

MILITARY CONSTRUCTION, VETERANS AFFAIRS, AND RELATED AGENCIES APPROPRIATIONS FOR FISCAL YEAR 2018

THURSDAY, MAY 4, 2017

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:32 a.m. in room SD-124, Dirksen Senate Office Building, Hon. Jerry Moran (chairman) presiding.

Present: Senators Moran, Hoeven, Capito, Cochran, Schatz, Tester, Udall, and Baldwin.

VETERANS HEALTH ADMINISTRATION

STATEMENT OF DR. KEVIN GALPIN, MD, EXECUTIVE DIRECTOR, TELEHEALTH SERVICES

OPENING STATEMENT OF SENATOR JERRY MORAN

Senator MORAN. Good morning, everyone. Thank you for joining us. Welcome to our fourth subcommittee hearing which I now gavel to order. Thank you all for being here to discuss the benefits of telehealth at the Department of Veterans Affairs on behalf of veterans across the country.

I will have my formal statement submitted for the record and reduce my remarks to just off the cuff. This is an important hearing. In my world, it has a lot to do with access. I represent a very rural state. But I would also admit that I almost never hear anything from veterans or the VA about telehealth in Kansas. I know historically and in conversations that I have had over a long period of time that telehealth at the VA gets high marks. It is considered one of the best programs in the country, but I have to admit that in my experience in dealing with veterans on almost a daily basis every day this is not a methodology by which I have seen veterans come to me and say, "This works so well for me." So I am very anxious to hear the story and see it demonstrated as something of great value.

This hearing in significant part is occurring because of the encouragement and suggestion of the senator from Hawaii. And I appreciate very much his suggestion that we do this and I look forward to working with him in making certain that the outcome of this hearing is something that is beneficial to veterans in Hawaii and Kansas and Montana and West Virginia and across the country.

But I have a great opportunity to learn how telehealth is making a difference in the lives of the people I represent in Kansas and the care and concern that we all have for veterans across the country. So this is a—I come here with fewer preconceived ideas than I do when we talk about some other topics within the VA, so looking forward to the conversation and the dialog.

I wanted to correct something I said last week. I was bragging about—in our hearing about suicide prevention, I was bragging about the vet center and their mobile van and my impression now is that it is not being used and it is sitting in a parking lot. So for those of you in Kansas who are listening to the vet center mobile van, my statements from last week, the last hearing, were more real than what they turned out to be.

[The statement follows:]

PREPARED STATEMENT OF SENATOR JERRY MORAN

Welcome to our fourth subcommittee hearing of 2017. The Subcommittee will come to order. Good morning. Thank you all for being here today to discuss the benefits of telehealth for the Department of Veterans Affairs.

Telehealth at VA is a good news story. The Department is a leader in the field of telehealth, and telemedicine has influenced the private sector in positive ways over the past 20 years. We traditionally think of telehealth as a medical provider and patient service, but I am encouraged VA is using this platform to reduce the burden on veterans who drive 300 miles across Kansas, or fly to Oahu, to access VA services beyond healthcare.

Since 2011, the VA “TeleBenefits” program has connected veterans virtually with a claim specialist to assist with questions and submit claims with supporting documents. For about 6 months, TeleBenefits has been serving veterans who visit the Community Based Outpatient Clinic in Parsons, Kansas, which is the first site to offer TeleBenefits in our state. The VA outreach coordinator, Ms. Tara Cisneros, told the Parsons Sun, “Anything we can do to reach our rural veterans, that’s what I’m aiming for. I just want them to know this service is here.”

This subcommittee is committed to being a voice for veterans and those who serve them, and I share the same goals as Ms. Cisneros.

What our witnesses have to share today should be exciting and interesting. Yet, like most things related to technology, new ideas and platforms are created every day, and the Department should certainly be striving to be even more innovative, more expansive, more connected. I recently learned VA just awarded a \$258 million VA Home Telehealth contract in February to improve veteran access to quality, remote healthcare. This is new information, and I look forward to learning more about how VA intends to use this contract to improve access to care.

Our witnesses from the private sector have stories they will share today about how telehealth has saved significant money and time for healthcare facilities and patients, and how lives have improved because of direct in-home access providers have to patients through remote devices. Their findings could be extrapolated across the country with potentially great cost savings and cost avoidance.

Telehealth creates a bridge between our rural and urban centers—providers at an urban site can now diagnose and provide a care plan for veterans hundreds of miles away. VA is able to expand the resources of one facility by connecting those providers to providers in another area—regardless of location. Through telehealth, the Department has the means and flexibility to provide care to veterans who do not have easy access to a VA hospital or access to a VA hospital staffed with the care they need. I look forward today to hearing VA’s plan to increase such care in the places that need it most, and I want to hear from those in and outside of the Department about ways we, Congress, can support and further expand the use of this life-changing, and in some cases, life-saving care.

Our panel today has traveled great distances to be with us to discuss this important topic. Thank you all for being here.

Senator MORAN. With that, I would recognize the Senator from Hawaii.

STATEMENT OF SENATOR BRIAN SCHATZ

Senator SCHATZ. Thank you, Mr. Chairman, and thank you so much for holding this hearing on a topic very important to all of us. I see the chairman of the whole committee here. We are very honored to have you and a good compliment of members at the dais.

Telemedicine has the potential to revolutionize the quality, convenience, and cost effectiveness of healthcare in this country in general and for veterans in particular and the VA and DoD have been real leaders in this.

I want to welcome our panel of witnesses with a special aloha to our witnesses who have traveled from my home state of Hawaii to participate in this hearing, Ms. Thandiwe Nelson-Brooks, Facility Telehealth Coordinator for the VA Pacific Islands Health Care System, and Dr. Norman Okamura, PhD, from the Pacific Basin Telehealth Resource Counsel and the University of Hawaii in Honolulu.

Hawaii and the U.S. affiliated islands in the Pacific have unique challenges in providing healthcare to veterans in remote areas and there is great potential in leveraging telehealth to reach these veterans. I look forward to hearing from our regional experts on their recommendations for employing telemedicine and remote patient monitoring to enhance the delivery of healthcare to remote areas.

It is worth noting that the VA introduced telehealth programs in the 90s and has been pioneering in the use of telehealth in the United States. The results are very encouraging. A VHA analysis of home telehealth services in 2013 showed a 35 percent drop in hospital admissions, an annual cost reduction of \$2,000 per patient, and a patient satisfaction rate of approximately 90 percent. Impressive results, but in terms of technological advancement, 2013 is a generation ago. I have no doubt that both current and projected advances in telehealth technology will reflect even greater savings.

Given VA's success in this space, it is important that other Federal health programs increase implementation of these programs, and that is why I and many others on both sides of the aisle, including Chairman Cochran, Senators Wicker, Cardin, Thune, and Warner introduced the Connect for Health Act of 2017.

The bill would eliminate many of the archaic restrictions on the ability of Medicare to reimburse for telehealth and remote patient monitoring. The goal would be to translate achievements similar to what the VA has been able to achieve over the last 20 years to Medicare so that our seniors can get similarly high quality care with potential cost savings for the Federal Government.

While I am encouraged by the advances that VA has already made in deploying telehealth in the field, I think we have barely scratched the surface, and that is what this hearing is all about. So I look forward to the testimony and the conversation.

Senator MORAN. Senator Schatz, thank you. Thank you for your leadership on this subcommittee and for your leadership particularly on this topic.

Let me recognize the distinguished gentleman from Mississippi, the chairman of the full committee, Senator Cochran.

STATEMENT OF SENATOR THAD COCHRAN

Senator COCHRAN. Mr. Chairman, thank you. I am pleased to join you this morning with the committee and the witnesses.

We thank you for cooperating and being here to help us understand the practical consequences of adopting legislation on this topic and we look forward to your testimony today. Thank you.

[The statement follows:]

PREPARED STATEMENT OF SENATOR THAD COCHRAN

Mr. Chairman, I am pleased to join you at this hearing. I look forward to hearing from all the witnesses today, especially Michael Adcock from the University of Mississippi Medical Center in Jackson. Mississippi has been recognized as a national leader in telehealth. The University of Mississippi Medical Center's telehealth program provides access to healthcare in underserved areas of the state. We believe that Mississippi's telehealth successes could be expanded across the country to improve health outcomes and reduce healthcare costs.

I'd also like to thank Senator Schatz for his leadership on telehealth issues in the Senate. I enjoyed working with him to reintroduce the Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act yesterday.

Again, Mr. Chairman, I join you in welcoming our distinguished panelists to our hearing today. I look forward to hearing the responses to questions of members of this subcommittee.

Senator MORAN. Mr. Chairman, thank you very much.

Let me introduce the panel. Our panel has traveled a long distance. Most of us wish we were going the other direction. We are glad to have you come our way, but thank you very much for being here.

Our panel consists of the following: Dr. Kevin Galpin, MD, as the Executive Director for Telehealth Services at the Veterans Health Administration at the Department of Veterans Affairs, and he is accompanied by Mr. Bill James. Mr. James is the Deputy Assistant Secretary in the Office of Enterprise Program Management in the Office of Information and Technology at the Department of Veterans Affairs. And Ms. Thandiwe Nelson-Brooks, the Facility Telehealth Coordinator for VA Pacific Islands Health Care System. She is responsible for the overall coordination, management, and evaluation of all telehealth services throughout the Pacific Islands Health Care System.

Mr. Michael Adcock is the Executive Director at the Center for Telehealth at the University of Mississippi Medical Center where he oversees the strategy and expansion of virtual medical care in communities across the region. And I was indicating that we would like to go west to Hawaii, but we are also happy to go south to Mississippi. And Dr. Okamura is the Principal Investigator at the Pacific Basin Telehealth Resources Center which is responsible for servicing the State of Hawaii, American Samoa, Guam, and the Northern Mariana Islands and other Pacific Islands that have a compact of association with the United States.

Welcome to all of you and I now recognize Dr. Galpin.

SUMMARY STATEMENT OF DR. KEVIN GALPIN

Dr. GALPIN. Great. Good morning, Chairman Cochran, Chairman Moran, Ranking Member Schatz, and distinguished members of the subcommittee. Thank you for the opportunity to discuss the De-

partment of Veteran Affairs and our efforts to expand the services VA provides to veterans through telehealth.

I am joined today by Bill James, Deputy Assistant Secretary for the Enterprise Program Management Office in the Office of Information Technology, and Thandiwe Nelson-Brooks, Facility Telehealth Coordinator from the VA Pacific Islands Health Care System.

VA telehealth is a modern veteran and family-centered health care delivery model that leverages information and telecommunications technologies to connect veterans with their providers irrespective of the location of the provider or the veteran. VA telehealth provides veterans enhanced access to care and clinical expertise across geographic distances that would otherwise separate some veterans, including those in rural areas, from the providers best able to serve them.

VA's telehealth portfolio allows for enhanced clinical care delivery in over 50 clinical specialties. Services are delivered primarily through one of VA's three broad categories of telehealth. The first, clinical video telehealth, is the use of real-time interactive video conferencing, with or without virtual examination tools like a digital stethoscope or an otoscope, to assess, treat, and provide care to veterans remotely.

In its most basic form, clinical video telehealth is video conferencing between a provider and veteran. To the veteran, this means that instead of dealing with the inconvenience of traveling long distances to see a provider, service from the VA provider comes to them at their preferred location, such as a community-based outpatient clinic and into the home.

The second broad category of telehealth is home telehealth. This is a technology-enabled remote monitoring program where clinical data and information is collected through a VA provided home-based device or through the patient's own mobile device or home computer. Using one of these technologies, the VA provider can monitor the veteran's health status, provide clinical advice, and facilitate patient self-management as an adjunct to the veteran's traditional in-person healthcare. This service can help veterans continue to live independently, reduce hospitalizations, and spend less time and money for medical visits.

The third category of telehealth is store-and-forward telehealth, which is the use of technologies to asynchronously acquire and store clinical information such as a picture, a sound, or video that is then assessed by a provider at another location at another time for clinical evaluation. VA's national store-and-forward program delivers such services as dermatology and retinal screening where a photo or series of photos of skin findings or retinal findings can be captured from the veteran at one location, transmitted electronically, and soon thereafter interpreted for diagnosis or triage by dermatologists, optometrists, or ophthalmologists at a different location.

Telehealth is mission critical to the future of VA health care. Its potential to expand access and augment services is both vast and compelling. While telehealth is capable of enhancing the VA health care system in many ways, I would like to highlight how it helps

in three critical areas which are particularly critical for the successful operation of a national integrated VA enterprise.

First, telehealth enhances the capacity for the VA to provide clinical services for veterans in rural and underserved areas. This is accomplished by empowering VA to hire providers in major metropolitan areas where there is a relative abundance of clinical services for the purpose of serving veterans in rural communities that lack sufficient medical resources.

Second, telehealth increases the accessibility of VA care. It brings VA clinical services to the locations that are most convenient for veterans, including those veterans with mobility or other health challenges that make any type of travel difficult. Through telehealth, veterans are able to receive care in their community-based clinics and even at home.

Third, telehealth increases the quality of care. It enables VA to model its services so national experts that deal in rare and complex conditions can effectively care for veterans with those conditions regardless of the veteran's proximity to the provider.

VA is committed to increasing access to care for veterans and has placed special emphasis on those in rural and underserved communities. This requires transitioning from a health care delivery model that has been in place for decades with a dependence on in-person care delivery to a system that leverages modern technology to provide veterans, their families, and their caregivers virtual access to VA teams when clinically appropriate. But to make this transition, the VA must operate in an environment that supports the type of advanced healthcare and services that these technologies enable us to provide.

This is where we need the help of Congress and a unified Government that is fully aligned in working to fulfill our commitment to veterans. As a first step and very simply, we need clearly legislative authority from Congress authorizing our VA providers to care for a veteran irrespective of the location of the provider or the veteran, especially when that is across State lines or in the veteran's home. This authority will remove barriers that currently exist between a national VA clinical expert and a veteran that needs their service.

It will allow us to leverage telehealth to enhance the capacity of services, particularly in rural areas. It will help us create flexible and unique employment opportunities for providers enabling us to recruit and retain the best providers for VA service. It will also allow us to be more efficient, decreasing beneficiary travel expenses and our reliance on new capital assets when needing to expand clinical services.

I will conclude by saying that delivering care via telehealth is not aspirational for VA. VA is already recognized as a leader in this area. Last fiscal year alone, almost 12 percent of our enrolled veterans received an element of their care through telehealth. That number represents over 702,000 veterans served in over 2.17 million telehealth episodes of care, but we need and want to do more. And with the support of Congress, we have the opportunity right now to shape the future of our VA health care system, increasing the capacity, accessibility, and quality of our care for the benefit of veterans so that those veterans who turn to the VA for their health

care services will know they will get the care they need from the provider they need no matter where they are in the nation.

Mr. Chairman, that concludes my testimony. We do appreciate your support and look forward to responding to any questions you may have.

[The statement follows:]

PREPARED STATEMENT OF DR. KEVIN GALPIN

Good morning Chairman Moran, Ranking Member Schatz, and distinguished members of the Subcommittee. Thank you for the opportunity to discuss the Department of Veterans Affairs' (VA) efforts to expand the services VA provides to Veterans through telehealth. I am joined today by Bill James, Deputy Assistant Secretary for the Enterprise Program Management Office in the Office of Information Technology, and Tandi Nelson-Brooks, Facility Telehealth Coordinator, Pacific Islands Health Care System.

INTRODUCTION

VA Telehealth is a modern, Veteran- and family-centered healthcare delivery model. It leverages information and telecommunication technologies to connect Veterans with their clinicians and allied or ancillary healthcare professionals, irrespective of the location of the provider or Veteran. It bridges enhanced access and expertise across the geographic distance that would otherwise separate some Veterans, including those in rural areas, from the providers best able to serve them.

Telehealth is mission-critical to the future of VA care. Its potential to expand access and augment services is both vast and compelling. While telehealth is capable of enhancing the healthcare system in multiple ways, three are specifically essential for the successful operation of our national, integrated VA enterprise.

First, telehealth enhances the capacity of VA clinical services for Veterans in rural and underserved areas. This is accomplished by empowering VA to hire providers in major metropolitan areas, where there is a relative abundance of clinical services, for the purposes of serving Veterans in rural and even frontier communities where medical services may be insufficiently available.

Second, telehealth increases the accessibility of VA care. It brings VA provider services to locations most convenient for Veterans, including for those Veterans with mobility or other health challenges that make travel difficult. Through telehealth, Veterans are able to receive care in their community-based clinic and at home.

Third, telehealth increases quality of care. It enables VA to model its services so that national experts in rare or complex conditions can effectively care for Veterans with those conditions, regardless of the Veterans' location in the country.

VA is committed to increasing access to care for Veterans and has placed special emphasis on those in rural and remote locations. This means transitioning from older systems and a healthcare delivery model that has been in place for decades to a system that works for Veterans and is focused on contemporary practices in access.

VA is empowering Veterans and their caregivers to be in control of their care and make interactions with the healthcare system a simple and exceptional experience.

VA is recognized as a world leader in the development and use of telehealth technology to ensure excellence in care delivery, and VA aspires to elevate and expand this impact in the coming years. In fiscal year 2016, of the more than 5.8 million Veterans who used VA care, approximately 12 percent received an element of their care through telehealth. This represented more than 702,000 Veterans, with 45 percent of those Veterans served living in rural areas. In total, this amounted to over 2.17 million telehealth episodes of care.

BRIEF DESCRIPTION OF TELEHEALTH SERVICES

VA leverages three broad categories of telehealth to deliver services to Veterans in over 50 clinical specialties. The first, Clinical Video Telehealth, is defined as the use of real-time interactive video conferencing, with or without virtual examination tools (e.g., digital stethoscopes), to assess, treat, and provide care to Veterans remotely. Clinical Video Telehealth allows clinicians to engage Veterans via video at another medical center, a remote clinic, or in the comfort and convenience of the Veteran's home. It facilitates delivery of a variety of clinical services including primary care, mental healthcare, specialty care, and pre- and post-surgical care. To the Veteran, it means that instead of having the inconvenience of traveling by road, rail, or air to see a provider, service from their VA provider comes to them. Last fiscal

year, more than 307,000 Veterans accessed VA care through over 837,000 Clinical Video Telehealth encounters.

At present, 93 percent of VA's Clinical Video Telehealth occurs between VA facilities. VA Video Connect (VVC) represents the next step for Clinical Video Telehealth and is currently undergoing field testing. VVC provides fast, easy, encrypted, real-time access to VA care and can be used to connect VA providers to a Veteran's personal mobile device, smartphone, tablet, or computer. It allows for video healthcare visits, such as telemental health visits, where a hands-on physical examination is not required. It also makes it easier to provide services into a Veteran's home, literally putting access to VA healthcare in the Veteran's pocket. As a recent example, a 70 year-old Veteran was seen by VA Video Connect at home following hospitalization for a stroke that resulted in difficulty walking and compounded his challenges with transportation. VA Video Connect enabled a VA provider to promptly and remotely assess his functional status, his in-home mobility, and to help modify his fall risk from rug or chair placement.

The second broad category of telehealth is Home Telehealth. This is a technology-enabled monitoring program that allows a VA staff member to follow a Veteran's care and health status on a daily basis through a VA-provided home-based device or service. Clinical data and information is collected securely via landline, cellular telephone network, or through the patient's own mobile device or home computer.

Using Home Telehealth technologies, the VA provider can monitor the Veteran's health status, provide clinical advice, and facilitate patient self-management as an adjunct to the Veteran's traditional in-person healthcare. The goal of VA's Home Telehealth program is to improve clinical outcomes and access to care while reducing complications, hospitalizations, and clinic or emergency room visits for Veterans who are at high risk due to a chronic disease, such as diabetes. This service can help Veterans continue to live independently and spend less time at medical visits. For example, a Veteran with hypertension might transmit his blood pressure values daily from home, and if they are elevated, a VA Home Telehealth nurse would be able to notify the VA Primary Care team, arrange for a change in medication dosage, and then continue home blood pressure monitoring until the goal blood pressure was reached—leading to more prompt care and better long-term outcomes for the enrolled Veteran.

Over 87,000 Veterans are using Home Telehealth services. VA has found that Veterans easily learn how to use their Home Telehealth devices and are highly satisfied with the service, reporting an 88 percent satisfaction rating in fiscal year 2016. Home Telehealth services also make it possible for Veterans to become more actively involved in their medical care and more knowledgeable about their conditions, providing them the knowledge and skills needed to more effectively self-manage their own healthcare needs.

The third category of telehealth is Store-and-Forward Telehealth, which is the use of technologies to asynchronously acquire and store clinical information (such as data, image, sound, and video) that is then assessed by a provider at another location, at another time, for clinical evaluation. VA's national Store-and-Forward Telehealth programs deliver such services as dermatology and retinal screening, where a photo or series of photos can be effectively used for diagnosis or triage. Last fiscal year, over 304,000 Veterans accessed VA care through more than 314,000 Store-and-Forward Telehealth encounters.

EXAMPLES OF TELEHEALTH USE

Mental Health

VA uses information technology and telecommunication modalities to augment care provided by its mental health clinicians to Veterans throughout the United States. VA has found telemental healthcare to be equally, if not more, effective than in-person appointments. From 2002 through 2016, more than 2.2 million telemental health visits have been provided to over 405,000 unique Veterans.

Telemental health increases the accessibility of VA mental healthcare by bringing critical healthcare services closer to the Veteran. It also increases the capacity of VA to provide needed mental healthcare services in rural and remote areas by moving service supply from urban areas to rural and other underserved communities where there is system demand. In 2016 and 2017, in order to increase the capacity of VA mental healthcare in rural communities, VA initiated work on 10 telemental health clinic resource hubs.

VA Telemental Health also serves to bring highly specialized mental healthcare to patients who otherwise would have to travel great distances to receive such care. VA's National Telemental Health Center (NTMHC) provides Veterans throughout the country with access to the highest level of clinical experts using telemedicine.

The NTMHC national experts (in affective, psychotic, anxiety, and substance use disorders) are currently located at the VA Boston Healthcare System, VA Connecticut Healthcare System, Philadelphia VA Medical Center (VAMC), and the Providence VAMC. The NTMHC has provided access and national expert consultation to over 5,000 Veterans for more than 18,500 encounters at over 120 sites throughout the Nation since its inception in 2010.

Primary Care

As part of its core access enhancement strategy, VA also initiated work on eight TelePrimary Care resource hubs in 2016 and 2017. Similar to the telemental health resource hubs, these centers leverage the provider recruitment capabilities in metropolitan areas to provide Veterans with core clinical services in areas where these providers and services are scarce.

VA TelePrimary Care leverages telehealth digital examination equipment along with staff at the Veteran's location to facilitate a remote physical examination. This service is part of a hybrid model in that providers still travel to designated facilities at regular intervals to offer in-person visits to the Veterans when needed. Further, the TelePrimary Care model is multidisciplinary, involving social workers, pharmacists, and mental health providers in addition to the primary care provider.

Rehabilitation

Rehabilitation providers leverage video conferencing to increase access to specialty rehabilitation care. From the beginning of the fiscal year through mid-April 2017, close to 33,000 clinical episodes of care occurred using this modality, providing care to over 21,000 unique Veterans. Numerous specialty rehabilitation clinics are offered through telehealth, including clinics focused on amputation care, blind rehabilitation, physical therapy, speech therapy, and traumatic brain injury. Veterans with disabilities, especially in rural areas, benefit greatly from telerehabilitation. Many of these Veterans experience challenges that affect their ability to travel to receive needed care. Telerehabilitation increases access to specialty rehabilitation therapies, which assists in increasing functional gains and social reintegration.

Intensive Care Unit (ICU)

Tele-ICU is a telemedicine program that links ICUs in VAMCs to a central monitoring hub staffed with intensivist physicians and experienced critical care nurses. Through the use of a camera mounted above each patient's ICU bed, as well as links into the medical record and vitals sign monitors, staff in the Tele-ICU hub not only see all of the pertinent medical data on a Veteran, but they are capable of performing audiovisual exams of the patient; discussing treatment plans with patients, nurses, and families; intervening during emergencies; and generally providing specialist-level care and consultation. The Tele-ICU staff supplement the existing staff physically present in the ICU with the Veteran, adding a layer of quality to existing services.

Store-and-Forward Retinal Imaging

Diabetes can cause problems with the blood vessels in the retina, especially if the condition is poorly controlled. A special camera takes pictures of the retina that are sent to an eye care specialist to review, and a report is returned to the patient's primary care physician who can provide the required treatment. This encounter does not replace a full eye exam, but does mean that those at risk of eye problems from diabetes can be assessed easily and conveniently in a local clinic.

Telesurgery

The diagnosis, coordination of care, and triage of surgical patients can be enhanced by the availability of telesurgical consultation. The use of telehealth can provide intra-operative consultation, patient and staff education, and pre- and post-operative assessment.

BARRIERS TO EXPANSION

Telehealth removes key barriers that have traditionally separated providers and patients. However, there are several barriers that are still inhibiting the expansion of telehealth for the benefit of Veterans in VA care. VA providers delivering telehealth across state lines have no clear protection from the enforcement of state or local laws, rules, or regulations that otherwise limit the practice of telehealth. VA requests Congressional action to authorize VA providers to furnish care for Veterans using telehealth irrespective of these limitations. Such legislation would specifically invoke Federal supremacy and allow VA to expand the provision of care into Veterans' homes or on their mobile devices, regardless of the provider or patient's location, and leverage technology to create an ever more Veteran-centered experience.

Additionally, such authority would reduce the need to lease or build Federal workspace for telehealth providers and would promote more rapid and cost-efficient expansion of services. It would also strengthen VA's ability to recruit the very best healthcare providers to furnish services to Veterans in locations where resources are limited.

CONCLUSION

While VA is currently a leader in telehealth, with the support of Congress, VA has the opportunity to shape the future of this critical strategy and ensure Veterans can access convenient, accessible, high-quality care, anywhere in the nation.

Mr. Chairman, this concludes my testimony. We appreciate your support and look forward to responding to any questions you may have.

Senator MORAN. Thank you for your testimony.

I recognize Mr. Adcock.

STATEMENT OF MICHAEL P. ADCOCK, EXECUTIVE DIRECTOR, CENTER FOR TELEHEALTH, UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

Mr. ADCOCK. Good morning, Chairman Cochran, Chairman Moran, Ranking Member Schatz, and members of the subcommittee. I am Michael Adcock. I am the Executive Director at the Center for Telehealth at the University of Mississippi Medical Center in Jackson. I am honored to talk to you this morning about telehealth and the ways that it can help to address the health care needs of America's veterans.

UMMC is very proud of the close relationship we have with the G.V. (Sonny) Montgomery VA Medical Center in Jackson. As you may know, VA hospitals were intentionally co-located with academic medical centers so that they could work together to educate medical professionals, conduct research, and provide cutting edge clinical care. We interface with our VA in all of these ways and are always seeking to broaden this relationship.

Mississippi has significant health care challenges, leading the nation in obesity, cardiovascular disease, and diabetes. In order to address chronic disease, improve access to care, and give Mississippians a better quality of life, it is clear that we need something more than traditional clinic and hospital based services. Telehealth has been a part of the health care landscape in Mississippi for over 13 years, beginning with an aggressive program to address mortality in rural emergency departments. Today the UMMC Center for Telehealth delivers more than 30 medical specialties in over 200 sites in 68 of 82 counties, providing access for patients who might otherwise go untreated. Maximizing our utilization of healthcare resources through the use of technology is the only way that we can reach all of the Mississippians who need care.

One program that has been very impactful for our patients is remote patient monitoring (RPM), which manages chronic disease in a patient's home. RPM is designed to educate, engage, and empower patients so that they can learn to take care of themselves. A pilot we undertook in Mississippi aimed at testing the effectiveness of remote patient monitoring in a rural underserved area of the Mississippi Delta, the preliminary results through 6 months of the study showed a marked decrease in blood glucose, reduced travel to see specialists, and most importantly, no hospitalizations or ER visits for diabetes related illness. The Mississippi division of Medicaid extrapolated our data to show a potential savings of over

\$180 million per year if 20 percent of the diabetics on Mississippi Medicaid participated in the program.

Given the success of the pilot, UMMC Center for Telehealth has expanded our remote patient monitoring program statewide. I am confident that telehealth and remote patient monitoring programs like ours can bolster the current offerings of the VA. As already stated, the VA has one of the longest running telehealth programs in our country, but even with this robust system, gaps in care still exist. In Mississippi, we have only two VA hospitals and eight CBOCs attempting to serve over 200,000 veterans. That is 10 access points in a state that spans 48,000 square miles.

According to the U.S. Census Bureau, approximately 67 percent of Mississippi veterans do not take advantage of the VA health care system. For those who do, wait times can be significant. Based on appointments scheduled at the VA in Biloxi during the first two week period of April, 3,200 patients will have to wait over 30 days for an appointment, 1,175 will have to wait more than 60 days, and some will wait beyond 120 days for an appointment.

By layering veterans services across UMMC's 200 active telehealth access points, the VA could quickly reach more patients without significant investment. Because of the deep nexus that already exists between academic medical centers and the nation's VA hospitals, it seems a natural progression for us to partner to provide health care and chronic disease management for our veterans.

We have attempted this type of partnership in the past, but were unsuccessful due to administrative red tape locally and the VA's challenges in engaging with external health care partners globally. After multiple attempts to bring requested dermatology and mental health services to the VA, progress stalled and the services were not implemented. The benefits of partnering with established telehealth programs at academic medical centers could go well beyond dermatology and mental health.

With over 30 medical specialties online at UMMC today, access to high quality specialty care is well within reach. Partnership has the potential to open access to a statewide network of high quality health care close to home reducing the burden of travel and delay in receiving care. Congress should encourage the VA to streamline contracting with programs like ours to bring these lifechanging and lifesaving programs to all of our veterans.

That is the end of my testimony. Thank you for your time and attention to this very important matter.

[The statement follows:]

PREPARED STATEMENT OF MICHAEL P. ADCOCK

Chairman Cochran, Chairman Moran, Ranking Member Schatz, and Members of the Appropriations Committee, thank you for the opportunity to appear before the subcommittee today. I am Michael Adcock, Executive Director for the Center for Telehealth at the University of Mississippi Medical Center (UMMC) in Jackson, Mississippi. I am honored to talk to you this morning about telehealth and the ways that its power can be harnessed to address the healthcare needs of America's veterans.

UMMC is very proud of the close relationship we have with the G.V. (Sonny) Montgomery VA Medical Center in Jackson. As you may know, VA hospitals were intentionally co-located with academic medical centers so that they could work together to educate medical professionals, conduct research and provide cutting edge clinical care. We interface with our VA in all of these ways and are always seeking to broaden this relationship and interdependence.

Mississippi has significant healthcare challenges, leading the nation in heart disease, obesity, cardiovascular disease and diabetes. These and other chronic conditions require consistent, quality care—a task that is made harder by the rural nature of our state. In order to improve access to care and give Mississippians a better quality of life, it is clear that we need something more than traditional, clinic and hospital-based services.

Telehealth has been a part of the healthcare landscape in Mississippi for over 13 years, beginning with an aggressive program to address mortality in rural emergency departments. In 2003, three rural sites were chosen to participate in a program that would allow UMMC board certified emergency medicine physicians to interact with and care for patients in small, rural emergency rooms via a live, audio-video connection. The TelEmergency program has grown to serve more than 20 hospitals and continues to produce outcomes on par with that of our Level 1 trauma center.

Today, the UMMC Center for Telehealth delivers more than 30 medical specialties in over 200 sites across the state including rural clinics, schools, prisons and corporations. The depth and breadth of this network allows us to deliver world-class care in 68 of our state's 82 counties and provides access for patients who might otherwise go untreated. Over the last decade, we have conducted over 500,000 patient encounters through telehealth. Maximizing our utilization of healthcare resources through the use of technology is the only way we can reach all of the Mississippians who need lifesaving healthcare.

One program that has been very impactful for our patients is remote patient monitoring (RPM), which manages chronic disease in a patient's home. RPM is designed to educate, engage and empower patients so that they can learn to take care of themselves. Our initial pilot with diabetics in the Mississippi Delta was a public/private partnership between critical access hospital North Sunflower Medical Center, telecommunications provider C Spire, technology partner Care Innovations, the Mississippi Division of Medicaid, Office of the Governor of Mississippi and UMMC. The purpose of the pilot was to test the effectiveness of remote patient monitoring using technology in a rural, underserved area. The preliminary results through 6 months of the study showed: a marked decrease in blood glucose, early recognition of diabetes-related eye disease, reduced travel to see specialists and no diabetes-related hospitalizations or emergency room visits among our patients. This pilot demonstrated a savings of over \$300,000 in the first 100 patients over 6 months. The Mississippi Division of Medicaid extrapolated this data to show potential savings of over \$180 million per year if 20 percent of the diabetics on Mississippi Medicaid participated in this program.

Given the success of the pilot, UMMC Center for Telehealth has expanded remote patient monitoring to include adult and pediatric diabetes, congestive heart failure, hypertension, bone marrow transplant and kidney transplant patients. Working closely with a patient's primary care provider, we continue to grow this program both in terms of volume and number of diseases that can be managed. This program is giving patients the knowledge and tools they need to improve their health and manage their chronic disease.

I am confident that telehealth and remote patient monitoring programs like ours can bolster the current offerings at the VA. The VA has one of the longest running telehealth programs in the country, but even with this robust system, gaps in care still exist. VA hospitals and CBOCs are typically located in urban areas, and patients have to travel long distances to receive specialty care. In Mississippi, we have only two VA hospitals and eight CBOCs attempting to serve over two hundred thousand veterans. That's ten access points in a state that spans 48,000 square miles.

According to the US Census Bureau, approximately 67 percent of Mississippi veterans do not take advantage of the VA healthcare system. For those who do, wait times are significant. The Gulf Coast Veterans Health Care System in Biloxi, Mississippi, for example, enjoys higher utilization than others. Based on appointments scheduled in the two week period of March 31–April 15, 2017:

- 3,200 patients will have to wait over 30 days for an appointment,
- 1,175 will have to wait more than 60 days, and
- Some will wait beyond 120 days for an appointment.

Additional telehealth sites could be an excellent complement to the existing VA healthcare system. Because of the deep nexus that already exists between academic medical centers and the VA hospitals across the nation, it seems a natural progression for us to partner to provide healthcare and chronic disease management for our veterans. By layering veterans' services across UMMC's 200 active telehealth access points, the VA could quickly reach more patients without significant investment.

We have attempted this type of partnership in the past but were unsuccessful due to administrative red tape at the local level and the VA's challenge in engaging with external healthcare partners globally. Two services we've tried to bring to the VA population are mental health and dermatology. Due to the limited number of dermatologists in Mississippi, UMMC and the Jackson VA attempted to work together to provide this service to veterans throughout the state using telehealth. After multiple attempts, progress stalled and the service was not implemented.

Many veterans and active service members seek professional help for mental healthcare. In Mississippi, the wait time to meet with a psychiatrist or psychologist is quite long. Through telehealth, veterans could access appropriate mental health services more quickly and more often. If UMMC were to partner with the VA on mental health, we could easily increase the number of veterans seen by mental health professionals, allowing them to receive the treatment they need in a shorter timeframe.

The benefits of partnering with established telehealth programs at academic medical centers could go well beyond dermatology and mental health. With over 30 medical specialties online at UMMC today, access to high quality specialty care is well within reach. This type of working relationship has the potential to open access to a statewide network of high quality healthcare close to home. This limits the burden of travel and delays due to waiting for in person care. Congress should encourage the VA to streamline contracting with programs like ours to bring these life changing and lifesaving programs to all of our veterans.

Thank you for your time and attention to this very important matter.

Senator MORAN. Mr. Adcock, thank you very much.

Dr. Okamura.

**STATEMENT OF NORMAN OKAMURA, PHD, FACULTY SPECIALIST AND
PRINCIPAL INVESTIGATOR, PACIFIC BASIN TELEHEALTH RE-
SOURCE CENTER**

Dr. OKAMURA. Thank you. Good morning.

Senator MORAN. Good morning.

Dr. OKAMURA. Chairman Moran, Ranking Member Schatz, Chairman Cochran, Members of the Appropriations Subcommittee on Military Construction and Veteran Affairs.

We appreciate the opportunity to be here today. My name is Norman Okamura. I am with the University of Hawaii Telehealth Resource Center. And I work with basically the University of Hawaii system and with our health care providers not only in Hawaii, but also in the Pacific Island region.

The telehealth issue is really important and moving forward with the Pacific Islands region, we are trying to really work hard to promote the continued use and expansion of telehealth resource services. Our center basically provides technical assistance to health care providers throughout the region, but the region is very vast. And we are supported also by two national telehealth centers as well, one focused on policy and one focused on technology assessments in all—the program supports all 50 States.

So our telehealth center, as noted earlier, but basically we include Hawaii and the Pacific Island territories and the freely associated states. I wanted to just take a second to kind of talk about distances and services.

Between the State of Hawaii and Guam, which is a U.S. territory that has both a U.S. Military Air Force base and a Naval station, the distance is 3,800 air miles. There are four hours of time zone differences between Guam and Hawaii. Now, Hawaii is basically 2,500 miles away from Los Angeles. There is a nine to ten-hour time zone difference between Washington, D.C. and Guam. That is not including the Republic of Palau, which is one more hours after. So the care for veterans with smaller populations in this very dis-

tant remote area is really important and can only be delivered via telehealth to support the CBOCs out there.

So when they ask for the senior person from there, they sent me because I am just older. And so I have had a chance to actually see some of the telehealth developments over the years. And because of all the comments that have been offered and that are really on point to some of the technologies and the uses, I am kind of deviating from what I originally was going to say.

And having said all of that, you know, I am really pleased to report on some good things that have happened in the region as well as the outstanding issues. So the good things include, for example, the fact that, yes, telehealth and applications between the VA and the DOD and the Pacific actually were implemented way early in the 1990s. So there was actually a lot of consultation being done with the technologies through satellite communications. And I had a chance to actually visit all of those locations very early.

So, Kwajalein, which if, of course, where the, you know, Star Wars missile defense system is actually located and tracking all of those activities actually used their satellite links as a co-activity between the DOD for telehealth applications as well as communications between the missile range facility and the State of Hawaii and, of course, the Department of Defense and Pearl Harbor there.

So, with respect to the successes of telehealth, that history was translated into a lot of activities from store-and-forward consultation, again, in the 1990s, to more advanced applications including the sharing of electronic health record software and technologies which is really important. It is very difficult to do telehealth and telemedicine without having a copy of the patient record and without populating the patient record again.

So the video conferencing is really good and very important, but you also need the medical records and some of those activities were actually done through the assistance provided by Congress to an activity called the Pacific Telehealth and Technology Hui that actually develops some of these technologies, some of which are being used today and supportive of making sure that medical record information between the VA and the DOD and the VA sites are all available to the clinicians, the very important point.

So, with respect to the successes of the VA telehealth, there is nothing more that I can add to what has already been said in terms of its value to being able to promote access to care in terms of quality in terms of the net results that would actually occur by getting care early so that hospitalizations do not need to occur. And that is obviously one of the big challenges right across the United States with all health systems. And the great news is that, you know, the VA health system is the largest integrated care system and able to deliver the full range and compliment of services. And through telehealth, that allows that extension everywhere although in our environment we still have some challenges.

And the relationship obviously between the VA and the medical centers is really important, famous, contributes to knowledge, contributes to the development of clinical protocols, that can then be moved out into the broader environments. And that is actually one of the areas where I think it is really important to kind of emphasize, so how to translate all of that into basically the community

at large and the telehealth resource centers may be able to help facilitate that communication as well.

So one of the areas that I would like to kind of spend just a second on is basically the Choice Program it is really important because it allows access to services to veterans in their own communities. At the same time, the Choice Program needs to make sure that that, the data from the community providers, is actually populated back into the VA electronic health record for care purposes because there are a little bit of some data gaps that are occurring that kind of have an impact on the opportunities to provide clinical care and have all of the data and information that is really available right now in the VA system.

So, for us, the other issue, I think, is that the Veterans Choice Program is really good because it allows for care to be provided in the community through the community partnerships except that in our environment we still do not have all of the expertise that we need even within the communities. In the State of Hawaii, we do not have enough dermatologists. In Guam, same problem. I can go down the list of things that the VA is able to deliver through their subspecialty consultations in all of these areas and it would be really beneficial for all of that to be extended into the region so that it also saves on airfare.

One note on airfare costs, how do I put this really nicely? Airfare for me to here is \$1,000. When I travel out to Guam, even though the distances are less, it is double the cost. And the reason for that is there is not enough traffic and many have argued that it is also the size of the monopoly.

So having said that, I would like to basically suggest that if I could in kind of summarizing the comments, I would like to recommend that authorizing the VA to be able to provide telehealth services to the freely associated states, and these are those that have Compacts of Free Association with the United States, they are unable to get services today technically because they are countries, but they have compacts. And this is a region that is very important for long-term military purposes. So just be aware and using some of these technologies to be able to extend and provide services to the region would be very beneficial. The VA are experts in this area.

[The statement follows:]

PREPARED STATEMENT OF NORMAN H. OKAMURA, PhD.

Good Morning Chairman Moran; Ranking Member Schatz; and Members of the Appropriations Subcommittee on Military Construction/Veterans Affairs:

Thank you for the opportunity to provide some comments on telemedicine and telehealth as Leveraging Technology to Increase Access, Improve Health Outcomes, and Lower Costs.

In a meeting with Medicaid Health Information Technology programs in the multi-state western region, a question was asked in a small group session on the pace of transformation in care quality and coordination. There was significant pessimism with primary care providers. My response was that some things were getting better. When asked why I believed that, I said that after seeing my primary care provider for 2 years, I was shocked to receive a letter that contained patient education information on my diabetic condition. The letter also contained tests that I should undertake and general literature on the condition. Now, the letter was generated by a company that worked for the insurer probably as a result of analyzing the medical claims data; but, it was at least signed by my primary care provider (PCP). I told the group that that even though I had seen the same PCP for many

years, I never received anything like this before. The same thing happened with my drug store. For years, I managed my own prescriptions. Now, the drug store follows up on medication refills, sends text messages about refills and pick up, and other reminders. This is promising—that at a very personal level, I am seeing and experiencing better healthcare coordination.

I was invited to this hearing as the Principal Investigator of the Pacific Basin Telehealth Resource Center (PBTRC) at the University of Hawaii. I work with two Co-Directors at the University of Hawaii—Ms. Christina Higa of the College of Social Sciences and Dr. Deborah Peters of the University of Hawaii John A. Burns School of Medicine.

The Pacific Basin Telehealth Resource Center (PBTRC) is one of 14 Telehealth Resource Centers (TRCs) funded by the Health Resources and Services Administration (HRSA). The TRCs provide assistance to healthcare providers and stakeholders in developing policies, programs, and operational and systems protocols for support. Two of the 14 TRCs provide national support for policy and technology. They are the National Telehealth Policy Resource Center and the National Telehealth Technology Assessment Resource Center. The 12 regional TRCs support all 50 states.

The PBTRC works closely and collaboratively with other programs and projects in the Social Science Research Institute of the University of Hawaii, including electronic health record (EHR) implementation, health information exchange, healthcare innovation model planning, and healthcare analytics. The PBTRC supports the State of Hawaii, Pacific Island Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI), and US Compact of Freely Associated States (FAS) in the Pacific including the Republic of Palau, Federated States of Micronesia, and the Republic of the Marshall Islands.

VETERANS CARE IN HAWAII AND THE PACIFIC ISLANDS REGION

The Department of Veterans Affairs (VA) healthcare system provides care to veterans that is deserved and earned. This care is provided to millions of veterans who are geographically dispersed throughout the whole of the United States, including the U.S. territories; the FAS in the Western Pacific that have Compacts of Free Association with the United States; and veterans in the Philippines recruited during World War II.

To provide perspective on this challenge, the VA coverage area includes island land masses in a water area of the Pacific Ocean almost equal to the continental land mass of the United States. The U.S. territories of Guam and CNMI, and the FAS of Palau, are respectively 10 and 11 time zones from Washington, DC, plus a day since the dateline is in the Pacific. Guam is about 3,800 air miles from Hawaii. Hawaii is about 2,500 miles from California. California is 2,300 air miles from Washington DC. Distance, time, and day challenges are massive and so is the cost of travel to these locations.

There are approximately 127,000 veterans in Hawaii, the U.S. Pacific territories, and the Freely Associated States. The VA Pacific Islands Health Care System (VAPIHCS) provides medical care to veterans in Hawaii and the USAPI in the VAPIHCS facilities. In Hawaii, care is provided to 50,000 veterans through the Spark Matsunaga VA Medical Center (VAMC) that is co-located on the Tripler Army Medical Center of the Department of Defense and the Community Based Outpatient Clinics (CBOCs) on the islands of Kauai, Maui, Hawaii, and Oahu.

The VAPIHCS is also responsible for providing care to the veterans in the U.S. territories in Guam, CNMI, and American Samoa, the latter where Vice President Pence, on his return from Australia, recently rededicated the CBOC in memory of the late Congressman Eni Faleomavaega, who was a fierce advocate for veteran care. The CBOC in Guam is co-located next to the Guam Naval Hospital. The Anderson Air Force base is also located on Guam. The VA contracted a clinician in the CNMI to provide services to veterans there.

SUCCESSSES IN HEALTH INFORMATION TECHNOLOGY AND TELEHEALTH

The VA is the largest integrated healthcare system in the United States that serves six million veterans annually. The VA is a leader in the use of health information technology (HIT) as an early adopter of an integrated electronic health record system that was implemented in all VA medical centers and clinics from 1984. The patient medical record is a critical infrastructure in providing care. Clinicians rely on medical diagnosis and clinical notes from other providers and specialists, laboratory test results, radiology images, and knowledge of what drugs a patient may or may not be taking to diagnose patient conditions and prescribe regimens of care. The VA views this from both hospital, clinics and other sources (e.g., reference laboratories) as one composite record.

The VA is also a pioneer in telehealth to improve access to care, health outcomes, and lower costs for veterans. The VA provides care to about 6 million veterans through more than 1,200 facilities, and conducts more telemedicine encounters than any other private or public health system. The VA supports many modalities of telehealth from store and forward and home telehealth monitoring, to teleconsultation in more than 45 specialty areas of care. In fiscal year 15, 12 percent of enrolled veterans received care through telehealth services. 2.14 million telehealth encounters were conducted servicing 677,000 Veterans (Slabodkin, 2016).

Further, the VA's high priority on quality performance measures and evaluation has resulted in the VA's prolific contribution to research in telehealth. A quick Google Scholar search on "Veteran Administration Telehealth" results in 7,660 results, with 304 current citations in 2017. Atkins, Kilbourne, Shulkin (2017) indicate the VA conducts more than \$1 billion of research annually, significantly contributing to the translation of research to policy and care practices throughout healthcare facilities in the U.S. This includes improved algorithms for identifying high risk re-admission patients who need closer monitoring and additional healthcare interventions, such as remote home monitoring via telehealth.

Telehealth is a substantial means for access to care for the 45 percent of Veterans that live in rural areas. It also affords significant cost saving in consideration of the reported 58 percent reduction of hospital bed days care and 32 percent reduction of hospital admissions (Slabodkin, 2016).

This is important because the Centers for Medicare and Medicaid (CMS) National Health Expenditure in 2016 reported that healthcare costs reached \$3.2 trillion in 2015, approximately 18 percent of the total Gross Domestic Product (GDP) of the U.S., and was expected to rise to 19.9 percent of the GDP in 2025. A commentary in the *Journal of the American Medical Association* in December 2016 pointed out that this was five times the total budget of the Defense Department and made healthcare the fifth largest economy in the world. At the same time, studies on the Organization for Economic Co-operation and Development (OECD) countries shows that despite spending more per-capita on healthcare, the U.S. does not fare as well in many metrics for healthcare quality. Further, there is a need for systematic studies of telehealth operations, costs, and quality in the VA. Such studies will have immense value not only to the VA, but to all healthcare system providers and payers such as CMS.

BARRIERS AND OPPORTUNITIES

The Veterans Choice Program (Public Law 115–26) aims to extend access to services for veterans in their own communities by authorizing and partnering with non-VA healthcare facilities. This provides opportunities for reduction of wait times for veterans and more frequent care that can result in less complications, less readmissions and healthcare utilization, improved health outcomes, reduced cost, and overall improved patient satisfaction. However, the program also introduces challenges for the VA to sustain continuity of care of veterans especially if healthcare information is not integrated back into their care record. This also impacts the data VA collects for research on interventions and outcomes. At a minimum, medical documentation should be made again a requirement for payment of services of a non-VA healthcare provider through the Veterans Choice Program. Further and more complex, attention and funding must be prioritized for addressing the challenges of health information exchange among non-VA and VA electronic health record systems and or databases.

There is significant potential for the VA and community health providers to synergize with the HRSA-funded TRCs that serve all 50 states. As an example, the PBTRC works in collaboration with VAPIHCS specifically to identify and outreach to non-VA clinics in areas of high veteran populations for possible collaboration, provider support and training in adoption of telehealth, and other technical assistance. There are many opportunities to partner with the TRCs. TRCs may also assist in raising awareness of VA telehealth options for veterans. For example, the VA could collaborate with the Southeastern Telehealth Resource Center and large established telehealth networks such as the Georgia Partnership for Telehealth using the network's existing originating sites across the region as a place where healthcare can be delivered to the rural veteran in his/her rural community. This could be VA providers or non-VA providers of primary or specialty care.

VETERANS IN COMPACT OF FREE ASSOCIATION (COFA) FREELY ASSOCIATED STATES (FAS)

I would also like to highlight a moral obligation we have to the veterans in the US Freely Associated States (FAS) in the Pacific—the Republic of Palau, Federated States of Micronesia and the Republic of the Marshall Islands. The U.S. entered into

Compacts of Free Association with these countries and as part of these agreements, the U.S. is responsible for the defense of these countries, has the right to operate armed forces in these jurisdictions and exclude other militaries, which is key to our strategic interests in the Pacific, and the U.S. military is allowed to recruit on-site in these countries—the only foreign countries in which it may do so. Our military recruits heavily in these nations and the enlistment rate of FAS citizens is significantly higher than that of U.S. citizens in the States and Territories.

However, under current law, the Veterans Health Administration is not able to provide on-site care to veterans in their home jurisdiction, as it is able to do in Guam, American Samoa and CNMI. Nor it is able to provide care via telehealth from a Veterans Health Administration (VHA) facility to a health facility in a FAS. To receive VA health services, a veteran must travel, at his/her own cost, to a VA health facility, which means traveling to Guam or Hawaii. Although FAS veterans are eligible for the VA Foreign Medical Program, which is a VHA “health insurance” program for veterans residing in foreign countries, this program only covers service-connected conditions and again the veteran would be responsible for covering the cost of travel to a country with the needed specialty care. Given the high cost of travel in the Pacific and the inherently poor island economies, many FAS veterans are never able to access the VA health services due them. This not only affects veterans and their families, but it further burdens the already limited, fragile health systems in these countries.

The veterans in Hawaii and the Pacific Region have not only made important contributions, but, per capita, they are among the higher veteran populations the states. The limited number of FAS veterans will not add significant burden to the already well-established telehealth services that are provided to veterans including those in the U.S. Pacific Island Territories. Regardless, the FAS veterans are as deserving to have access to care as any other veteran in the U.S.

There are two concurrent resolutions in the current Hawaii State Legislative 2017- 2018 session (SCR54 and HCR176) urging Hawaii’s Congressional Delegation to work with the VA to develop a health services program or pass legislation to assist FAS veterans.

Other possible solutions for your consideration include at a minimum: authorize the VHA to provide telehealth services to veterans in the FAS (for example, tele-behavioral health for post-traumatic stress disorder); and support the outreach of VHA’s robust Project ECHO education program to healthcare providers in the FAS, enabling them to participate in these tele-education/tele-mentoring sessions via video teleconference and present their most difficult cases for review by an expert panel strictly for training purposes. This would enable healthcare providers in the FAS to increase their capacity to care for the veterans in their local communities. Another possible solution is to authorize the U.S. Embassies in the FAS to be a place for veterans to receive telehealth consultation. I encourage the VA to work collaboratively with the DoD and the U.S. Department of Health and Human Services (HHS) to address U.S.-affiliated Pacific Islands (USAPI) veteran issues. Recently the HHS Insular Policy Group, comprised of HHS senior leadership, created a veteran subgroup to address USAPI veteran issues. Again, the PBTRC is working with healthcare providers in the FAS and could assist in providing technical assistance to the VHA should authorization be given to provide telehealth services to these underserved veterans.

There are many healthcare leaders in the Pacific Islands who are strong advocates for the FAS veterans, including the Director of Public Health and Social Services in Guam and the Minister of Health in the Republic of the Marshall Islands, who are both veterans. A U.S. career service officer in the FSM strongly stated that, “It’s more than cost . . . it’s also a deep sense that they [FAS veterans] have been largely discarded once used. They can be recruited here, serve as Micronesian, but can’t receive benefits when they return home. This is NOT what they should be feeling—it’s not the way they should be treated.”

RECOGNITION OF TELEHEALTH AND SUPPORTING EFFORTS IN THE REGION

There are challenges with using telehealth in the Pacific region. The efforts to use technology to improve access to care and to improve outcomes, while reducing costs, have been many. We should keep in mind the progress and some of the individuals who worked to make a difference.

Over the many years, I have had the opportunity to observe and interact with some very committed individuals from the Tripler Army Medical Center and the Department of Veterans Affairs. I would like to acknowledge that some individuals that had big hearts and truly cared about veteran healthcare in Hawaii and the Pacific region. General Dr. James Hastings, Colonel Tom Driskill, Dr. Steven McBryde,

the late Dr. Stan Saiki and Dr. Donald Person are individuals that that were really special, and tried to work collaboratively with community providers and academia to improve veteran and community care years ago. Additionally, the efforts of several foreign service officers to improve veteran care in the Freely Associated States that should also be recognized. Individual efforts are often not recognized, but are the grist of positive change. Two ambassadors to the FAS that visited us at the University of Hawaii (Suzanne Hale from the FSM and Joan Plaisted from Republic of the Marshall Islands) on their own initiative to discuss how telehealth could be extended. They too were genuinely concerned with veteran care.

HIGHLIGHTS OF HISTORICAL TELEMEDICINE DEVELOPMENTS IN THE REGION

There have been historical efforts to use information technology to provide the right care, at the right place, and at the right time within the Hawaii and the Pacific region.

These efforts should be acknowledged. The DoD, way back in 1992, used their dedicated satellite connection between the Kwajalein Clinic in the Marshall Island to link to healthcare providers in the Tripler Army Medical Center.

Despite what seems to be an overwhelming challenge to provide deserved care to veterans, there have been some bright spots in the use of telemedicine, telehealth, and health information technology in the VAPIHCS and the DoD.

- In 1992, the DoD clinic in Kwajalein used its dedicated satellite capacity to enable two-way medical consultations back in 1992 using a video teleconferencing. The Tripler Army Medical Center used the dedicated satellite capacity of the DoD to provide consultation for its military and civilian contractor population on the island.
- The DoD Tripler Army Medical Center developed a web-based telehealth consultation platform to share information and undertake case consultation among healthcare providers. Dr. Person connected the medical doctors through a web-enabled capability that enabled the clinicians to communicate with each other for both teaching and clinical care purposes.
- In 1997, the State of Hawaii held a two and a half day Institute for Telehealth at the East-West Center collocated at the University of Hawaii.
- To fulfill its responsibilities to the veterans in the U.S. territories, the VAPIHCS was able to establish a VA CBOC in Guam and American Samoa, and hired a clinician to take care of Veterans in the CNMI.
- The VAPIHCS in Hawaii, in the early 2000s, was the first VA program in the nation to take advantage of Rural Health Care Program funding, established under the Telecommunications Act of 1996, to interconnect the CBOCs on the islands of Maui, Kauai, and Hawaii to Honolulu for both consultations and the access to the VA VISTA electronic medical record.
- The DoD, in building its fiber optics infrastructure to lessen the latency of satellite communications for the U.S. Space and Missile Defense Command, built a fiber optics network capacity from Kwajalein to Guam. In so doing, the DoD enabled the Freely Associated States of the Federated States of Micronesia and the Republic of the Marshall Islands to establish fiber optics connectivity.
- The USDA helped the carriers with long-term low interest loans to finance the connectivity. Just recently, the World Bank has stepped up to assist these Pacific Island FAS countries with fiber optics through grants. The Asian Development Bank has also helped with a loan to Palau. Coupled with commercial developments in the Pacific, these have changed the face of communications, enabling more telehealth and telemedicine to occur.
- The Pacific Telehealth and Technology Hui, a project of the Telemedicine & Advanced Technology Research Center (TATRC) of the U.S. Medical Research and Material Command, developed a website that was used to provide teaching cases to Tripler Army Medical Center, a project enabled communication among clinicians to consult on cases.
- The Hui was also successful in testing the usefulness of the VA software in American Samoa's Lyndon B. Johnson Tropical Medical Center. This enabled the center to implement a medical record. It has since moved to the certified OpenVista that used the open source version of the Hui to establish a business.
- The Hui also converted the VA Vista to an OpenVista. This development was initiated by dedicated VA personnel that were unhappy with cost of proprietary software following the end of a contract. The software converted by the Hui has been taken up and supported by private companies and non-profits.
- The VA is today has a telehealth program and many activities. The VA coordinator is attending the hearing and will be able to respond to VA telemedicine and telehealth questions.

SUMMARY

The VA is the national leader in the use of telemedicine to improve access, patient outcomes, and to be cost effective. However, there needs to be continued efforts to ensure that veterans get the care deserved wherever they live, that quality outcomes are achieved, and that continuous effort be applied to lessen and bend the cost curve in healthcare through rigorous business management. The Veterans Choice program should not sacrifice the strides that the VA has achieved with healthcare data and interoperability, beginning with continued health information exchange or integration with the DoD and the VA Choice providers. Since the VA relies on community providers wherever the VA might not have facilities, interoperability needs to be bidirectional and administratively seamless; but, that will, in part, require national progress in electronic health records and ubiquity in health information exchange; and we are not there yet. Finally, VA should continue its collaboration with academic research centers to ensure quality metrics are established and routinely reported on. You can't improve what you cannot measure.

From a national level, there may be a need to establish the authority for VA and VA-certified Choice providers to be able to provide services to veterans in any state, territory, or FAS without state board approval. At the same time, VA should be authorized to monitor and require community healthcare providers to meet VA high quality standards.

There may also need to be improvements to Joint Ventures so that there can be more seamless care between collocated VA and DoD facilities.

Thank you for the opportunity to provide some input into your processes.

Dr. OKAMURA. Thank you very much.

Senator MORAN. Thank you, Doctor.

I recognize the chairman of the full committee, Senator Cochran, for his questions.

RURAL AND REMOTE CARE

Senator COCHRAN. When we hear you testifying about the fact that so much of what you provide in terms of health care for veterans is tied to local customs, and do you find the cost and expenses of these remote area veterans who are not in a metropolitan area, how do you make up the slack there? What are the alternatives?

Dr. OKAMURA. There are no really good alternatives. In our particular areas, Mr. Chairman, you know, some of the ways in which the services could be delivered would be building out those community partnerships with the health care providers there, co-locating facilities with the health care systems that are already there, and certainly trying to save, of course, on travel and other costs and the inconvenience of those services. But for the freely associated states, they actually have to call the Foreign Affairs Office in the VA to get their services versus the territories that are in the Pacific. So it is a lot more difficult. I wish that there was some flexibility provided for the Pacific Island Health Care System, the VAPIHCS Program in Hawaii to be able to reach out and provide those services better.

Thank you.

UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

Senator COCHRAN. Could you tell us more about the telehealth services you offer and some of the successes the University of Mississippi in particular, has experienced through telehealth.

Mr. ADCOCK. Yes, sir. Thank you, Chairman Cochran.

The University of Mississippi Medical Center, as I stated earlier, has a very broad system of telehealth. We have not been at it as

long as the VA and certainly do not have national reach, but we do have over 200 locations across the state. As we talk about telehealth, we have live telemedicine, which is scheduled and unscheduled. That is that live audio/video interaction between a patient and the provider. We also have store-and-forward and multiple different specialties: radiology, cardiology, audiology, dermatology. We have talked about that here today as an issue.

There are not enough dermatologists in Mississippi to have live appointments with all the patients as quickly as we should, so store-and-forward provides us a great option to be able to diagnose and treat a patient at a distance in a much quicker fashion.

The other big program is remote patient monitoring. We provide all these services in multiple different locations, hospitals and clinics, not just our hospitals and clinics. We do have community partnerships but far and away the majority of our locations are not in University of Mississippi Medical Center sites. They are actually in community sites and co-located using space that is being used for primary care for rural health, FQHCs. We are in corporations, schools, universities, rural health care clinics, and prisons. So we are actually delivering telemedicine in prisons as well.

One of the biggest, newest locations and we think is optimal for patient care is in a patient's home. So remote patient monitoring with chronic disease we have shown to be extremely effective not just with diabetes, as I talked about earlier, but we also offer it for pediatric diabetics. We offer it for hypertensive patients, for congestive heart failure patients. We also offer it for kidney transplant, bone marrow transplant patients. And the goal is to get patients in home quickly, keep them at home, teach them about their disease.

There is not enough time as we interact with patients in hospitals and clinics to provide them the education that they need to fully understand their disease. So remote patient monitoring allows us to give them that education on a daily basis and actually teach them how to manage their own care. And we think that is the key to keeping them out of the hospital.

We are soon to provide asthma and bone marrow transplant as well as high risk pregnancy through remote patient monitoring. So we have seen many successes throughout our state. We are in 68 of the 82 counties. We are working with the health department to be in every county in Mississippi, but one does not have to drive very far to find a telehealth access point in Mississippi.

Thank you.

Senator COCHRAN. Thank you very much, Mr. Chairman.

Senator MORAN. Mr. Chairman, thank you very much. Thank you for joining us.

Senator Schatz, the Ranking Member.

Senator SCHATZ. Thank you, Mr. Chairman. Thank you all for your testimony.

COST EFFECTIVENESS OF TELEHEALTH

I want to start with Dr. Galpin. What metrics does the VA have built into its program regarding cost effectiveness?

Dr. GALPIN. So I am going to—that is a great question. And, you know, I talked about some of the things that telehealth can do for

an organization: improve capacity, accessibility, and increase quality. Four and five on that list are cost avoidance and recruitment and retention.

So when we look at what telehealth can do, we can look at it as what direct costs can we see coming back to the organization right now. And one of the direct costs we see which is very unique to the VA is our decrease in expenses for beneficiary travel.

So for the VA, we reimburse veterans to get to their appointments in some cases. And last year, for instance, in fiscal year 2016, our Allocation Resource Center estimated that we saved about \$24 million in beneficiary travel expenses because of the telehealth that we did. So that is one way we could save the Government money.

The other things and I would say the two big areas beyond that, are cost avoidance related to hospitalizations. As has already been mentioned, when you have a remote monitoring program like we have that veterans can enroll in, get trained, get education on their care, get information that helps them maintain independence at home, we see reduction in hospitalizations.

And as you have mentioned, in studies that have been, in data that has been produced by the VA we can see a 20 percent reduction in hospitalization for veterans enrolled in that program. For our telemental health program, not necessarily remote monitoring, but the video care, we can see a 25 percent reduction, and that was published data. We track that yearly. Last year we saw about a 30 percent reduction in both those programs reducing hospitalization. Last year we saw about a 60 percent reduction in bed days of care in our home telehealth program.

So it is not a direct cost avoidance like we talk about with beneficiary travel, but certainly that is helpful. The healthier you keep our patients, the better their health. The more accessible to the care, the better their health, and we prevent longer term chronic conditions.

Senator SCHATZ. Thank you. And to Ms. Nelson-Brooks and Mr. Adcock, if you have anything to add on cost savings, I would be interested to hear from you.

Ms. NELSON-BROOKS. Sure. So in terms of cost savings for audiology specifically for VA Pacific Islands Health Care System, we have a challenge with obtaining audiology services in the community as well. The capacity is not there for Choice, for the Choice Program. And so VA Pacific Islands Health Care System receives services from the San Francisco VA for teleaudiology. And we estimate that the average cost of an audiology appointment in the community for the VA is \$100 per visit. And so far this fiscal year, we have done over 500 teleaudiology visits between Pacific Islands and San Francisco, which roughly equates to a cost savings of about \$50,000 so far this year.

Senator SCHATZ. Mr. Adcock.

Mr. ADCOCK. Sure. Thank you.

As a part of our remote patient monitoring program, we are monitoring the number of ER visits, which are certainly more costly than receiving care in home, hospitalizations, patient engagement. So we are measuring how our patients are engaged and whether or not they are participating in the program and medication adher-

ence because if they are not taking their medications, they are likely to end up in a higher level of care.

We are also measuring decreased length of stay, working with managed care companies to enroll their patients in remote patient monitoring. They are working with us to measure the overall cost of care. So they obviously have the most data on their clients on their covered panel, so they know exactly what the cost of care is and we are working with them to see what impact we are having on decreasing that cost of care.

Senator SCHATZ. Thank you.

BROADBAND AVAILABILITY

Dr. Okamura, I wanted to ask you. Between remote patient monitoring and store-and-forward and the sort of face-to-face telehealth, you know, there is a conversation around broadband availability or satellite connectivity. And I just wonder whether we know already which ones of—in terms of the kinds of care you can get with telehealth, which ones require a really robust broadband connection and which can be done? Because I think we are all looking at—and I am looking at Senator Capito especially.

We are looking at rural broadband as a national objective for a number of reasons, but including telehealth. But I would like to roll some of these technologies out sort of in advance of the rural broadband being laid out. And it seems too that store-and-forward remote patient monitoring, you do not necessarily need big home broadband. If you could briefly comment on that, Dr. Okamura.

Dr. OKAMURA. Yeah. I think that that is absolutely correct in ways, but in the Pacific Island region you actually have infrastructure challenges as remote areas where basic connectivity for—

Senator SCHATZ. Right. Where there is zero connectivity.

Dr. OKAMURA. Yes. Zero connectivity. I really hate to put it that way, but absolutely true. So the rural broadband and the telecom initiatives are really kind of important. And on that front, you know, the Universal Service Fund (USF) has kind of reached its limit at this point in time. They once had an excess. Today they actually are bumping up against the limits, so the amount of resources available to the rural community has really kind of hit its limits.

If we could get some of these programs to kind of just work together and have some authorization of these service components in there, also as part of the USF type programs, it would be really beneficial because listening to the other applications in Mississippi, Mississippi has always been a leader in telehealth activities. And some of these applications would be really good to be able to move out.

So the only other thing I would add as part of all of those, if we could figure out the mechanisms for assisting the rural providers to be able to use these funds and get a little more collaboration and cooperation, it would be really great. Thank you.

Senator SCHATZ. And you are always smart to recognize Mississippi as a leader on this committee.

Senator MORAN. Senator Capito.

Senator CAPITO. Thank you, Mr. Chairman. And I want to thank all of you.

MENTAL HEALTH

I have a couple of questions related to this. We have in our general population in many states an opioid and drug abuse problem and I think it is reflected in the VA as well, I am sure. And so my question is have you at the VA looked at telehealth and mental health—yeah—mental health and treatments for opioid and drug abuse treatments in the telehealth space? Is that something that you are offering? Is it successful? How does that work?

Dr. GALPIN. So we offer—probably our most utilized program is our telemental health program. We have services in all sorts of clinical areas within the mental health space, including addiction type services. I do not have the specific data on the outcomes for that specific type service, but it is certainly something that is critical and important for us. It is why there has been such an investment in our mental health arena and getting those services out there.

Senator CAPITO. When a veteran accesses that, do they go to a CBOC to maybe have a session with a psychiatrist at one of the main facilities or do they do it in their home and tap in? How does that technically work?

Dr. GALPIN. Well, it is going to be dependent on the area. So I would say that the future of where we are going is it is going to be the preference of the veteran. So we see going out 5 years that we are going to offer more and more services in the home if that is preferable to the veteran through a variety of devices. At present, we have a combination. We have some locations that offer services into the home. We have other locations where it is a clinic-based appointment.

And one of the barriers we have actually, and this goes back to the legislation that I mentioned in my opening statement, is that when we create a mental health resource hub in one state and we want to deliver care to a veteran in a home in another state that, is when we get concerned about this.

Senator CAPITO. In terms of licensing, physicians, and—

Dr. GALPIN. Licensure, State laws, yes.

Senator CAPITO. Yeah. That would be a problem.

THE CHOICE PROGRAM AND TELEHEALTH

Let me ask you this. In the Choice Program, we have heard, I think, through this committee and others various problems with it that we have tried to solve, some of it being understanding by the veteran of what the Choice card really does, understanding by the medical community what it really means. And then the third-party administrators have been a subject of discussion as well.

In terms of reimbursing physicians through the Choice Program that are I guess paid by the VA to deliver care even though they are not part of the VA, have there been any issues with that in terms of reimbursing for telehealth or is that an issue or not?

Dr. GALPIN. So I am probably not the person who can really speak to the Choice Program, but that is information we can get back to you.

[The information follows:]

Reimbursement of our VA telehealth providers is not considered a constraint in the use and expansion of VA telehealth services.

Senator CAPITO. Do either of the other VA?

Dr. GALPIN. No.

Senator CAPITO. No. I am curious on that. I do not know that there is a problem there, but I know there has been some problems with the Choice Program in general.

Mr. Adcock, or is it Dr. Adcock.

Mr. ADCOCK. Mr.

BROADBAND CONNECTIVITY

Senator CAPITO. Mr. Adcock, Mississippi and West Virginia have a lot of similarities and we are really looking at telehealth in our State just in the general population and I am excited for what it can do for our VA. I am really interested in your chronic disease delivery of service, particularly as we have older states and if you can get somebody into the home to help with chronic disease monitoring, it does—we have some pilot projects in West Virginia that are working.

Following on what Senator Schatz brought up about broadband connectivity, is that an issue for you in Mississippi? I mean, it certainly is for us and obviously, it is for the Pacific Islands as well.

Mr. ADCOCK. Connectivity can be an issue. I would say that it is less of an issue in Mississippi than you would expect and I think a lot of that is due to our partnerships with telehealth providers and with providers out in the community and our telecom provider in Mississippi. C-Spire is a telecom provider in Mississippi and they have worked with us to grow the network across the state, whether it be fiber or cellular connectivity, to help reach these patients' homes. So we have a very strong success rate in being able to offer our chronic disease management program in homes that would normally you think would not be accessible.

Senator CAPITO. Well, good. That is good. That is good.

Mr. ADCOCK. There is still work to do.

VETERAN SATISFACTION RATE

Senator CAPITO. Right. And my last question is more of a general question and I think it was sort of touched on in the discussion. Many of our veterans, we have some great hospitals in West Virginia in Huntington, Beckley, Clarksburg and Martinsburg. When you visit a VA hospital, the camaraderie, the socialization that occurs at a VA hospital or even at your CBOC is something that I think particular veterans are very welcoming of that interaction, that ability to see the same practitioner, but to also maybe have appointments the same time your fellow veterans that you know do or you can talk about similarities of where and when you served.

Is there a pushback from the veteran on, okay, that is nice, Mr. Smith, but you know what? You can actually stay in your home and we can do your retinal screening that way. Are you getting any pushback on that because of the socialization aspect of being a veteran, you know, and the camaraderie of that, and then going to the VA?

Dr. GALPIN. Yeah. No. I think that is a great question. And, I mean, the nice thing about this program is it provides an option

for the veteran. So it is not a requirement to do telehealth, so if you want your care in person, you can have your care in person. So the veterans who are getting care via telehealth are choosing to do it that way, which means that they want it. And honestly, our satisfaction rates and utilization of our services reflect that. Our satisfaction ranges from 88 to 94 percent depending on which of the programs you are looking at. So people seem very satisfied with the service, but if they do want that in-person care, that is their choice.

Senator CAPITO. Okay. That is a good answer. Thank you. Thank you very much.

Senator MORAN. Thank you, Senator.

Senator TESTER.

TELEHEALTH IN THE HOME

Senator TESTER. Well, I will start where I was going to end and that is because it goes off of Senator Capito's question. And that is: are there any plans for taking telehealth to the home?

Dr. GALPIN. Yes, absolutely. That is one of the, I would say the critical areas. I mean, if we look out 5 years I think a lot of our services are going to be provided into the home.

Senator TESTER. Okay. But it will be at the vet's option? They can go to CBOC if they want. They can go to CBOC and have telehealth if they want, or they can do it at their house.

Dr. GALPIN. Correct.

Senator TESTER. Cool. Look, my opinion on telehealth has changed over the last 10 years. I remember when I first heard about it I thought, no, it is not going to work. Technology has improved. The vets who have had experience with it have expressed some very positive impacts and the fact that we have very few mental health professionals in Montana in the areas of mental health, at least, it makes a big difference. So I have got a couple of questions.

TELEHEALTH LOCATIONS

I know there are some expansions into Indian country and into CBOCs to be able to have Salt Lake support our telehealth. Can you talk about if you have a short and long-term telehealth model on where you are going to be putting centers or, you know, what CBOCs you are going to actually put in mental health telehealth potential into?

Dr. GALPIN. Yeah. And I think I understand the question. Let me tell you—

Senator TESTER. Well, the question is where are you going to go with this because there used to be few. Now there is more and if there is going to be even more, could I see the diagram? That is what I am asking you.

Dr. GALPIN. Okay. Yeah. So last year we started out by saying we need to prioritize what we are doing in telehealth.

Senator TESTER. Yeah.

Dr. GALPIN. We have access issues that we want to respond to. One of the five work streams we developed was related to our core ambulatory services. That is mental health and primary care.

Senator TESTER. Okay.

Dr. GALPIN. And what we said is in certain areas of the country it is hard to recruit those providers. And I think that is what you are speaking to. And so what we set out to do was not replace in-person care with telecare, but it was to supplement. So if you have a rural facility——

Senator TESTER. Yeah.

Dr. GALPIN. And you have a provider who leaves.

Senator TESTER. Yeah.

Dr. GALPIN. We want to have a bench of providers. We want to have providers available who can move over and fill in the space.

Senator TESTER. I got you. And just to put this in perspective, there is one. It might have changed. We might have two now—east of Billings. So as far as mental health goes, we meet those criteria. The question is what is the VA going to do to help meet those veterans who live in those frontier areas and what does this committee need to do to support you to make that happen?

Dr. GALPIN. I appreciate that. So from a national strategy standpoint, we want to develop more of those resource centers and increase their capacity to take care of veterans. Again, it is hire the providers in the large academic sites where we have the ability to hire and serve the veterans in the rural communities. From a committee standpoint, that is across the nation. That is our expectation. That is where we want to go with that specific program model.

What we need, I mean, to support—and I appreciate you asking that question—is we need the legislative authority that says we can go across state lines into the veteran’s home so that if the place where we can hire is not in your state, we can still serve the veterans in your state and continue that care into the home if that is their preference.

The other things that I think are needed, we need to have and maintain a modern IT structure and modern telehealth equipment.

Senator TESTER. Yeah.

Dr. GALPIN. And so from a perspective of what this committee could do is help ensure that when the VA does come to request and say, “These are our needs,” that that is heard within that need request.

Senator TESTER. Okay. Okay. So I think that the Chairman or Ranking Member can ask you for that language then when that time comes and I hope they will. I would ask if you have any plans to—I would ask that if you have a document that shows your plans for expansion in telehealth across the country—in my case, Montana—I would love to see that document. And not to be critical of it, just so I know what to expect. And then we can help encourage you to do it and you can help encourage us to fund it, okay.

Dr. GALPIN. We have got it and we will provide it.

Senator TESTER. Okay. That will be great.

[The information follows:]

Describing our vision, operating plan, and our IT expansion initiative (documents available upon request):

—“VA Telehealth-Strategic Priorities Goals Barriers and Constraints”

—“VA Connected Care Operating Plan”

—“VA Telehealth Expansion Hub Initiative and Interfacility Access (OIT) BCTA”

Senator TESTER. The other thing is we have got a number of folks that head south for the winter and they say they have different providers when they are down in Arizona, say, than they have in Montana. Is there—could this telehealth replace one of those—and I do not mean replace by replace, but replace it so that that person would be dealing with the same provider? Say they have a provider in Montana or the other way around, in Arizona. They go move to Arizona in the wintertime. They could access that Montana provider by telehealth. Is that something that would be possible so there would be some consistency there?

Dr. GALPIN. Yeah, certainly. I think particularly with that legislation where you can go across state lines. I think there are two models that we could potentially envision to resolve that problem. So, one is for a patient who is in a very complex position as far as their disease state.

Senator TESTER. Yeah.

Dr. GALPIN. They can take their mobile device. They can still maintain a relationship with their provider wherever they are for the winter, get some basic care.

Senator TESTER. Got it. Good.

Dr. GALPIN. We could also set up access points at facilities or with community partners so that we can provide a broader range of more complex services for the veterans that need those types of services.

MENTAL HEALTH CARE FOR NATIONAL GUARD MEMBERS

Senator TESTER. And this is not a question. This is a comment, so hopefully the Chairman will let me say this. We have some issues with the National Guard with suicide, quite frankly. And I think if there was some prospect of the Guard being able to tap into the VA's mental health options for those members, I think it could work. If you could think about that, Doctor, and if there are any barriers, if you could recommend for us, number one, if you had the capacity to actually do that because we do not want to take the service away from the veterans themselves, but we have got a huge issue in rural America with suicide anyway and Guardsmen are no different. In fact, it is probably ramped up a bit. So if there is some way we could take down some of those barriers, if you have the capacity that would be great.

Thanks, Mr. Chairman.

Senator MORAN. Thank you, Senator Tester.

TELEHEALTH SERVICES

Dr. Galpin, let me ask a series of questions in a sense really directed toward my home State. Broadly, first, what would be the array of telehealth services that are available?

Dr. GALPIN. So we provide services in over 50 clinical specialties. The most commonly utilized are mental health, our store-and-forward retinal imaging program, and dermatology. Right now it is not the same from one site to the next, so it depends on what that center has decided is their most important need and what services they want to provide.

So other than the home telehealth program, the remote monitoring program, which is fairly universally available, the others have been chosen by the facilities on what they want to prioritize.

Senator MORAN. And that prioritization would occur based upon the particular specialists that might be available within that VISN?

Dr. GALPIN. So it would be a combination of the services that are available as well as what the needs of the veteran population is at that location.

Senator MORAN. So there is a wide array, with fifty some specialties that would be available to veterans across the country. The decision is then made at what level, the hospital, the VISN?

Dr. GALPIN. Well, so we are speaking current state, but also I think there is a vision of where we will go in the future. So, right now services that are available to a veteran in one area are not going to be the same as a veteran in another area. What we like to do and what we are moving toward is more national enterprise initiatives. So for our teleprimary care program, that was funded by the Office of Rural Health as an enterprise initiative. Same with our mental health expansion plans. We just added in a sleep medicine plan.

So I think the goal more is to standardize which will help us out in a tremendous amount of areas including communicating the services to veterans. Right now it is hard for me to say. We have teledermatology because if a veteran goes to a clinic and they are disappointed they do not have it there, I do not want to be in that situation for them, so.

Senator MORAN. I had not thought of that. You said something that caught my attention. Everything you said caught my attention, but where is the provider? Not necessarily in Kansas. Not necessarily within our VISN today?

Dr. GALPIN. So most likely the providers who are taking care of the patients at—

Senator MORAN. And this goes back to the state line issue?

Dr. GALPIN. Yeah.

Senator MORAN. All right.

Dr. GALPIN. So let me—if I could, let me take some time and kind of tell you where I think we are going.

Senator MORAN. If you would only do one thing first.

Dr. GALPIN. Sure.

Senator MORAN. Which is to tell me where we are today? Who in Kansas makes the determination as to what telemedicine services are currently available?

Dr. GALPIN. It is going to be the facility. It is going to be the facility with probably some input from the VISN.

Senator MORAN. Okay, and then your vision?

THE FUTURE OF TELEMEDICINE AT VA

Dr. GALPIN. Yeah. And this is going to take a few minutes. And I hope that is okay, but I think it will help kind of answer some of the questions because where we are going with telemedicine is exciting and I think it kind of brings this all together. And what we do is we do think about it as what are we going to be offering at a facility level, you know, in the remote clinics at the medical

facilities then. What is going to be organized? More at the network level and then more at the national level. And at the facility level, I think we are going to be doing a tremendous amount of services into the home. There is tons we can offer and that is where it is probably most convenient for most people to get their care.

Also at the facility, telehealth is just going to be integrated into our daily operations. And what does that mean is that probably every specialty is going to adopt some portion of remote care or virtual care to make their services more accessible.

It is also just going to be a part of routine operations in the sense that when a veteran leaves a clinic appointment there is going to be a question of how do we best deliver this next visit? Is it in person? Is it by telephone? Is it by video? So it is just going to be kind of part of the regular routine and thought processes.

Also, at the facility level we are going to make care more accessible to families and caregivers. As we know, you get better care when you have someone navigate a complex medical system, especially if you have a lot of comorbidities. Some of our elder veterans fit into that category. So being able to invite someone and saying, "Yes, it is hard for you to make this appointment and help the veteran out, but we are going to bring you in virtually so you can attend the appointment, listen to the doctor, help them after they leave the clinic." That is really important. I mean some family caregivers live across state lines.

We also want to enhance our remote monitoring program. I mean, obviously, that has been very successful. We want to add more options. Right now there is a certain threshold that people have to meet to get into that program. They have to respond every day. They provide information. We need to have something and we are going toward more of a continuum of services so that no matter where you are on your healthcare journey there is some way you are going to be able to engage with us and we are going to be able to engage with you to get services. So that is at the facility kind of medical center.

When you look at the VISN or region, and this is where the across state line comes in. What we have in this country in our VA system, but also in our communities, is there are certain places where there are just gaps in services. And this is where the legislation comes in. It is so critical to provide is that we need to look and say, "Where can't you get a certain service in the VA? Where can't you get neurology care? And where also is that care not available in the community?" And that is on the top of our work list. We need to figure out a program so we can remote in that care or do a hybrid model where we bring in some in-person, some remote care.

For primary care and mental health, core ambulatory services, we need to expand our interim staffing program. This is where again at a site that is rural you lose one of your primary care providers. We do not want to wait 6 months to a year to get someone else in there. We are going to start hiring that provider, but we want to bring in a remote primary care provider to fill in those services so we provide consistent access.

Similarly, at the regional level, we need to do consultant networks. If a provider—I will speak to my own experience in this. I

worked at a large academic site. I had a list of all of the subspecialists that I could contact. When I needed help, I got help. If you are in a rural clinic, we can provide that same level support for every provider that is sitting even in a one doctor clinic. They should be able to go to an icon on their desktop and just say, "Who is on call for cardiology, nephrology, pulmonary?" Be able to text them, email them, start a video, start a phone call.

And it does not matter where that provider is sitting. That provider may be two states over at a large academic site. The point is the provider that is sitting out in the rural community needs to feel they have the entire organization at their back taking care of the veteran in front of them.

And at the national level, we need to have failover capacity. We need to make sure that when we set up our telestroke program, our teleICU program, that we do it in a way that if one network goes down, we have failover. We also need to move around our national experts. So if there is an expert in a rare condition, that person—let's say there is ten veterans that have that rare condition—that provider is providing input into all of their care.

And so I think when you look at that you see, you know, yes, right now a lot of it is the decisions are made at the facility. It is facilities try and take care of the veterans in their catchment areas. We are moving toward a model where we are doing more intrastate, more across the VISN, but where we expect to go, we are going to leverage the VA enterprise in a way that you cannot do if you do not have a national integrated health care system. And I think that is where it starts getting incredibly exciting.

Senator MORAN. You answered my question in a different direction than I was intending to go, but I found it very helpful. And as I think about this, and it pains me to say it, we have too many locations in Kansas in which we cannot recruit a medical provider.

Dr. GALPIN. That is correct.

Senator MORAN. It is a consistent problem in the VA and in the private sector. We have tried for as long as I have been in the United States Senate to get the VA to hire a physician at a CBOC in Liberal, Kansas, almost in Oklahoma, almost in Colorado. And that has been apparently an insurmountable challenge.

What you described to me tells me that there is a way to solve this problem with a provider who—this is the part that is painful to say—who may be unwilling to live in a particular location, but is willing to provide services to veterans and he or she is providing service from Maryland. It reminds me that we provide radiology services across the country.

Dr. GALPIN. Absolutely.

Senator MORAN. For communities in Kansas and the radiologist may be in Australia, may be in Maryland or Virginia. And the VA is not—what you are telling me is the VA is not there yet, but that is the vision.

Dr. GALPIN. That is the vision. And let me state this because I think this is really important. It is not that we do not want to continue recruiting that provider to live in that community. That is the direction we want to go, but in the meantime, let's make sure the services are provided and let's bring in a provider in the way we can.

Senator MORAN. I appreciate that answer even more.
 Senator Baldwin.
 Senator BALDWIN. Thank you.

TELESTROKE PROGRAMS

Dr. Galpin, much of our discussion and your testimony has been focused on the beneficial uses of telemedicine to treat chronic conditions, issues like diabetes, like mental health. I heard you just reference it quickly a moment ago. I want to focus on a more acute use for telemedicine, stroke care, utilizing telestroke programs.

Stroke is the third leading cause of death in the United States. I think slightly more than 1 out of every 15 deaths are due to stroke. And according to the American Stroke Association, the American Heart Association, telestroke services could save thousands of people every year and certainly cut costs by perhaps even over a billion dollars in the next decade. Yet only 3 to 5 percent of those diagnosed with a stroke are given the clot busting drug, TPA, in time to avoid brain damage.

So do you agree that our veterans would benefit from telestroke programs, especially in our rural areas where primary stroke centers can be sometimes hours away?

Dr. GALPIN. So the very simple answer to this is yes. And I do not know the awareness on this, but the VA has a plan to develop a national telestroke network within the next 5 years. That work is ongoing now. They have already identified their first ten pilot sites and we expect to have the implementation of the first services this year.

So it is, I would say—you know, we focus a lot on ambulatory care, but the inpatient potential for this is dramatic. And that specialty consultant network, that ability to walk into an ICU and have a button on the wall that says, “I need to talk to an intensivist,” or, “I need the neurologist right now.” That is critical and that is lifesaving. So I appreciate that you brought up inpatient and acute care.

Senator BALDWIN. Yeah. And I want to dig down a little bit deeper on this. You mentioned pilots. Maybe they are in response to a couple of the OIG recommendations of the past few years. And there have been some specific recommendations and I want to hear the progress the VA has made on them.

One in June of 2015 was an inspection report dealing with treatment of a veteran in Wisconsin. And that OIG report recommended that the VA review current acute stroke treatment policies and assess the use of telehealth evaluation for more aggressive local treatment in patients presenting to rural and low complexity VHA facilities with signs and symptoms of acute stroke. And the VA agreed with the recommendation and stated, “At this time VHA does not have national or local guidance for the emergency department stroke management using telestroke.”

I am asking sort of where are you in that process. Does the VA now have national guidance for emergency department stroke management using telehealth and if so, can you please provide us with copies and also tell me a little bit today?

Dr. GALPIN. Sure. So the decision by the VA to develop and commit to a five-year plan to develop the national telestroke network

I think was informed by the cases that we saw that the OIG responded to. So this is the year, again, they have the first 10 sites that are supposed to go live with this program, but it has not been activated yet. That is anticipated this year.

Senator BALDWIN. That is helpful to hear. In reference to another OIG report, there was a recommendation. Let's see. This was all of the VA facilities, not Wisconsin specific, but the VA—the OIG recommended that the VA improve the availability in expertise in stroke treatment across the system. And in concurring with the recommendation, the VA stated, “Patient Care Services will develop a plan for phased implementation of telestroke program to link stroke specialists with emergency departments and include identification of patients that may benefit from endovascular therapies.”

The target completion date for this effort was April of 2016. Wisconsin is part of VISN 12 and currently there are no telestroke programs or partnerships that are currently operating within our VISN. So I am wondering of these first 10 sites if you can give us some indication will there be any in VISN 12? I do not know if you are able to announce those at this point, but certainly we are very anxious to hear progress on that.

Dr. GALPIN. You know I wish I could. I will have to bring that back for the record. I believe that list can be readily available and we can get that back to you.

[The information follows:]

Please see response to Question for the Record on the same topic.

Senator BALDWIN. Great. I have a couple more specific questions with regard to this issue that I am happy to submit for the record. I suspect you do not have the data with you right now, but we are very interested in seeing these partnerships and agreements, especially recognizing that the supporting stroke facilities have more limited capacity and we want to see robust agreements both for telestroke as well as treatment with the primary stroke centers in the regions.

Dr. GALPIN. Okay.

Senator MORAN. Thank you, Senator Baldwin.

Senator Udall.

Senator UDALL. Thank you very much, Chairman Moran, and let me just thank the panel overall. I have been listening here for a bit and I think you have really pointed out the real potential for telehealth. And, Dr. Galpin, I want to thank you for your vision and where you are headed. I think that is where we all want to go.

Telehealth and telemedicine is often seen as a silver bullet, especially in a rural state like New Mexico where health care practitioners and specialists are in short supply. If you are a veteran in Farmington, New Mexico, for example, and the nearest specialist is three and a half hours away in Albuquerque, telemedicine is a blessing. But what we often fail to see is that telemedicine does not fix capacity, nor does it address the VA's provider shortage.

For example, while that specialist in Albuquerque is treating the rural veteran, the doctor is unable to see the other veterans in Al-

buquerque. Fortunately, there is a growing evidence base that other technology enabled models could make a real difference here.

CLINICAL RESEARCH STUDY

And, Mr. Chairman, I have a research study I want to put in that demonstrates this point. It is titled, "Clinical Research Study April 2017, American Journal of Medicine. Telemedicine Specialty Support Promotes Hepatitis C Treatment by Primary Care Providers." Ask consent to put that in.

Senator MORAN. Without objection.

[The information URL follows:]

[https://www.amjmed.com/article/S0002-9343\(16\)31227-X/pdf](https://www.amjmed.com/article/S0002-9343(16)31227-X/pdf).

Senator UDALL. All right. Thank you, Mr. Chairman.

In 2010, and this study drives home the point that I am going to ask about in terms of Project ECHO which I think you are very familiar with. In 2010, the VA Specialty Care Services adopted a new model to transform the delivery of care throughout the VA. They began utilization of a technology enabled model that was developed by Dr. Sanghi Varroa at the University of New Mexico called Project ECHO. Since then, VA's Scan ECHO Program has created specialist teams at 11 VA facilities that reach over 600 VA clinics throughout the country and assist treating veterans with 39 otherwise very difficult illnesses.

The key difference between Project ECHO and the traditional telemedicine is that Project ECHO helps expand capacity through the system. Rural VA practitioners collaborate with VA specialists around the other country and over time by treating patients they become specialists themselves. And so you are really—it is pretty special expanding that capacity.

So, Dr. Galpin, Scan ECHO is accessible from over 600 VA clinics. Does the VA plan to provide the same access to all 1,233 VA health care facilities around the nation?

Dr. GALPIN. So the Scan ECHO Program is not under our telehealth operations. I am familiar with it because I think it is a brilliant program. I actually applied to set up a center where I was in Atlanta when we initially had the opportunity, but I cannot speak for the office that does that or the organization, but we can get that information back to you.

[The information follows:]

The VA ECHO program is offered and available to all 1,233 points of care. Currently 516 VHA site receive ECHO programs, some from multiple hub sites. Additionally there are 18 DOD sites which receive VA ECHO programs.

Senator UDALL. Yeah. But you understand the idea in terms of expanding capacity and that is one of the problems, isn't it, with telehealth is what happens with this new model, this enabled model, is that you grow the specialists out in the area and then they are able to do a lot more rather than just relying on the specialists at the facility. And so that is something I just hope you look at and take a hard look at expanding that out.

Dr. GALPIN. Well, I would love to—oh, sorry.

Senator UDALL. Go ahead.

Dr. GALPIN. Well, I would love to respond to that because I think this is one of the things that I think is important to understand

about telemedicine is that it can do a lot of things. And so it increases accessibility. It does move that appointment from one spot to another. Excuse me. And that makes the care more convenient. Like you mentioned, it does not add appointment slots though. But we can do that when we leverage our large academic sites. That is where we talk about increase in capacity, going across state lines, having that authority to really leverage that value proposition from telehealth. It is "I am going to hire people here because I can. I am going to serve veterans over here because it is hard to hire. I am increasing capacity in the places that it is hard to hire."

Scan ECHO, I think similarly gives us another avenue to do something similar. It is a great way of educating providers. I have been able to attend some of those sessions. At the same time, you are helping to take care of a veteran. They are not part of it, but it is an education session where you get specialists who then get to participate and you get a multidisciplinary approach to managing a veteran and then you get learning from all of the other providers around.

So when you are at, like, a large academic tertiary site, you participate in those type of conferences. When you get out in the rural communities, you cannot. Scan ECHO helps us invest in our primary care providers to build new skillsets and therefore have the capacity and the ability to manage more complex diseases.

I do not think it is a one or the other. I think we have to look at all of these options that increase capacity in your organization and that is one of the models that I think has been very successful and proven.

Senator UDALL. Right. Thank you very much. And let me just—Chairman Moran, if I could just have one more second.

Senator MORAN. You may.

BROADBAND IN RURAL AREAS

Senator UDALL. Commenting on what Dr. Okamura and your vision, Dr. Galpin, in terms of where the Veterans Administration is going to move to plug these holes so that we do not have in broadband, as he said, Universal Service Fund has hit its limits. I would urge you all and I would urge your Secretary to be at the table when the President puts together his infrastructure package. And you all be advocating that it is absolutely essential in project number one to fill these holes so that we can get this telehealth out into the rural areas of America.

And I know there is reluctance in terms of stepping outside your agency. You had mentioned your whole vision, but the biggest part of the vision that all of us have talked about is you have these big holes in terms of broadband. And if we had a national effort to put that broadband into all these rural areas, it would really make a difference in terms of your vision, I think.

So thank you for your courtesies and thank you.

Senator MORAN. I share your view and was therefore pleased to extend you additional time.

Senator UDALL. Okay.

Senator MORAN. The Senator from North Dakota. Senator Hoeven.

Senator HOEVEN. Thank you, Mr. Chairman.

EMPOWERING HEALTHCARE PROVIDERS IN THE FIELD

I guess my question is primarily for Dr. Galpin, but the others may want to weigh in as well. So in terms of making sure that you are providing care to our veterans out in the rural areas, I am going to give you an example from North Dakota. We have a VA medical center at Fargo that serves North Dakota and also western Minnesota. They do a fantastic job. The veterans really appreciate the high-quality care they get from the Fargo VA Health Center. They are really good.

If you live in Williston, North Dakota though, it is an 800-mile round trip to the Fargo VA, 800-mile round trip. Now, we have a CBOC out there. And so it creates kind of an interesting dynamic with Veterans Choice because under Veterans Choice if you cannot get an appointment in 30 days or you live more than 40 miles from a VA facility, then you go in to your local provider.

So, not too far from Williston, but more than 40 miles, is Tioga. Now somebody in Tioga can go into Williston, go to Mercy Hospital, and get VA care under Veterans Choice. Somebody in Williston lives within 40 miles of a CBOC which has limited services and if they want more services they would have to drive all the way to Fargo, 800-mile round trip, under that provision.

So what we have worked to do is create the Veterans Care Coordination Initiative in North Dakota whereby we actually have the business center at the Fargo VA working with veterans to try to make sure that we empower people in places like Williston to—or authorize, I should say—them to go in to get local care rather than making that 800-mile trip which makes no sense. And it follows the old Non-VA Care model.

The point being you could have telemedicine, but you have to empower your people out there in the field and rural areas to make good common sense decision on when they can go and get care locally versus when they would have to come to a VA facility that can actually provide the care they need.

So talk to me in terms of as you develop telehealth telemedicine which you are doing in North Dakota which is coming and we will support you in that effort. Tell me how you are making sure that the medical professionals can do what makes sense for the VA client, the VA patient, and so you are getting them in to some place close where it makes sense when it makes sense and not having them caught up in the red tape. So it is both the technology and the capability, but it is also the empowerment of your healthcare providers out in the field.

Dr. GALPIN. I think that is a good question. I think that is a good question and I think that I will start out by saying that telehealth is an option for veterans, so veterans get to choose to do telehealth and if it is not the right solution for them. They can choose another option.

I think also for a provider you have to choose what makes sense for the veteran. What is the best way to provide the care? So it is there is a choice at the provider's side too. Is this appropriate? Is this the best way to provide it?

You are speaking, I think—I think I understand your question that in addition to having a telehealth option, we need to have

other options that are equally accessible to the veteran. And that right now——

Senator HOEVEN. I am saying with your telehealth: let's say you use your telehealth to determine that that patient needs a procedure that they cannot get from the CBOC in the community and it does not make sense to make them drive 800 miles round trip to get it.

Then does it follow on your telehealth you have got to be able to send him into that local hospital or other local healthcare provider to get that care when you cannot provide it through the CBOC or you are defeating both your regional system of CBOCs and your telehealth. You are putting him right back into driving 800 miles, you follow me, if you are not empowered to deliver that local care? Because you may make a diagnosis through your telehealth, but that does not mean you can conduct the operation.

Dr. GALPIN. No. And so we have to be comprehensive in the services we provide. We have to provide them at convenient locations. I think the telehealth only gets you so far. And in the situation you are describing, the telehealth got you to this point and now you still need a convenient patient centered system to allow you to get the next step in your care.

So I am agreeing with you. I think that it is in an area of our agency. That is more the Choice Program or the Non-VA Care Program, but I cannot speak to as an SME, but I hear your point. It is not—we cannot set up our system in isolation and not think about the next step. And so I am going to take away is what I think you wanted to make sure I walked away with.

Senator HOEVEN. I want you to be an advocate for the follow-on. In other words, I want you to go in and say, "Look, through telehealth we can make diagnosis. There is a lot we can do, but if we do not combine that with empowerment of our local health care providers in the field to send the person where they need to go and we do not have the flexibility to do it, you are going to defeat the effectiveness of the telehealth." So I want you to be an advocate in that process.

Dr. GALPIN. I hear you. Yes. Thank you. I appreciate that now and fully understand and can do that.

Senator HOEVEN. Thank you.

Senator MORAN. Senator Hoeven, thank you very much.

My understanding is Senator Schatz has concluded his questions. I hate to tell in front of Senator Hoeven that I am going to ask a second round, but you should go ahead and leave if you would like.

Dr. Galpin, you did a good job of using my time and so——

Senator HOEVEN. The Chairman asked such profound questions. If I did not have a time constraint, I would want to stay and learn, but unfortunately, I have to go.

Senator MORAN. Thank you, Senator Hoeven.

COST BENEFIT OF TELEHEALTH

I want to direct—well, first of all, maybe there is a question to Dr. Galpin. Is there any financial benefit, or at least not a disincentive, for the use of telehealth within a VISN? In other words, to try to ask the question more succinctly, you talked about it being cost effective, saves money in addition to prevention and hospitalization

and that kind of thing. Does the VISN reap the benefits of using telehealth such that they get to keep the dollars saved within their VISN?

Dr. GALPIN. Okay. So let me—I will go through just a little bit of where the cost benefits are.

Senator MORAN. Now do not take my full five minutes.

Dr. GALPIN. I will try not to. So, I mean, there is the travel reimbursement. So I am not exactly sure, you know, would they get to keep the money or not the money, but again last year \$24 million estimated in travel cost savings. If you are not paying for more advanced care like nursing home care, institutional care, hospitalizations which we show that telehealth can reduce, that money can be redirected to other patient care services.

Senator MORAN. Within the VISN?

Dr. GALPIN. I would imagine so.

Senator MORAN. Okay.

Dr. GALPIN. And that is, again, a little—I believe that their budget would be their budget. And we can confirm that when we look at the testimony.

The third space which we have not really even talked about and it does require the legislation again. And I apologize. I keep bringing that up. But, how critical it is. It is space. I mean, we—capital assets. I mean, the idea that when we want to expand services right now we are traditionally needing to build more spaces. Telehealth does not require traditional spaces and so you can have a provider working in an academic site in their private office, in a home private office as long as it is approved, so when you want to say, “I need to do more of this,” your barrier is how long does it take me to find the best doctor, not how long does it take me to lease or build a space.

Senator MORAN. All right. Let me follow up. The impediment is finding the physician, finding the provider. It is not acquiring the equipment. That is available. If you are a VISN director or you are a—I guess in this you told me it is going to be decided at the hospital level. If you are a director of a hospital in the VA in Wichita, Kansas, the Dole Hospital or the Colmery-O’Neil in Topeka, you have the availability of the equipment necessary if you decide to pursue more telehealth access?

Dr. GALPIN. So I would say it is a barrier, but it is a smaller barrier. We have a national blanket purchasing agreement for telehealth equipment to help facilitate people ordering and obtaining the equipment they need. I mean, depending on the clinic you are at you might not have space. I mean, we certainly hear that. We do not have space for the equipment. We do not have space for the personnel on the patient side or we cannot hire that person in this community because of the salary. I mean, so there are other constraints, but in general the equipment is available.

Senator MORAN. What does telehealth equipment cost? Is this a significant expenditure if you just?

Dr. GALPIN. Significant is certainly a relative term. I mean, I think it is something that I think our organization certainly has made a commitment to. It is not a nominal cost and to keep it refreshed and modern is a fairly sizable cost. But to outfit one clinic

compared to the other maybe activation costs of a clinic, I think it is a very reasonable——

Senator MORAN. What does the VA spend on telehealth?

Dr. GALPIN. So there is a big number and then there is——

Senator MORAN. Okay.

Dr. GALPIN. Smaller numbers and the big number, I do not know if I wrote it down, but when we looked at I think it was \$1.2 billion. That certainly does not come to my office, but that is what it is approximately estimated across the organization. And we can get that final number for you.

Senator MORAN. Thank you. Mr. Adcock, are there still—in the private sector at the University of Mississippi Health Systems are there still reimbursement issues that diminish the use of telemedicine? When a patient shows up with a “Blues” card or Medicare or Medicaid who gets compensated for providing that care?

Mr. ADCOCK. So in Mississippi, as far as state-based payers, there is not as much of a barrier anymore. We have legislation that was passed in Mississippi that requires parity for both telemedicine visits and remote patient monitoring. So we are able to be reimbursed there. There are some private payers that interpret those rules a little bit differently, but as far as Medicare, yes, there is an issue in getting paid for telehealth.

Senator MORAN. So at least in Mississippi you have solved the issue with Medicaid.

Mr. ADCOCK. Medicaid has been solved.

Senator MORAN. You may have solved the circumstance with the private payers.

Mr. ADCOCK. For the most part, yes.

Senator MORAN. In Kansas, generally the “Blues”.

Mr. ADCOCK. Right.

Senator MORAN. And the issue still is Medicare.

Mr. ADCOCK. Correct.

Senator MORAN. What is the challenge there?

Mr. ADCOCK. There are, and many of these will be addressed in the Connect for Health Act. Geographic restrictions—so it has to be in certain areas. They only pay for certain things. There is no reimbursement for remote patient monitoring at all. There is a code with chronic care management that can be used, but it does not cover the intensive program that we have with remote patient monitoring. So those are the biggest issues, geographic barriers and then no payment for remote patient monitoring.

Senator MORAN. It seems to me that in one of my visits to a hospital in Kansas the CEO of that hospital indicated that one of their providers, and I think it was psychiatric services, actually found a psychiatrist who lives in Arizona willing to provide services to a community in western Kansas, but could not get reimbursed related to the fact that the provider was out of State.

Mr. ADCOCK. We do not have those issues in Mississippi as long as they are licensed in Mississippi.

Senator MORAN. Okay.

Mr. ADCOCK. So it is by State. You have to be licensed in the state that you are providing care, but we can reimburse physicians from out of State.

TELEHEALTH ACCESS TO CARE

Senator MORAN. So your experience in Mississippi, what is the differentiation? What is the difference between what a veteran could receive in telehealth services through the VA versus what a patient with Medicare, Medicaid, or private pay could receive as a citizen that is not a veteran in Mississippi? Is the access—how would you describe?

Mr. ADCOCK. I think it is a differentiation in access. We have so many access points throughout the state that can be used by all of the others that you mentioned. As I stated, there are only ten access points in Mississippi for VA patients. That is something we could certainly—I would love to see layered on top so that we could work together to provide that service and utilize those access points.

Senator MORAN. So it is a fair statement to say that it would—if you want to use telehealth services you are less likely to be able to access those if you are veteran than if you are not?

Mr. ADCOCK. In Mississippi?

Senator MORAN. In Mississippi.

Mr. ADCOCK. I would say that we offer many more access points than they do at the VA. I would not want to say that—

Senator MORAN. I am not trying to trick you. I am—

Mr. ADCOCK. No, I understand.

Senator MORAN [continuing]. Trying to make sure that veterans have the same access to care that anyone else would have.

Mr. ADCOCK. Absolutely. And we certainly want that same thing. I think that there are access points that the VA does not currently utilize in the State of Mississippi.

Senator MORAN. Well, and this lends itself to my—I think final question or conversation with you, is I think your number was 68 percent, 68 percent of veterans in Mississippi do not access health care through the VA.

Mr. ADCOCK. According to the U.S. Census Bureau, 67 percent, yes.

Senator MORAN. And you do not know the next part of that, the next set of facts, where they do access health care?

Mr. ADCOCK. I do not. I do not have that information.

Senator MORAN. And it could be that they do not access health care at all.

Mr. ADCOCK. Could be.

Senator MORAN. Or they could be in your system or something else in Mississippi.

Mr. ADCOCK. Could be. Could be.

Senator MORAN. But there is a number out there that says 68 percent of veterans in Mississippi do not access health care through the VA.

Mr. ADCOCK. At the VA Health System, correct.

Senator MORAN. Okay. That may be taking you right back to the access point issue. I mean, in Mississippi. We have no Kansas witness here today, but it would be very similar to the circumstances we face at home. I am going to talk about that in just a second. Well, let me do that now.

I mean, we have CBOCs in Kansas. I talked about Liberal, Kansas, in which it has been more than 4 years since there has been a physician there. We have CBOCs that have hours two days a week and so actually getting to the telehealth side of the VA still is a huge challenge if your access point—if you are rural, you are a long way from Wichita, Topeka, or Leavenworth, and your access point should be something at home.

Now, let me ask this question. So under the Choice Act, you show up. The VA approves you to see a hometown physician. Does that physician then have the ability to refer—I am looking at you, Dr. Galpin? Does that hometown physician under the Choice Program, can he or she refer that veteran back to telehealth through the VA? Would that be an access point?

Dr. GALPIN. That I would have to get back to you on. I am just not familiar with that part of the Choice Program. I know the Choice Program is piloting the use of telehealth within the Choice Program, but the actual referral patterns I would have to get back to you on.

[The information follows:]

A Choice provider cannot formally refer a Veteran back to the telehealth program, but can work with the referring Medical Center, should appropriate telehealth services be available within the VA.

Senator MORAN. What my point is that lack of access points. One of the things we are trying to do to solve that is Choice. With permission, you can go see a hometown physician, be admitted to a hometown hospital, but it may turn out that the VA and even a more efficient way than Choice can provide services through telehealth, but I bet there is probably no physician who would think, “Oh, the VA has a telehealth program. We ought to refer you back to the VA and you can get the services through the VA at telehealth.”

I would guess there is no connection between telehealth at the VA and the Choice Program at the VA. That question or does that comment make sense?

Dr. GALPIN. Yes.

Senator MORAN. Okay.

Dr. GALPIN. Yes.

THE FUTURE OF TELEHEALTH

Senator MORAN. And then, Dr. Okamura, you heard Dr. Galpin tell me about the vision. From your experience, is the VA on the right track? Do you agree with that vision? Are they missing something? What they described is what we ought to have both at the VA and in the private sector or is there a differentiation?

Dr. OKAMURA. Thank you, Mr. Chairman. That is a really good question. And I was listening and trying to ferret out how this would actually impact Hawaii that has eight islands and the Pacific Islands region and the remote islands.

And just hearing your conversation on the access points, my question would have been at least in the past, the ability to kind of work with, and that is why in my written testimony you will see some references to some people that have really worked hard that are in leadership positions that really tried to do the outreach

through community share facilities and things so that the resources could be extended.

So, to directly answer that question, I am not certain at the present point in time. I would really like to see the VAPIHCS be able to—that is the regional side from Hawaii on out to the Pacific, have a little more resources and authority, be flexible, because I think that leadership has tried to build these bridges with the community providers.

That question that you just asked Dr. Galpin would have also been for me a different kind of question. It would have been, okay, so how can we work collaboratively to take advantage of these community access points when we do not have a physical facility to actually extend resources. But to get to that point, we then have issues of some other things like interoperability and shared information.

So I am listening to these. I am saying that as long as some of these other visions are articulated at a lower level and then at least the community can provide some input, I think that that would be very valuable. Thank you.

Senator MORAN. You are welcome. Thank you.

A couple of observations from your comments. There is often the circumstance in which I am sitting in this committee or in the authorizing committee which I serve on as well and the VA officials here who are testifying tell me what the circumstance is, but I go home and nobody has heard that story. And it could be the veteran, but often it is the people that work for the VA in Kansas. And so that communication could be strengthened.

The other part about access point is the access point, it could be just a phone call to Colmery-O'Neil in Topeka saying, "I need." We had a hearing last—a couple of days ago on suicide prevention within the VA. There is a hotline. That hotline could be an access point for telehealth services for psychiatric and mental health services. Is that true? There is another access point that we have not talked about which is just the telephone calling the VA or sending an email saying, "I need help."

Dr. GALPIN. Yeah. I mean, so one part of the vision I did not talk about was contact centers. And I think let me address a couple of things here because I think the idea of working with public private partnerships, I mean, that is something we would love to do. And one of the challenges we have is, again, about where our providers are licensed and what they are allowed to do across state lines because within the VA you can be licensed in any state and deliver services, but when you get outside of Federal property, then you start getting restricted.

So, again, this legislation is really critical to realize the vision. We really need to be authorized to deliver care to a veteran in any location and then we can really take advantage of, I mean, you know, libraries or post offices or academic sites or any private site where a veteran can come for care that would allow us to deliver that care, even if our provider is in another location.

So I just wanted to put it out there. I hear what the other part of the division is. That is something we would love to do. We just really are looking forward to the authority on that.

And then talking about access points, so I did not mention. There is so much that we are doing and trying to do at one time. I think it is very exciting, but, you know, one is we want a veteran to be able to contact us very simply and get not just what we have now which is scheduling, support, pharmacy, supported nurse triage, but licensed independent provider urgent type care. And you see this in the private sector. We would like to bring it into the VA.

And it would not necessarily just be by video. I mean, this could be—you could initiate with a text message. I think that is how a lot of us start communications. That would then going forward, looking at some new technologies, allow you to activate a video session right from that or an audio session. You could do an email.

So I think the point is we want it to be really easy to contact to us. We want veterans to have no real activation barrier for initiating or engaging with us in that communication. So I think part of the contact center is I think looking at access points outside Federal property. I think that is all critical. Again, we are looking for the authority to allow us to do that effectively. And, yeah, I mean that is part of the vision.

TELEBENEFITS

Senator MORAN. The final thing I would indicate and then I will turn it to Senator Schatz, in preparation for this hearing I found an article, we found an article from the Parson Sun, a community newspaper in southeast Kansas. And the bragging by the VA was a program that I had never heard of which is telebenefits. We have been talking all morning about telehealth, but the ability to access your benefits now is apparently available through a different program in which you connect with the VA to talk to somebody about getting your benefits. I suppose this goes back to you, Dr. Galpin.

Dr. GALPIN. Yeah. You know, that is not in my shop, per se, but I think it goes back to my comments that for everything that we deliver in the VA, I mean, for every clinical specialty I see a role for doing at least part of it virtually. So when people say, “Well, how about surgery?” Well, we are not going to do the operation virtually at this point, but, you know, at the post-op where we want to look at the wound or you are in the middle of the night concerned that it does not look right this is where you can get on the video call and show someone. So I think there is tremendous potential and it really is going to be integrated into pretty much everything we do.

Senator MORAN. The article says, “Parsons area veterans can now ask VA staff questions about their benefits face to face without driving to Wichita, the regional office.”

Dr. GALPIN. Perfect.

Senator MORAN. “For now, Parsons is the only site in Kansas with others to be added after the pilot site is running smoothly.” The director of that outreach, the coordinator, indicates that we are trying to do everything we can to access veterans where we are. And while we focused on telehealth, as you are confirming, there is other opportunities to better serve veterans who do not live next door to a VA office.

Senator Schatz.

Senator SCHATZ. I really want to thank the chairman for conducting this hearing. As some of you may or may not know, that for a subcommittee we have got a good level of participation on a bipartisan basis. And through the conversations, Senator Moran and I are going to look at the possibility of legislation specific to VA and telehealth and whether or not there are some additional resources that can be provided, authorities that can be looked at to try to assist all of you in your good work.

So my first question, and it is really a request, is to ask if you could work with our staffs to develop a kind of wish list going forward. You know, we have the Connect for Health Act. I know a lot of you are familiar with it and helped us to craft it. We have a good bipartisan group behind that legislation and I think that will only grow in this Congress, but this is a specific area of opportunity and I think the momentum is pretty strong. So we would like to work with you on some—in a certain way, it is a little more modest than the Connect for Health Act which is broader and outside of just VA, but we would like to get your recommendations and we think we could hit a good solid double, maybe a triple on this one.

TECHNOLOGY NEEDS

The final question I have is for Ms. Nelson-Brooks. Dr. Galpin talked about resources in response to Senator Tester's questions about, you know, what do you need? On the ground, what are your unmet needs when it comes specifically technology? I am thinking obviously hardware connectivity is one question. I am also wondering about the software and worry a little bit about there being, in terms of the way this stuff gets contracted out, that you end up having the software platforms that are not interoperable and you end up with the problem that you had with EMRs between DOD and VA.

And so I am just wondering since we are kind of at the nascent stage whether there is any guidance that the committee or the Congress can give to make sure that you do not end up with everybody having to contract their own software vendor and then by the time we are trying to do a national rollout we have got standards that do not fit. And then by the time you get your authorities to have the doctors serve across state lines, then we are dealing with software and jurisdictional and licensure questions that all do not match up. So I guess the first question is hardware and resources. The second question is the software aspect.

Ms. NELSON-BROOKS. Okay. So that is a great question. So we have had some challenges in some of the Pacific Islands, specifically American Samoa, when it comes to the infrastructure. In addition to that, we have had challenges in Guam. So the VA is able to provide hardware for patients who do not have access to their own Internet connection. And that hardware has been successful on Oahu and the neighbor islands of Hawaii, but we have experienced challenges in Guam because they do not subscribe to the same carrier that we have. So the carrier that we have is Verizon and Verizon 4G, so that is readily accessible on the neighbor islands, but not so much in Guam and American Samoa.

So it would be helpful if things like that are taken into consideration when we are looking at places like Hawaii because Hawaii

is unique and we do not experience some of the same challenges that other facilities across the country do.

In addition to that and going back to Dr. Galpin's issue on the licensure, Hawaii in and of itself is in the process of standing up two teleprimary care and telemental health hubs. One of the reasons for us putting the hub in the Pacific is in addition to serving the Pacific Islands we wanted to be able to capitalize on that time zone difference between Hawaii and the rest of the United States.

When it is five o'clock in California and we still have hours to go in our day, and so we would be able to——

Senator SCHATZ. I am ten minutes from calling my wife and kids this morning for breakfast, so.

Ms. NELSON-BROOKS. Right. So we would be able to provide some of the services going back towards the mainland in the event that we had capacity. And so we are restricted in that area currently by the regulations requiring licensure.

Senator SCHATZ. Thank you very much. Appreciate all of you.

Senator MORAN. Yes. Thank you very much all of you for your testimony.

Dr. Okamura, you highlighted for me. Senator Tester and I were talking as you talked about distance and miles and air travel, we always make this pitch about how rural our states are and the long distances people have to go. And you have increased my respect and admiration for the Senator from Hawaii, Senator Schatz, and the challenges that Hawaiians and Islanders face in regard to distance and time and travel.

Does any member of the panel wish to say something that they feel needs to be said before we conclude our hearing? Anybody feel like they have missed an opportunity to respond or say something or wants to correct something they said? Good.

A week from today we will have a hearing in regard to Choice. I had not realized the connection between telemedicine and Choice, but it gives us some additional information as we go to pursue how to make certain that the resources are available for the Choice Act as well.

ADDITIONAL COMMITTEE QUESTIONS

Senator MORAN. With that, I will conclude the hearing. Members who wish to submit written questions for the panel should do so by Tuesday of next week and this hearing is now adjourned. Thank you very much. Thanks for doing that.

QUESTIONS SUBMITTED BY SENATOR THAD COCHRAN

Question. I understand that the University of Mississippi Medical Center has used telehealth to provide mental healthcare services to patients throughout Mississippi. These services also are beneficial to VA patients. Mr. Adcock, could you tell us about this program at the University of Mississippi Medical Center? How have patients responded to this service?

Answer. Thank you, Senator Cochran, for the question and for your leadership. The Center for Telehealth at the University of Mississippi Medical Center (UMMC) has been providing telehealth services for over 13 years. Our program started in 2003 with our TelEmergency program, which connects rural hospital emergency rooms to the expertise of the level one trauma center and Board Certified Emergency Medicine physicians at UMMC. This program, like all of our telehealth programs, began as a solution to address the need for access to high quality emergency healthcare throughout rural Mississippi. This combination of expertise and technology allowed patients who would have normally been transferred to a higher level

of care to stay in their community and receive the same high level of care close to home. This program continues to be successful throughout Mississippi, but our Center did not stop there.

To meet the need for access to mental healthcare in Mississippi, UMMC next introduced TelePsychiatry services. While we have grown our telehealth program and now offer more than 30 medical specialties, to date, our Tele-Mental Health program is the most requested and most in-demand service of any of our offerings.

A primary benefit of telehealth is that it reaches patients where and when they need care. For mental healthcare, telehealth provides a way to deliver care in convenient locations without the stigma often associated with these services. A success story is our partnership with one of Mississippi's largest universities, where we offer Tele-Mental Health services in the university's student health center. Here, students receive the care they need without going into a traditional mental health or counseling center—instead, they are able to access this service in the convenience and anonymity of the student health center. The students have responded favorably, and the university has continued to grow the partnership and increase the availability of this service, demonstrating its value for meeting students' mental healthcare needs on campus.

Today, the UMMC Center for Telehealth has more than 200 telehealth sites located in 68 of Mississippi's 82 counties. We deliver this care in multiple settings, including: community hospitals and clinics, rural health clinics, federally qualified health centers, mental health clinics, universities, schools, corporations and the prison system. Delivering mental healthcare in any of these locations offers promising ways to bring this needed care to patients where and when they need it.

While we have been very successful in establishing live telemedicine along with store and forward telehealth programs across our state, one of the newest and we believe, most impactful, telehealth programs is our remote patient monitoring program.

Thank you for this thoughtful question.

Question. The University of Mississippi Medical Center now has many years of experience in telehealth, and Mississippi is considered a national telehealth leader. Mr. Adcock, given these years of experience, what do you see as the greatest opportunity for the use of telehealth in the future?

Answer. While our telehealth programs have been and continue to be successful, we still have work to do. We work daily on improving our current programs, expanding needed services, increasing access to high quality care and building new, needed programs. We continue to educate providers on the appropriate usage of telehealth and how it can help improve their practice and patients' health. We also continue to educate patients on how telehealth can improve access to high quality care close to home.

One of the greatest opportunities for the use of telehealth is in chronic disease management and prevention. Our remote patient monitoring program has demonstrated success in helping patients learn about their disease, engage in their own health and empowers them to improve their overall health.

Remote patient monitoring (RPM) is chronic disease management delivered to the patient where they live. This program started as a public private partnership in Sunflower County Mississippi as an attempt to address the overwhelming diabetes issue in the Mississippi Delta. The program provides patients with the education, engagement and empowerment they need not only to manage their disease, but also to improve their overall health status. The preliminary results from this pilot study exceeded our expectations with the following results: decrease of Hemoglobin A1C of 1.7 percent, 96 percent medication adherence, high rate of compliance with the daily health sessions and zero ER visits or hospitalizations over the first 6 months of the program. This resulted in a real savings of \$339,000 for the first 100 patients during the first 6 months. The Mississippi Division of Medicaid extrapolated this data and estimated that if 20 percent of the diabetics on Mississippi Medicaid participated and had similar results, the savings would be \$189 million per year. The pilot project ended in September of 2016, and we expect final results in the next 3 months.

We have expanded this program statewide and now manage multiple chronic diseases. These diseases include adult and pediatric diabetes, hypertension, heart failure, kidney transplant and bone marrow transplant. We will soon offer adult and pediatric asthma, chronic obstructive pulmonary disease (COPD) and other chronic diseases. This program allows patients to not only have real time monitoring, but also educates them daily on their disease and how to manage it.

While the management of chronic disease is extremely important, we also are working to prevent chronic disease and are developing virtual prevention programs to assist with this effort. These virtual prevention programs use technology that the

majority of Americans already possess and allow them to follow proven prevention programs from their own homes. These programs benefit the great number of Americans who are already at risk for developing chronic diseases.

There are many important ways that telehealth can improve healthcare delivery and the overall health status of our state and nation. Telehealth allows us to maximize our limited healthcare workforce and reach patients where they live. Telehealth is the only way that we are going to spread our current resources and improve access to care.

QUESTIONS SUBMITTED BY SENATOR TAMMY BALDWIN

Question. Dr. Galpin: you stated there were ten pilot projects within the VA working on telestroke. Can you provide the committee with the locations of these pilot projects?

Answer. VA is committed to providing the best and fastest acute stroke care to Veterans. In an effort to increase Veteran access to acute stroke care expertise, VA is implementing the first nationwide telestroke program.

On March 23, 2016, VA leadership approved funding for a five-year plan to establish a nationwide 'hub and spoke' telestroke program.

The program uses mobile devices (tablets) at 'both ends', to connect patient 'spoke' sites (i.e., VA emergency departments and intensive care units that lack on-site stroke expertise) to VA provider 'hub' sites with on-call telestroke neurologists.

Veterans with acute stroke symptoms are assessed in real-time via videoconferencing by the telestroke neurologist who advises the patient site physician as to the recommended diagnosis and treatment.

VA has established a roster of VA telestroke hub neurologists located throughout the country that are responsible for providing 24/7/365 telestroke coverage and has selected the first 10 patient 'spoke' sites. Initial pilot implementation is expected before the end of fiscal year 2017.

TELESTROKE PATIENT SITE SELECTION CRITERIA

VA chose the initial (Phase 1) telestroke patient spoke sites by reviewing the following criteria:

- volume of stroke patients seen in the preceding fiscal year (fiscal year 2015)
- response to a prior emergency department survey
- rurality of Veterans served
- lack of access to a nearby academic medical center
- availability of critical support services (CT scanner, CT tech on call 24/7, STAT labs), and
- facility interest as expressed in an exploratory teleconference with local leadership/key stakeholders, followed by an on-site assessment of the most promising candidates. Initial sites were also asked to help provide feedback and refine the program if selected as a Phase 1 participant.

CURRENT/POTENTIAL (PHASE 1) VA TELESTROKE PATIENT SPOKE SITES

- 1) VISN 21/Mather (Sacramento), CA
- 2) VISN 5/Martinsburg, WV
- 3) VISN 5/Clarksburg, WV
- 4) VISN 5/Beckley, WV
- 5) VISN 19/Muskogee, OK
- 6) VISN 23/Fort Meade, SD
- 7) VISN 1/Togus (Augusta), ME
- 8) VISN 15/Marion, IL

CURRENT (PHASE 1) VA TELESTROKE PROVIDER HUB SITES (WITH NUMBER PARTICIPATING)

- 1) VISN 1/West Haven, CT (4 neurologists)
- 2) VISN 7/Birmingham, AL (1 neurologist)
- 3) VISN 8/San Juan, PR (1 neurologist)
- 4) VISN 9/Nashville, TN (2 neurologists)
- 5) VISN 16/Houston, TX (1 neurologist)
- 6) VISN 19/Salt Lake City, UT (1 neurologist)
- 7) VISN 20/Seattle, WA (1 neurologist)
- 8) VISN 21/Mather (Sacramento), CA (2 neurologists)
- 9) VISN 22/Greater Los Angeles, CA (1 neurologist)
- 10) VISN 22/Long Beach, CA (1 neurologist)

All telestroke hub providers are centrally credentialed and privileged at the VA's Palo Alto Healthcare System, so that they can be available as a virtual resource for any telestroke spoke site; in addition to VA Palo Alto most VA telestroke providers are affiliated with a host/home VA medical center, although a few are new to the VA system and are solely telestroke providers through VA Palo Alto.

VA continues to recruit and credential appropriately trained, experienced providers.

Please note that two VISN 12 sites, Iron Mountain, MI and Danville, IL, have declined to participate in VA's national telestroke program at the present time.

Question. A June 2015 VA Office of Inspector General healthcare inspection report on the treatment of a veteran in Wisconsin recommended that the VA, "review current acute stroke treatment policies, and assess the use of telehealth evaluation . . ." The VA Agreed with the recommendation and stated, "At this time, VHA does not have national or local guidance for Emergency Department stroke management using telehealth." Please provide the committee with VA's national guidance for Emergency Department stroke management using telehealth.

Answer. VHA has developed a "Telestroke Packet" to guide facility stroke management using telehealth. The packet includes a detailed protocol, actions and guidelines, supplemental information, forms, orders, templates, step-by-step instructions, checklists, and Frequently Asked Questions. "VA's telestroke packet is available upon request."

Question. Published on November 2, 2012, VHA Directive 2011-038 deals with the Treatment of Acute Ischemic Stroke (AIS). This VHA Directive expired on November 30, 2016. Please provide the committee with the current VHA Directive on the Treatment of AIS.

Answer. VHA Directive 2011-038 "Treatment of Acute Ischemic Stroke," future Directive 1155, has been drafted, undergone technical review, and has been circulated internally to program offices and the field for comments. The comments are currently being compiled and addressed, and will undergo review by VHA medical ethics officials regarding consent issues. After these issues are addressed, the final reviews by VA leadership will take place before publication.

Question. The VA has three classifications of VA facilities for stroke care: Primary Stroke Center, Limited Stroke Facility and Supporting Stroke Facility. Right now, Supporting Stroke Facilities (SSF) are not required to stock the clot-busting drug, TPA, yet each year veterans present to SSF's with stroke symptoms. Can you provide the committee with the number of veterans who presented at a SSF with stroke symptoms in 2016, or in the previous year in which that data is available? If this data is not available, please inform the committee if it is because the data is not collected, or if it is because the VA cannot aggregate the data from each SSF.

Answer. In calendar year 2016, 2,338 Veterans presented to a VA supporting stroke facility (SSF) with stroke symptoms.

SUBCOMMITTEE RECESS

Senator MORAN. We will stand adjourned.

[Whereupon, at 12:12 p.m., Thursday, May 4, the subcommittee was recessed, to reconvene at a time subject to the call of the Chair.]