How to Implement a VA Mobile App

Hannah Webster: Hello everyone. Welcome, and thank you for attending our VA Mobile Health discussion series webinar. My name is Hannah Webster, and I'm going to run through a few brief technical reminders before we begin our discussion about how to implement the VA app. Your phone lines are muted. We will be taking questions through the chat function that is available to you at the right of your screen. If you're 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 several members of the VA Mobile Implementation Deployment team to lead the presentation: Kay Lawyer, Cindy Wamsley, and Conor O'Brien. As mentioned before, if you have any questions for us, please use the chat feature. We will stop the presentation intermittently to answer those questions. If we don't get to your question, we will send out an email following this webinar with any relevant answers. To download the presentation, please click on the file below the chat screen. With that, I'll turn it over to you, Kay. Thanks.

Kay Lawyer: Great. Thanks, Hannah. So, yeah, as Hannah said, this is Kay Lawyer, Katherine Lawyer, you'll see in the presentation and in the GAL if you need to find me. I also have Cindy Wamsley and Conor O'Brien on the phone. We're all members of the VA Mobile Implementation and Deployment team. So today, we wanted to talk with you all about how we go about implementing a VA app. We're going to go through a few items starting with a little bit of background on how this all begins and the software development lifecycle, so everyone can see how this starts, and how we get basically to an actual deployment. There's a lot of work that goes on in there and we just want to see the whole process will give a better idea on how this works.

Then, we're going to dive into the application-specific planning. So, once we have an application, how do we go about planning for national deployment? How do we identify the audience? Where do we go? And then, the field test activities and national release activities.

Alright, so diving into the software development lifecycle process. So, this is a standard software. SDLC is what you'll hear it called, software development lifecycle process. Those highlighted in orange there, the field tests and national release, are areas that we primarily focus on. But as you can see in the purple line there, planning for any type of implementation, whether it's to a small group of field testers or on a national level, really happens throughout the whole process. It occurs very early on so that our team knows exactly what's going to be in the application. Then we can identify the key stakeholders and work with the clinical folks within connected care offices to really identify what that use case is, and what the problem is with this app or in some cases there are a group of apps. What is it trying to solve? So, when we develop our materials and work with communications and training teams we are really driving

towards the problem that these applications are trying to help those in the field with and also Veterans, too. That's why we start so early on there.

Then, really the key implementation efforts occur during field test and national release. That's when things really ramp up, and we're really talking with those in the field about the application, what they need to do to help us implement it and what those tasks are.

So, at the VA, what we use in developing mobile applications is a continuous improvement process. A lot of the applications have older versions out there, and it's just an iterative model, right? So, an application will come out; we'll work through the whole process of preparing the field for that; and then we execute that implementation giving the field what they need to know about that app. That's kind of the key piece there; as we work with the field, we hear exactly what is needed to maybe help make that app a little bit more functional for either staff or Veterans. Then, that gets back into the development team planning and processes. For example, VA Online Scheduling, that's an app that maybe many of you have heard of. The initial implementation of that actually happened in the fall of 2016, and, as it got out to Veterans and staff, we heard a lot of problems with it using DS logon – it's a big barrier for Veterans to overcome. They don't often remember their password, things of that nature, so how could we make it easier for them to get in?

Well, over the course of the year, folks talked and got My HealtheVet login included. So now, that's fully integrated into My HealtheVet. Veterans can log in using their My HealtheVet accounts, and we've seen a huge uptick in usage. So, things of that nature are how we get this iterative model going. We definitely hear what those in the field have to say, and what Veterans are telling us as well as features that they would like to see to try to prioritize that and get that back into the development cycle.

All right. Great. So then, now, we can get into the application specific planning. Once we have an application, or a group of applications that are ready to go out, this is really kind of where the national deployment efforts start. So, we say national deployment overview here, but it's really a combined effort of field implementation in general. How it usually works is we'll have an application, we'll get all the materials, everything ready to go, get some training together, communication skills as well, and that will take us into a field test component of that - it's really like a dress rehearsal. We work with business owners or certain sites that will help us test this. It's really the full end-to-end testing of whatever the application or group of applications needs to do.

It also gives us the opportunity to test out the supporting materials for that. So, we get input not only on the applications, that function as they should, but also was our training sufficient? Did we get the right message out to the end users? It really provides those that are giving us the opportunity to provide feedback in many different areas. It's a nice way to get that before we try to push this out nationally, and sometimes national deployment means to all facilities, sometimes it means to a handful of facilities based on information we've received. For example, some applications really are targeted towards rehab work. Not every facility may have that type of patient, so we might only go to 50 facilities, for example, based on that information. When

we talk national deployment, it can mean all sites, or it might only mean a subset of sites depending on what the application is.

So, for every app, we follow a similar approach, and this does vary because apps are, well some are highly complex, some are not as complex as others, but they all basically follow this phase. So early on, and back up in that slide you know when I was talking to software development life cycle, we really wanted to find what those adaption strategies are. So, working with the business owner and other clinical leads within connected care really defined who is our target audience on this. We'll go through what those look like here in a moment. But really seeing what folks are needing and how do we get this to them in the best possible manner?

Then, we do the planning of the deployment. So, what does that look like from both a timeline standpoint as well as who do we need to talk to? What is the sequence of events in order for this to go smoothly, and who in the field can help us? We are a small team, so we really, really rely on those in the field to help us get the word out either to staff or Veterans. That is an area where we're trying to make some improvements. So, more to come on that, but we really need staff in the field to help us with that.

Then, we go into, like I mentioned, some communication/marketing preparation. What do we need? Who are we going to advertise this to? Is it going to be like a national-level advertisement or is it more grass roots where we give facilities a toolkit of materials that they can then use in whatever manner is best for their facility working with their PAO? It just kind of depends on the app's deployment preparation. So, that item really is more about sites.

So, what do sites need to have in place in order to take on the app? Some apps require a Vista component where certain Vista changes have to be made in order for the apps to function correctly. Also, many of our apps do require certain keys to be added to staff login, so that they can get into the application.

Then, outreach is really about getting out to the site. Even if an app is primarily Veteran focused, we really have a staff outreach component of that as well, so that staff are fully aware that this application is coming, what it does and what the Veteran can use that for, which may impact how staff and Veterans interact with each other. The outreach is more on the staff side both at the facility-level and even at the program-specialty-level too. That's a big component of what happens, and primarily, the bulk of the work that we do is just talking with people and making sure everybody understands what the goals are, and what the applications do.

The site readiness and implementation [phases] are really when things start to happen. There are components there that require site-specific things. So, some applications, like I mentioned, have a Vista component, but also there may be some applications that facilities need to decide what they want to enable in the app, or what they don't want their Veterans to be able to do. That's where that portion comes in. Lastly, training preparation and delivery. That's part of the site implementation readiness as well, but really then training the staff. That's mostly on the staff side of things. We don't really do any Veteran direct training but training the staff so that

they know what the app is, what's coming, and then they can then train other staff members or Veterans.

So, like I already mentioned, the strategy that we use is tailored in many different ways based on complexity of the app or apps; what is the impact of the application to existing workflows? Is this application really disruptive to the workflow or is it something that's maybe being mandated by another office in VA that will require staff to use it, and how much change does that require to the end user? That would require a much larger strategy than a simple app that maybe just is out there for Veterans as an information-only type app. Lastly, the target end users and stakeholders. So, who are we trying to get to, and what's the best way to get to them? All those things are examples of items that we consider when we're doing deployment planning.

All right, so moving on into the types of apps and audiences. Dr. Kathy Frisbee, who's head of VA mobile, has really outlined here the kind of, the types of, apps that they do, right? These aren't the app's names or anything, but these are kind of what our applications try to do. So, one of the biggest ones is support management of your own health or family members health. There are a lot of applications that you have, the self-scheduling, and we're getting ready to have an iOS app for our RX Refill for example. Also, there are a lot of apps that have some informational components too. There's one with lab work, and there's some information there on what that lab work means, so Veterans can understand that before they really talk to their provider.

The next part is really improving the communication for better integration of care. So, there are some applications that will be coming soon that have a component where patients can enter data. Then, that data goes back to their providers so that the provider has a chance to view that before they even come into their appointment. It will offer them a sense of what's been going on with a Veteran over time and free up that time in the clinic to talk about things that are really important. We also have some other ones, a lot of apps, that have some type of communication between either providers or schedulers and Veterans. So, really, that's where that communication fits in.

Then, the improved efficiency of care delivery. There's a lot of Telehealth work that we do as well, and you'll see some of those applications coming out. VA Video Connect is a big one that works with the Telehealth team to really provide a virtual medical room and allows patients to meet with their provider in video form, so that they don't have to have a clinic visit. Then, of course, the mobile health care team. Our office also does deployment of the tablets to different sites and things like that.

Okay. So, then moving on into deployment strategies and models. Like I mentioned earlier, each app is a little bit different. Some require a lot of work and some have more of an information-only purpose. We really devise kind of four general models or strategies that we use when we think of national deployment. So, what we termed Big Bang Light is really used for this version or URL updates. This is mostly used on Veteran-facing apps. There are some applications out there that Veterans can use to look at their own data or even just

informational ones that may get updated every now and then. We might work with our communications team to just put out a quick email that says, "Hey, this has been updated. You should go check it out." That's for those that are really, really simple and easy to understand - don't require a lot of high touch.

Alternatively, the Waves approach really is more of a phased manner. I mentioned the VA Online Scheduling application that rolled out last year happened in a very phased approach. We had various, I'll go through kind of what that example looks like in a minute, but we had to vary key stages that sites had to work through. We only had a few sites go live at a time to make sure if something did go wrong, it wouldn't impact a high amount of users. We could easily roll that back and get back to what the issue is. So, it really is more of a high touch when a lot of VA staff input is needed for VA staff to do something. A lot of our applications, a lot of the bigger ones, will use this approach. We have some coming out in the next few months that will really be a very phased manner because it's pretty time intensive.

So then, I mentioned earlier too, Focused and Targeted is really where maybe the app is only good for a specialty, right? Like, there's an application that was really intended to be used by physical therapists and rehab specialists that really is specific to their role. So, for that one we're really only going to go to them. There's some other apps that maybe require an iPad. So, we might just go out to those staff who have been given a VA-issued iPad, for example.

Then, the Big Bang Heavy is the last one there. It's, again, just a big push out to all end users at the same time, but it requires a little bit more upfront work. A lot of training needs to happen or other very in-depth communications efforts need to happen in order for end users to be able to understand it and get to use it. So, most apps fall into these four types of deployments. Some are maybe a little bit of both, a little bit of one or the other, but most of them fall into these categories here.

So, then this slide just kind of gives you a sense of overall, in general, what are some field test activities? You have kind of three different groups in a field test. You have government side, meaning who in the Office of Connected Care is really kind of running this, or who is providing the input from a clinical perspective from Connected Care and doing a lot of that work there. You have the Release and Implementation team, which is me and others on the team that I work on, and then you have our Development team. So, they are often involved not directly with staff in the field, but we definitely try to include them when there is an issue that comes up, for example. They're really the ones giving us the information we need to understand it technically.

The other piece, too, that I didn't mention here, is we do have a help desk, a mobile service desk, and they're really there to provide answers to those in the field that run into problems with the app. We will be utilizing them during field tests and then obviously national deployment once things are underway. Most technical questions will go to that service desk rather than go through maybe the folks that were heavily involved in implementation, so that our team can then focus either on the next version of the app or onto another application that's coming out.

Then, the same thing here for the next slide. National Deployment Activities, same kind of model. A lot of these activities, you see, will be the same. Like I mentioned earlier, the field test is really just a small version of what we envision for national deployment, so a lot of the same activities we do during field tests will happen at the national deployment level, it's just a larger scale.

You'll see these three listed here, and the other thing probably missing from this component here is really what the field or staff perspective from the VA facilities looks like. Depending on the app, like I mentioned, there is a big component there that field staff help us with in both evangelizing the app, letting others at their facility know that it's ready, or working with Veterans to know what's available to them. We're really doing a heavy push on that in the next few months about who can help us get this out there and get these applications known to whoever the end users are. Really just kind of be part of our team, so more to come on that one.

Then, as I mentioned before with these complex apps, we really have this phased approach. So, we have very specific stages that sites would have to go through, for example, and this is an example of one that we had done a year or so ago. This is with VA Online Scheduling, and what this did was we needed to determine that local team. Like I mentioned, we really need people on the ground at facilities, especially for these very complex apps, that can help us know who we need to contact for a certain either specialty or area, or if there's an IT problem at the local level, who is there that we need to work with? Then, the implementation planning is more in stage two, which is more about putting together the team at the facility, for example, and what they need to do. I mentioned some of the Vista components and other things there. And then, actually doing those.

So, once we've gone through what we need to do, now you're actually doing some of these, either local configurations or determining what your site wants to do with an application and getting all those things in place. Stage four is then really about the validation testing. So, testing at that facility, maybe with a staff Veteran or any other end users that would be involved and can log in. Does this app work at my facility? Especially for those applications that are very facility specific, that's a really important step.

Then throughout this stage, we really have been providing super user training and staff training as well. A lot of our deployment efforts will utilize this super user model where we've identified a group of folks who really will attend all the trainings, become experts on the app or a group of apps, and then they will really be the ones to educate other staff at their facility that may need to be involved. Of course, our team will be available, and we try to put everything up on either SharePoint site, usually it's SharePoint, but also the VA Mobile App Store has training materials as well that can be utilized on demand.

Lastly is Veteran training and outreach. So, a lot of that is really at the facility level. Once an app is available, we'll do some national -level communications as well. We really found that it works best when facilities kind of do some of that grass roots level of marketing – where they go out and tell their Veterans what's available and work it into whatever care they're receiving. We try

to outline that and work with sites on what that might look like up front, so some of the apps that are coming out might be a app that allows Veterans to air their blood pressure or other vital statistics in which a provider may want to capture over a period of time. Instead of having to call in with that information or go through any other cumbersome processes, these apps really allow Veterans to do that and have their provider see that information, so there can be some care decisions made without the Veteran having to actually go into a facility.

So, that's where that is. That was the end of my presentation. Conor or Cindy, do you guys have anything you want to add or anything I may have skipped over?

Cindy Wamsley: Kay, I don't have anything. Are there any specific questions potentially about field test activities related to the sites that participate or any of the other questions? I know questions are coming through the chat window as well.

Hannah Webster: Yeah, great. We still see some people typing, but a few questions have come through, and I know, Conor, you were answering some in the chat. For people who may not have been following along in the chat, we're going to go ahead and maybe cover some of those. We have one that says, "I'm developing an app that's part of a VA funded grant. I need some questions answered but don't always know who to call." She has a couple examples there, and I know, Conor, you said that there may be information we need to find and circle back, but I wanted to see, Kay or Cindy, if you had any additional information on that.

Alan Greilsamer: Hannah, this is Alan. If you have any questions related to what you need to do for your particular app, they're welcome to contact me, and I can put them in touch with the web and mobile team. There are various people there who have been through the process as project managers or helped business owners through the process. I'll put my email again in the chat window, so everybody has it.

Hannah Webster: Okay great, thanks Alan. We have one more that just came in from Nanette. If there is an app that is already developed and in use, can your office facilitate getting the app integrated for clinical use? For example, getting results into CPRS.

Cindy Wamsley: Yes, I'm not exactly sure what the ask is. So essentially, when you log into your CPRS account you can see the patient generated data? Like what the patients are entering into the applications or?

Hannah Webster: Sure, yes. Can you clarify in the chat please? And we'll wait for that, but we have one more here. It says, "Who are the folks who do the outreach at the field-level generally? The My HealtheVet coordinators or are they usually a separate role."

Kay Lawyer: So, the folks who do the outreach, and I'm assuming you mean Veteran outreach, are typically My HealtheVet coordinators. Depending on the app, though, we do a lot of telehealth work. So, there are some telehealth coordinators as well that do a lot of that, and then some of the applications really require that clinician. Using the clinician, really telling the

Veterans about it. It just kind of depends, but we have worked a lot with the My HealtheVet coordinators on various applications.

Hannah Webster: Okay, great. Thank you. A couple coming in. So, the next one, "For people in the field like physicians or nurses who would like to get involved, how would they go about that?"

Kay Lawyer: Yeah, that's a great question. You can certainly email myself. I can put my email in the chat. Alan, do we have a specific way yet for folks in the field to get involved or to get on a listserv or anything that you guys provide?

Alan Greilsamer: I mean, there are a couple ways. I mean, they're more than welcome to contact me or Kay. We have various newsletters that we send out. We also have outreach materials that we develop and have on our Connected Care SharePoint site. You're welcome to use those. We also have some clinical leads within the Office of Connected Care. Dr. Neil Evans, Dr. Jennifer McDonald, Dr. Dane Bent, who have all been very instrumental in getting wider adoption for our application. Again, I'm going to have to say email us, but if you want to email us, we're more than happy to hook you up with some of our clinical needs to get more information or to hook you up with the various business owners who are associated with that.

Hannah Webster: Great. Thanks so much, Alan. So, the next question, "How will researchers have access to data on adoption and use of these mobile applications?" And then she asks specifically about, "Where will the mobile transactions for RX Refill be stored so that researchers can merge them with requests initiated through My HealtheVet?" I don't know if that's a question for you all, or something we need to circle back on.

Alan Greilsamer: We'll have to get more information on that one from Dr. Spahn.

Hannah Webster: Sure, great. Thanks Allen.

Kay Lawyer: Then, we'll probably also, Hannah, have to get some more information for Nanette there. I don't think we've ever heard of that application, or at least I haven't, so I'm not sure exactly the answer for your question yet.

Hannah Webster: Thanks Kay, we'll circle back on that.

Kay Lawyer: Okay, great.

Hannah Webster: Then we have one more here: "How can we help initiate development of new apps, especially for clinical research purposes?"

Alan Greilsamer: You know, I mean, a big part of this whole development process is VA staff, especially clinical staff, coming up with innovations to help in the mobile area. Again, I'm happy to field those requests and get them into the right hands. There is not a real formal intake process of "I have a great idea and here's what we do." We sort of take these on a case-by-case

basis. In the past, there was the employee innovation competition, where you could do some of this. There is the VA innovators network, where some apps have come through, but again, if you want to email me, I'm more than happy to send you to the folks in web and mobile and make some connections there.

The other point that I wanted to make; I know there was some discussion in the chat window earlier. You know, we've been doing this for a couple years now, and we know that our adoption rates need to be higher. We had a pretty significant event happen on November 7 of the past year when the VA Online Scheduling tool became integrated with My HealtheVet. As one of the participants noted, the numbers went up considerably. I think we went from about 1,700 scheduling actions a month to about 1,700 a week.

There are plans in the works to keep that going, to continue to better integrate our apps with My HealtheVet, and to make the apps available through not only DS logon credentials, but also My HealtheVet credentials. We are aware that there are 2.5 million registered My HealtheVet users with DS logon credentials who are very active in their health care. Our plan moving forward is to continue to join mobile and My HealtheVet and continue to push that. It's been successful in the short time it's been happening, and our leadership all the way up to the Secretary wants that to continue very aggressively.

Hannah Webster: Great, thank you Alan. Okay, so I still see a couple people typing. We'll give them just another minute, and if we don't get to your question, I know we're going to circle back. Alright, I see some conversation in the chat, which is great. Oh, here's one, "What is the typical timeline through the stages on the screen as an app goes from idea to national deployment?"

Kay Lawyer: Yeah, so let me get back to that slide here really quick. It just kind of depends on how complex the app is. A lot of applications use other services that are within VA, so it's dependent on other teams outside of Connected Care. So, it just kind of depends. Typical timeline? I don't know if there is a typical timeline. I don't know. Cindy, do you know if we have any data on this; on what the general timeline has been? But in the summer, it's a very rapid pace.

Cindy Wamsley: Yeah, I think we just go back to it. There really isn't a typical timeline, because it really depends on the integration points of the application. So, if the application has multiple, like it's talking to Vista imaging and Vista, that's a much more complicated app than say an education-only app. Some of those education-only apps go out very quickly, whereas some of the more complex apps take much longer. I don't know if I can give you kind of a one size fits all, unfortunately.

Alan: I think from what I've, and sorry to jump in here, Cindy, but from what I've seen; if we have an education or an informational app, it takes about a year from start to finish, from concept to reality. With some of these, especially some pretty complex ones like VA Online Scheduling, it's a continuous work in progress. It could take easily 18 months to get the first iteration going, but we continue to make enhancements and expand VA Online Scheduling, so

that now it's well into two and a half years of continuous development. I think that that's where we're going with this. The initial launch may happen in a short period of time, 12-15 months, but these applications, really to be successful, have to continue to grow and expand. That's what we're finding with our sort of premier app right now, VA Online Scheduling.

Cindy Wamsley: Thanks. I wanted to just jump in really quick. I know there's been a lot of mention of patient generated data and making that available to the clinicians. I know that the PGD workflow is in the works. It is complicated. There's some policy going through the VA IQ right now, and I know My HealtheVet is doing some work as well to get these apps, so the clinicians can see any data that's entered by the patient. That's one of those more complex things not only from a policy perspective, but just from a technical perspective. I think we have heard that feedback from the field and it is being worked.

Hannah Webster: Okay great, thank you all. So, in the interest of everyone's time, we can go ahead and wrap up. Any last-minute thoughts from you all? Kay, Cindy, Conor?

Cindy Wamsley: I don't have anything; thanks everybody for attending.

Hannah Webster: Yes, thank you all for participating in today's webinar. Cindy and Conor and Kay, thank you all for the great information about mobile app deployments. To all attendees, let me get down to the survey screen. On the screen you'll see a link to our Survey Monkey, so you can tell us how we're doing, and if there are any other topics you would like us to cover in the future on these webinars. Thank you all so much for attending.

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