U.S. Senate Appropriations Subcommittee on Military Construction/Veterans Affairs hearing: Telemedicine in the VA: Leveraging Technology to Increase Access, Improve Health Outcomes, and Lower Costs

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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 two 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 health care 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, health care 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) health care 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.

Successes in Health Information Technology and Telehealth

The VA is the largest integrated health care 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 FY 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 health care facilities in the U.S. This includes improved algorithms for identifying high risk re-admission patients who need closer monitoring and additional health care 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% reduction of hospital bed days care and 32% 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% of the total Gross Domestic Product (GDP) of the U.S., and was expected to rise to 19.9% 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 (P.L. 115-26) aims to extend access to services for veterans in their own communities by authorizing and partnering with non-VA health care facilities. This provides opportunities for reduction of wait times for veterans and more frequent care that can result in less complications, less readmissions and health care 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 health care 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 health care 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 health care 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 health care 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 health care 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 health care 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 health care 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 health care 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 health care 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 health care 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.

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