available to national release for anyone to use from a government furnished iPad. Or like we mentioned at the very beginning, since it's an HTML5 application, it can be used from your desktop web browsers so your Firefoxes and your Internet Explorers on your laptop, desktops, computers on wheels will still be able to utilize this functionality as a web app.

If in field testing, if we find something critical and we find a bug that obviously needs to be fixed, and that would delay us. And depending on what those bugs are that could be a delay of two to four weeks. But hopefully, we've done our due diligence. Our field testers will hopefully put this mobile application to test and we'll see what we see.

DENISE Excellent. Another question that we wanted to address was what sites are testing and how are you training them. And as a follow-up to that, how long is training for the folks who want to use the app?

SHAMAN SINGH: The three test sites. For the Washington, DC VA Medical Center, point of contact there is Nancy Dudash. Orlando, our point of contact there is Gloria Gomez. And Pittsburgh, our point of contact there is Brooke Decker. So we have an implementation team here at Connected Health led by Dr. Michelle Lucatorto. She is working directly with our field testers.

Things like this where we have our video demonstration, part of the video demonstration at the very end was the About section. There's a application guide and a quick start guide in order to become familiar with these mobile apps. But any time you're talking about using a mobile application, if you designed it well there shouldn't be a heavy lift or burden to learning. And we think that's the case with this app at least.

So if we put this app in the hands of providers, you should be able to start using it within 5 to 10 minutes, and of course, with those caveats, those three caveats that we had mentioned during the demo video. So training is not going to be laborious or burdensome. And these are the types of materials that we'll have access to for our users in the field.

DENISE Excellent. And another question that we have here is how does this work and interact with the other immunization programs that are happening in VA?

SHAMAN SINGH: Let's see. I'm not sure what they mean by different immunization programs. I will assume you're talking about some of our other health IT solution related programs, so the VistA Evolution immunization team who have done a lot of work at being able to capture those additional information fields like the manufacture of the dose, things that we weren't capturing before that was made available by a patch I think recently here within the last several months. So that would be Keith Magoon's team.

So now that that patch is out, we're going to make in our second phase of this app, make that update so all the information that we're capturing does indeed go to those fields that are now available to us in VistA. Prior to that team actually getting that patch out, we developed this app to capture that data in the anticipation that those fields would be made available. So there's a lot of cross pollination between their team and our team.

Certainly, we have leveraged a lot of their subject matter experts. So Dr. Bryan Volpp over on

the West Coast. Dr. Rob Silverman over in the Chicagoland area from Pharmacy Benefits Management. They've really served as a source of expertise for us in developing this application closely.

DENISE KENNEDY: Excellent. And one more question from Diane. She wanted to know if this satisfies the clinical reminder for immunization in CPRS.

SHAMAN SINGH: That's a great question. When you are in the process of documenting in the mobile application and you save it to VistA, the right information is going to the proper places in the V immunization file in VistA. So your clinical reminders typically scrub the patient's chart in looking at the V immunization file to see if the data there would satisfy the reminder.

If it's satisfied, the reminder is fulfilled. So the short answer to your question is yes. When you document in this application the right information is going back to the right places in VistA to satisfy those reminders appropriately.

DENISE KENNEDY: Great. Thank you for that. And it looks like the questions are winding down. I did want to just check in with Troy and see if there's anything you want to add as I know the Q&A has covered a few topics.

TROY KNIGHT: That's great. Thanks. I believe, too, that the first testing and development was for the influenza vaccines. And I know that later this app was to be expanded into other types of vaccines and developed further. But flu was just the first one for now. Am I right about that?

SHAMAN SINGH: Yup, that is correct. Now that we are able to prove out the underlying structure of the Immunization Campaign app, and we have this framework to work from, we can bring in things like classically when you're talking about influenza vaccinations, a lot of time pneumococcal vaccination goes hand-in-hand with that. And for those of you familiar with doing vaccinations for pneumonia, you know that the decision support and the logic behind that is fairly complicated.

So we will be leveraging all of that logic that already exists in VistA today to help bring that logic to this app in the second phase of development, so that if we wanted to, if you're capturing a Veteran and they're due for their influenza vaccination, if they're also due for their pneumonia vaccination, whichever one that is, you'd be able to capture and do that at the same time. And some of our facilities do those tandem campaigns. Not everyone, but there is that use case out there that we're seeking to fulfill as well. And certainly shingles is another

key one that some facilities do as well.

DENISE

Excellent. Well, thank you both so much for your time today, and thanks everyone who signed on for joining us on this Friday afternoon. There will be a link to a questionnaire to give us your feedback on today's presentation. Please, it just takes about two minutes and fill that out, and let us know what you thought of today's presentation as well as any other topics you would like to cover in the future.

KENNEDY:

Our presentation next month will be October 23rd on the Teledermatology app and the information is there. And as I mentioned, we will have a recording of this presentation on the mobile.va.gov/discussion-series website. Thanks so much to Dr. Singh and to Troy for your participation, and for everyone for your great questions. And with that, I think we can call it a day. Thanks everyone, and I hope you have a great weekend.