



MATURING VIRTUAL CARE IN TRIBAL COMMUNITIES

eHealth Initiative Roundtable Summary & Spotlight



Roundtable Panelists:

- **Moderator: Jennifer Covich Bordenick- Chief Executive Officer, eHealth Initiative and Foundation**
- **Mitchell Thornbrugh, Chief Information Officer, Indian Health Service**
- **Dr. Eric Ritchie, Clinical Director, Chinle Service Unit**
- **Dr. Justin Iwasaki, MPH, Director of Special Projects, Lummi Tribal Health Center**
- **John Sun, Vice President of Indian Health Service and Rural Health, Philips Healthcare**

Overcoming COVID-19 Data Challenges in Tribes

ROUNDTABLE DISCUSSION BY EHEALTH INITIATIVE

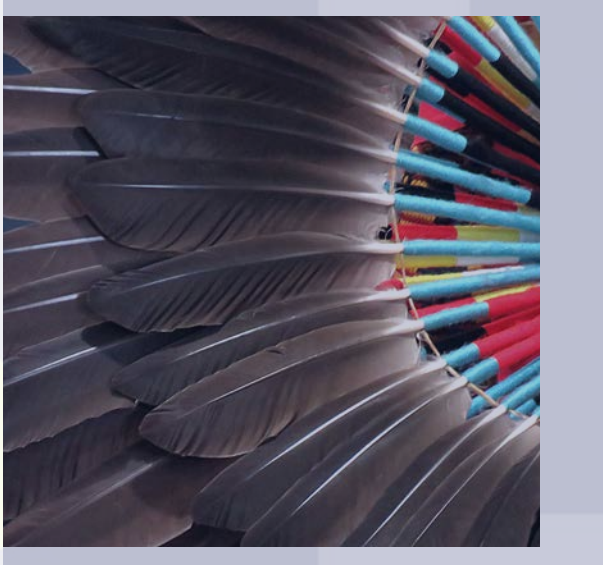
“*When thinking about the future of tribal communities, I entertain the idea that you can leap frog technology. I would hope that we challenge ourselves not to think about just reinventing what exists everywhere right now but actually try to figure out what will be relevant in 10 years and hopefully make that jump.*”

- Dr. Justin Iwasaki

This Executive Roundtable Panel focused on how Native Americans/Alaskan Natives are using telehealth to reach patients in resource constraint communities to combat the COVID-19 pandemic. The discussion addressed the data gaps and challenges, funding sources, the existing digital divide and provider innovations in the delivery of care.

Setting the Stage: Technology at the Core of Telehealth

MITCHELL THORNBRUGH, CHIEF INFORMATION OFFICER, INDIAN HEALTH SERVICE



Indian Health Service Overview:

The IHS provides a comprehensive health service delivery system for approximately 2.6 million American Indians and Alaska Natives.¹ It serves members of 574 federally recognized tribes and has an annual budget of \$6 billion FY21.² IHS staff consists of more than 15,000 employees; including nurses, physicians, pharmacists, sanitarians, physician assistants, and dentists.

Telehealth Strides:

80% of telehealth services in IHS facilities are audio-only because of challenges with internet connectivity and affordability. Nevertheless, there have been major strides with the use of telehealth by the IHS:

- Provided outreach, education, and better clinical documentation
- Developed IHS telehealth toolkit
- Offered multiple telehealth webinars
- Expanded telehealth listserv
- Performed market research for a new cloud-based telehealth platform
- Obtained leadership approval for the Telemedicine Service Category (M) to be workload reportable
- Provided guidance for standardization of EHR visit configuration and coding to improve accuracy

Strategies to Combat COVID-19:

Data shows that Alaska American Indian and Native people have a high prevalence of diabetes and comorbidities which increases susceptibility to COVID-19. Their populations have a high number of risk factors including obesity, heart diseases, lungs, and kidney diseases. Thus, to combat the spread of the virus the following strategies were deployed:

- Prevention- masks, wash hands, 6-ft apart, vaccinations
- Testing- the goal is to reduce positivity to below 10% recently lowered to 5%, early distribution, and access in rural communities
- Treatment- telehealth and culturally competent care
- Recover- resumption of services
- Track- track measures, publish, and share

Looking ahead:

On March 11, President Biden signed the American Rescue Plan Act of 2021. The Act appropriates a total of \$6.1 billion for IHS. These funds are directed toward COVID-19 testing and contact tracing, vaccine activities, and public health infrastructure.

The pandemic shone a light on existing challenges within the IHS data infrastructure, including the electronic health record (EHR) system. This presents significant hurdles from a data-sharing standpoint when trying to aggregate data for populations and filter data at the local level for reporting.

Looking at modernizing the health IT infrastructure, the clear priority is the effective management and movement of data to help achieve interoperability with the VA and tribal partners, while ensuring that data can be shared with any of the community partners. Thus, the IHS is launching the Four Directions Hub pilot that looks at connecting remote patient monitoring (RPM) devices to the VA's infrastructure to set communities up for modernization.

“Our greatest challenge during the pandemic was the lack of access to needed data from state records and Indian Health Service records, to find out who tested positive so that we could contact individuals to conduct contact tracing. Our state became overwhelmed with COVID-19 cases and we still were not contacting anyone even though we had the resources to do contact tracing; the lack of data is what stopped us. Because of this we could not get our contact tracing unit up and running until last October 2020 even though we could have started this back in June.”
- Anita Frederick, President, Tribal Nations Research Group (attendee)



Supporting Native American Communities Through Navajo Area Indian Health Service

DR. ERIC RITCHIE, CLINICAL DIRECTOR, CHINLE SERVICE UNIT

Overcoming Connectivity Challenges:

When talking about some of the challenges of delivering telehealth services in extremely rural and isolated locations, Chinle in the Northeastern corner of Arizona is a prototype for what it would be like to try to build a telehealth program in a place with very little infrastructure and connectivity.

Roughly one-third of the Navajo residents living on the reservation are still without electricity or running water in their homes. The infrastructure for cell phone and internet services is also inadequate. Thus, there are some real challenges to building a high-quality telehealth system and innovation was necessary to overcome these infrastructural challenges and deliver telemedicine services during the pandemic.

Early in the pandemic, the Chinle Service Unit expeditiously rolled out audio-visual telehealth visits at many of their clinics. Providers initially were asked to do most of the grunt work and kept a log of their encounters and issues they were facing when they were trying to make these connections. They soon realized that the quality of the connection was simply too poor to deliver high-quality healthcare over these platforms into people's homes on the reservation. Only about 0.16% of Apache County has access to high-speed internet.

Thus, to bridge this connectivity divide, Chinle brought their patients to locations where telehealth could be conducted and carefully managed in-person contact and the risk of COVID-19 transmission.

- They conducted in-person provider-remote encounters. This allowed them to engage some of their high-risk providers who were older or had underlying health conditions to work in a safe but remote environment.
- Chinle diverted sick patients to another location by seeing positive screening COVID-19 patients in a different location over a telemedicine connection. This allowed them to save a lot of PPE in the early stages of the pandemic and, interestingly allowed more of their providers to get comfortable using the Cisco platform.
- Chinle deployed iPads into the field for patients with poor internet connection in collaboration with IHS by putting iPads into the hands of tribal health workers who knew how to reach patients. The iPads were connected to a faster cellular network reserved for healthcare emergency first responders. This brought the technology directly into people's homes, allowing for a stable, high-quality audio-visual connection with a provider without needing to go into the facility.
- Chinle brought patients in person to use its IT infrastructure for remote specialist visits. This helped their patients to avoid risky travel to another location.
- Chinle set up telehealth kiosks in chapter houses, senior centers, and other places that are easy for patients to access.

Post-pandemic all of the above strategies can and should remain in place and be scaled to expand the ability to provide care to patients in resource-challenged and infrastructure-deficient communities.

Community Partnership:

One of the strengths of the Navajo area COVID-19 response was the unified coordination between federal IHS leaders and tribal leaders who were working together very early in the pandemic to disseminate information, plan, and share best practices. There were frequent virtual town halls with community leaders and chapter officials in order to make sure that local government was well informed of resources and changes related to COVID-19.



Examples from the Field, Innovative Strategies and Methods to Support Communities

**DR. JUSTIN IWASAKI, MPH, DIRECTOR OF SPECIAL PROJECTS,
LUMMI TRIBAL HEALTH CENTER**

New Telehealth Programs:

Prior to COVID-19, the Lummi Tribal Health Center, located in Bellingham, Washington, only offered one telehealth program: teleophthalmology. Today, they do telehealth visits in psychiatry, physical therapy, dentistry, and in fact, their behavioral health program is now 100% telehealth versus zero prior to March 2020. The majority of their visits are done by video conference using Zoom as a platform. On any given day, 60-70% of visits are performed via telehealth. Fifty percent of these visits are done with unreliable internet connections.

- The physical therapy telehealth program is very promising as it is convenient for the patient. A lot of successful physical therapy is done in the patient's own home environment using chairs or other tools around the house.
- The dental telehealth program utilizes oral cameras that are sent out to the patient to take photos of their tooth. Their providers can do triage based on the photos and determine the urgency of the case. Lummi Tribal Health also sends the patient a home kit where they can do basic temporizing measures while awaiting a full visit.
- Behavioral health fully converted to telehealth and grew for both individual and group sessions. The unique aspect of telehealth for behavioral health, especially in tribal communities, is the privacy that it allows as communities are very small and unfortunately behavioral health services are still heavily stigmatized. Patients fear being seen by people they know, and telehealth provides a level of privacy that helped to increase adoption. There is now a higher volume of visits than prior to the pandemic and no-show rates have decreased by 40% for all of Lummi Tribal Health's telehealth programs.

Challenges:

Patients seem to generally enjoy telehealth however there are some challenges that have been encountered:

- Lack of privacy in high-density households – Many patients have up to 12 people living in a 3 bedroom home and struggle to find a quiet space to do the visit.
- Lack of reliable broadband connectivity– Over 50% of the telehealth visits provided are interrupted or made more difficult by the lack of access to reliable internet.

Connectivity Solutions:

The solution Lummi Tribal Health Center deployed was to bring the patient to the internet. This was done by the following:

- Delivering iPads to patients' homes in order to complete telehealth using cellular networks.
- Bringing iPads to cars in the health center parking lot in order to conduct a telehealth visit using the broadband network of the health center while still minimizing personal contact and potential COVID transmission.
- Utilizing telehealth kiosks.



Solutions to Improve the Delivery of Virtual Care

**JOHN SUN, VICE PRESIDENT OF INDIAN HEALTH SERVICE AND RURAL HEALTH,
PHILIPS HEALTHCARE**



We are living in a time where global trends are disrupting the health technology industry, challenging the way we deliver value to customers and increasing demand for integrated offerings. Modernized healthcare can be visualized as a continuum that begins with the consumer and goes well beyond the interactions that occur within a clinical setting. Philips is working towards modernizing and transforming the delivery of quality healthcare through virtual care to achieve their mission of improving the lives of 3 billion people by 2030.

Virtual care as an ecosystem has no specific entry point and dictates that the solution must be able to address care at any level and any time in order to dynamically respond to the healthcare needs of patients or consumers, regardless of where they are or come from. Openness to and rapid scaling of new technologies – namely telehealth – makes this level of virtual care possible. Telehealth services are growing exponentially; during the first quarter of 2020, the number of telehealth visits increased by 50% compared with the same period in 2019. Providers and staff are learning to adjust to this demand, which has spiked during the pandemic, seeing 50 to 175 times the number of patients via telehealth solutions than they saw before the COVID-19 pandemic.

Leveraging Technology:

Philips has developed virtual care solutions that leverage technology innovations to reach patients no matter where they are located. This technology is critically important for members of tribal communities who live in rural or underserved areas without easy access to a hospital, those with chronic conditions who need ongoing monitoring and coordinated care in low-acuity settings, and those with disabilities for whom a trip to the hospital or the rehabilitation facility may be unnecessary. Virtual care also offers crucial intensivist and specialist support, addressing potential staff shortages, lack of clinical expertise, and possible staff burnout, all while improving patient outcomes. Virtual care solutions from Philips include:

- Enterprise Acute Telehealth– Centralized physiological monitoring for ICU, Med/Surg, ER, & General Ward
- Tele-radiology– Addressing the increased shortage of radiologists, as well as the pressing need to improve access to precision diagnosis
- Virtual Care Stations– Private, secure telehealth consultation locations in town buildings, community centers, and retail settings
- Remote Patient Monitoring– Management of chronic conditions, wellness visits, and maternal/fetal monitoring within the home
- Tele-dentistry– Dental evaluation, personalized evaluations, and ongoing advice for improvement of oral health

Data Management Solutions:

A virtual care ecosystem must have a centralized platform to connect these devices, collect and aggregate patient data, store and share data securely, and incorporate advanced analytics capabilities such as AI and machine learning to turn the data into actionable clinical intelligence. ns to accelerate the transformation of care delivery models.

This roundtable session continued to reveal that every tribe is implementing different solutions. Philips believes that innovations and partnerships in healthcare – particularly when facing challenges such as those that tribal communities see every day – can lead to incredible results and patients receiving the quality care they deserve, no matter where they live.