Moderator: Welcome to the VA HSR&D Investigator Insights podcast series. In this episode Rob Auffrey of the HSR&D Center for Information, Dissemination and Education Resources talks with Investigator Jacqueline Ferguson of the HSR&D Center for Innovation to Implementation about her work assessing pattern variation by chronic condition among Veterans receiving primary care via telehealth.

Rob Auffrey: Why don't we start with you just introducing yourself and telling us what you're doing here this week.

Jacqueline Ferguson: Sure. I'm Jacqueline Ferguson. I am an epidemiologist by training and I work in the Center for Innovation to Implementation over at the VA Palo Alto. And I focus mainly on working on some QUERI research looking at virtual care.

Rob Auffrey: Okay. And my understanding is that you are making a presentation or at least one presentation during the meeting. What exactly is that on? What's the research behind that?

Jacqueline Ferguson: Sure. This is a project I'm actually really excited about because as we've seen through the pandemic, we've had a very big shift in how folks are getting care at VA; a big shift away from in-person care and to virtual modalities such as video and over the phone. And while this was really successful throughout the pandemic in addressing this really acute need to keep COVID from spreading, now we're, kind of, in this transitory period out of the pandemic, and we're not sure how much more virtual care we should be providing.

 We know that there is some bandwidth that's good, but we know that maybe 100 percent virtual care isn't perfect, but neither is 100 percent in-person care. The optimal balance is somewhere right in the middle, and that's what this project is seeking to try to begin to understand.

 What we've done is we've looked at 40 of the most common chronic conditions that are managed among Veterans in VA. And we've looked at nationwide, what proportion of those encounters are offered via video? How many asthma encounters are offered via video versus COPD or migraines?

 And we found some really interesting findings, which I hope can be really hypothesis generating and make more research for other Veterans and other researchers. For example, we see migraines have a really high proportion of virtual care whereas other chronic conditions such as ischemic heart disease have really low. And trying to understand the natural variation, and what conditions are treated virtually, and how much is that dependent on who is accessing care, and how providers are providing it is, kind of, what this work is, kind of, trying to tease out. It's trying to start at the very beginning and understand what type of care is offered via video.

Rob Auffrey: It's not necessarily the disease or the provider or the patient. It's a combination of the three or that's what you're trying to tease out?

Jacqueline Ferguson: Absolutely. We've done a lot of research in the last year looking at patient characteristics that are associated with higher rates of video care. Things like younger patients, more diverse folks in more urban areas where the broadband access is quite good. We've also seen that certain facilities have higher rates of video care such as the San Francisco VA. But VAs in rural areas might not have as high rates of virtual care.

 We know that patient wise it matters. Provider wise, it matters. And facility wise, it matters. And this work is really trying to understand what about what you're actually managing in the appointment? How much does that matter?

Rob Auffrey: My first instinct is that the most important part is the symptoms, the disease that you're treating. But you're telling me that the variables really are not the disease. It's more the patient, the facility, and the provider.

Jacqueline Ferguson: Yes. We're still working out what the relative proportion is amongst each of those really important factors. But we're seeing things like once you adjust for patient characteristics, and facility characteristics, we're still seeing that, for example, asthma has higher rates of video care than COPD.

 And that's kind of interesting because they're both managed chronically through a lot of medication management. You don't really have too many laboratory tests minus a year, every year, a pulmonary function test or something of the like, but we're seeing very different rates in how those conditions are managed.

 And is that something we can leverage? Is there something about COPD that should be more virtual or not? And it's identifying those differences and then providing that information to the people treating those conditions so that they can make the most informed decision about how to manage Veteran care that we're trying to figure out here.

Rob Auffrey: This may be difficult, but what's your sense? What do you think would be ideal? Are you even there yet?

Jacqueline Ferguson: Gosh. I know from my own perspective, like, what kind of care I would like based off of the chronic conditions I have. I have chronic migraines and I really like video care because most of the interactions I have with providers are medication refills. Or, hey, this pill isn't working, can I try a different one? But there are some appointments where you really need to go in-person. You don't really know what's happening. You want that face-to-face conversation.

 I think it's about balancing it for each Veteran's preference for what kind of care, and how they want to interact with the healthcare system. If they want to do everything virtually, that should be allowed, and that should be promoted. If they want to do everything in-person, that should also be allowed. I think the goal of this work is to identify places where we can ultimately give the Veteran the best care in the way they want to receive it.

Rob Auffrey: Okay. Let's just\_\_\_\_\_ [00:06:13] a little bit.

Jacqueline Ferguson: Sure.

Rob Auffrey: Why VA?

Jacqueline Ferguson: I kind of stumbled into VA through a postdoctoral fellowship between the Big Data Scientists Technology Enhancement Program. It's a mouthful. We call it BD-STEP and Stanford [PH]. Both of my stepmom and my mom are military Veterans, the Army and the Marines. And I've seen a lot of VAs. We've lived in Hawaii, Atlanta, Fort Myers, Florida, and Morgantown, West Virginia. And my mom's experience at those VAs have been so dramatic. Some of them are really good. Some of them had really, really bad waitlists, not-so-good interactions with providers or the facilities weren't so good.

 When I started this fellowship program I was in it to gain, kind of, the skillset of healthcare data and big data. But what I found was it was really rewarding to look at, and try to identify the differences between different Vas, and how they're operating on a nationwide scale in order to, kind of, improve the care overall.

 I kind of stumbled into it through a fellowship program, but really ended up sticking with it because it's really satisfying work. I actually feel like I'm making a difference. The work that I do gets communicated to operational partners . And they actually do something with it as opposed to sitting in my dissertation on my bookshelf that no one really reads.

Rob Auffrey: Right.

Jacqueline Ferguson: That's kind of why I VA.

Rob Auffrey: Have you worked with Veterans directly in this work?

Jacqueline Ferguson: No, not too much. I'm an epidemiologist. I tend to work on the back end looking at nationwide encounters. I work with 18 million data points representing five or six million different Veterans. We've looked at ways to engage with Veterans more directly about their experience with video care. Some of my colleagues and work that I'm involved on have done surveys asking Veterans directly, what are your barriers to video care? But on a day-to-day basis most of my stuff is on the back end working with the large data patterns.

Rob Auffrey: You mentioned these providers. Have you had much interaction with them?

Jacqueline Ferguson: I have. I have called a lot of providers. I have called several folks and been, like, "Hey, you're a COPD provider at VA. Why don't you do more video care?" And the answer is usually, "We don't have to or we haven't seen the need to. Our people want to come in." I've had one-on-one conversations with a number of providers at VA asking just general questions, trying to understand their motivations for providing video care or providing in-person care. Because that 'kind of information doesn't show up in the data. We only see what gets coded. We don't know why it got coded that way.

Rob Auffrey: Interesting. Is there anything else that we haven't discussed that you think is important?

Jacqueline Ferguson: Maybe how exciting this space is right now.

Rob Auffrey: Okay.

Jacqueline Ferguson: Yes. I think a lot of people have the idea that the VA is a very slow-moving, maybe\_\_\_\_\_ [00:09:40] system. And that was kind of my perception before I, kind of, got involved. But I work with some really exciting, highly motivated people. And there's been a lot of opportunities to further this research in ways that were not possible a few years ago.

 And I would just encourage, particularly because I just came out of a postdoc a couple of years ago, folks to get more involved in governmental research. Because it's surprisingly fast-paced. And the ability to make an impact comes with a really high level of job satisfaction, red tape and bureaucracy of the VA aside.

Rob Auffrey: What are these new methods that make things better or easier?

Jacqueline Ferguson: Well, the pandemic changed a lot. The pandemic shifted, I think, not only how providers interact with patients, but also the work expectations in VA. There's a lot more flexibility in how you do your job remotely. I live in the Bay Area, the capital of traffic, right? And I now get to work remotely.

 And if I'm having a hard-thinking day, I can go take a walk, clear my head, come back to my work. The infrastructure has really improved. It used to take 30 minutes to get online to route into all of the VA research servers. And with the transition to remote work, it now takes less than five to get all the way in. It just made our jobs a lot easier, and everything just, kind of, moves a lot smoother.

 There are a lot of bad things that happened with the pandemic. But in terms of being able to move research forward, and I think focus on really dynamic, important issues for Veterans, the VA has really succeeded.

Rob Auffrey: Thank you.

Jacqueline Ferguson: Thanks.

Moderator: The views and opinions expressed in the preceding podcast are concerned with the scope of recently concluded or ongoing VA HSR&D funded research and do not necessarily reflect current or to be implemented VA policy. To learn more about this research, visit the VA HSR&D website at www dot hsrd dot research dot VA dot gov.

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