TELEHEALTH IN ALASKA Looking Forward 2/17/2021



Cindy Roleff MS, BSN, RN-BC Telehealth Director of Program Development



Outline

- What is telemedicine?
- What does it look like in Alaska?
- What are the needs?
 - Connectivity
 - Reimbursement
 - Regulatory standards
 - Telemedicine education
- Recommendations

What Is Telemedicine?

- American Telemedicine Association:
 - "<u>Telemedicine</u> is the use of medical information exchanged from one site to another via electronic communications to improve a patient's clinical health status."
 - The ATA treats <u>telemedicine</u> and <u>telehealth</u> as synonyms and uses the terms interchangeably.
- Mode of healthcare delivery, not a separate service line
- Types of telemedicine
 - Store & Forward (often referred to as asynchronous)
 - Video (to clinic, inpatient, homes, etc.)
 - Remote Patient Monitoring

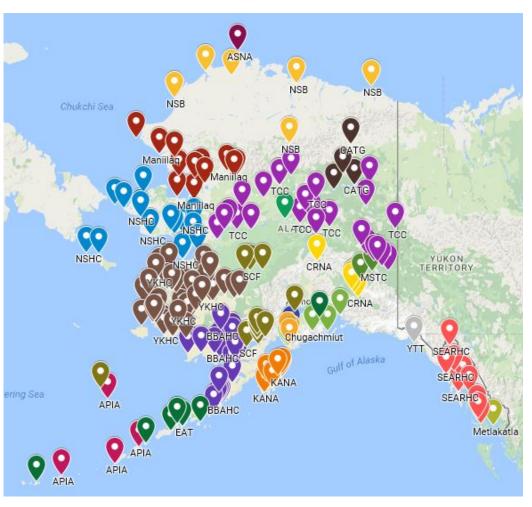
AK Communities & Tribal Sites Currently Served

75% Alaskan communities not connected by a road to a hospital (47th in road miles) & 25 of these have no airport.

25% Alaskans (46% of Alaskan Natives) live in communities of <1000 people.

Rural residents travel an average of **147 miles** one way for access to next level of care.

Population density is 1.1 persons/mile² (70 times smaller than the national average.)



30 Organizations

- Serve 172,000 AI/AN
- 200+ sites
- 7 Hospitals
- 1 shared domain EHR with 2/3 of sites on satellite links

2001 Single Store & Forward Solution

2013 Single Video Solution

Alaska Telehealth Outcomes

- ✓ Increased access to care & specialty care
- ✓ Increased provider and patient satisfaction
- ✓ Coordination of transition from hospital to home
- ✓ Limit difficult travel
- ✓ Save costs
- ✓ Increased family involvement
- ✓ Multi-site visits
- ✓ Mentoring and teaching
- ✓ "In home" care

- Ferguson AS, Kokesh J, Patricoski C, Hofstetter PJ, Hogge, N. "Impact Of Store-And-Forward Telehealth in Alaska: A Seven Year Retrospective". Alaska Native Tribal Health Consortium, 2008.
- Kokesh J, Ferguson AS, Patricoski C. "Preoperative planning for ear surgery using store-andforward telemedicine". Otolaryngology-Head and Neck Surgery, 143:253-257, 2010.
- Hofstetter PJ, Kokesh J, Ferguson AS, Hood LJ. "The Impact of Telehealth on Wait Time for ENT Specialty Care". *Telemedicine and e-Health*, 16(5):551-556., 2010.
- Kokesh J, Ferguson AS, Patricoski C, LeMaster B. "Traveling an Audiologist to Provide Otolaryngology Care Using Store-and-Forward Telemedicine". *Telemedicine and e-Health*, 15(8):758-763, 2009.
- Kokesh J, Ferguson AS, Patricoski C, Koller K, Zwack G, Provost E, Holck P. "Digital images for postsurgical follow-up of tympanostomy tubes in remote Alaska". Otolaryngology-Head and Neck Surgery, 139:87-93, 2008.
- Patricoski C, Kokesh J, Ferguson AS, Koller K, Zwack G, Provost E, Holck P. "A Comparison of In-Person Examination and Video Otoscope Imaging for Tympanostomy Tube Follow-Up". Telemedicine Journal and e-Health, 9(4):331-344, 2003.
- Patricoski C, Ferguson AS, Brudzinski J, Spargo G. "Selecting the Right Digital Camera for Telemedicine-Choice for 2009". *Telemedicine and e-Health*, 16(2):201-208., 2010.
- Patricoski C, Ferguson AS, Tooyak A. "A focus tool as an aid to video-otoscopy". *J Telemed Telecare*, 9:303 305, 2003.
- Patricoski C, Ferguson AS. "ECG acquisition using telemedicine in Alaska". Alaska Med, 45(3):60-63, 2003.

Current Store & Forward Services

Since 2001, Telehealth Utilization has resulted in:



78% of all Alaska Natives involved







All ANMC clinics use AFHCAN for referrals. The following also use it for telemedicine consultations:

- Allergy/Immunology
- Cardiology
- Dermatology
- Diabetes
- Endocrinology
- Emergency Medicine (limited)
- ENT

- Gastroenterology
- General Internal Medicine
- Hepatitis
- HIV/EIS
- Infectious Disease
- Maternal Fetal Medicine •
- Nephrology

- Neurology
- Neurosurgery
- Oncology
- Orthopedics
- Pain Clinic
- Palliative Care
 - Primary Care
- Pulmonology

- Rheumatology
- Sleep Clinic
- Surgery Clinic
- Urology Clinic
- Wound Care
- Women's Health



Current Video Services

2019 volume was 2,500; 2020 volume was 13,500

- Adolescent Medicine (Contracted provider at Seattle Children's)
- Adult Occupational Therapy
- Adult Physical Therapy
- Adult Speech Language
 Pathology
- Allergy/Immunology
- Cardiology
- Dermatology
- Diabetes
- Endocrinology

- Emergency Medicine (limited)
- ENT
- Gastroenterology
- General Internal Medicine
 - Hepatitis
- HIV/EIS
- Infectious Disease
- Maternal Fetal
 Medicine
- Nephrology
- Neurology

- Neurosurgery
- Oncology
- Oncology Nutrition
- Orthopedics
- Pain Clinic
- Palliative Care
- Pediatric Cardiology
- Pediatric Endocrinology
- Pediatric Neurology
- Pediatric Occupational Therapy
- Pediatric Physical Therapy

- Pediatric Pulmonology
- Pediatric Speech
 Language Pathology
- Pediatric Surgery
- Primary Care
- Pulmonology
- Rheumatology
 - Sleep Clinic
 - Surgery Clinic
- **Urology Clinic**
- Wound Care
- Women's Health



CONNECTIVITY

Broadband

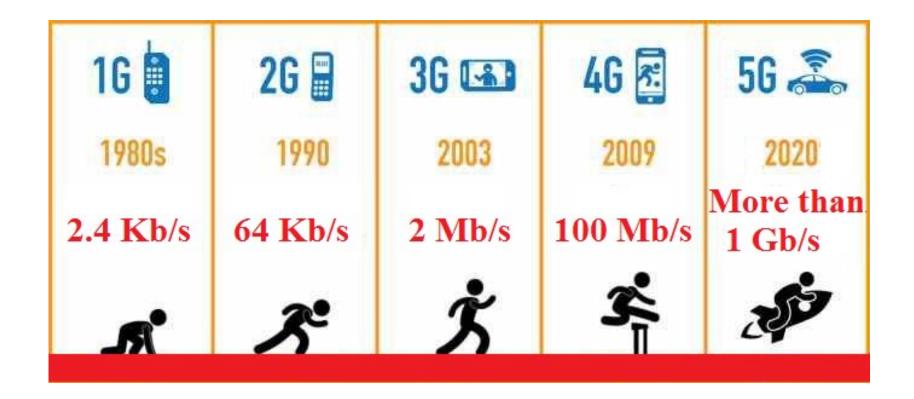
- What is it? (<u>www.healthIT.gov</u>)
 - High speed internet access (not dial up) so quicker data transmission
 - Access is constant
 - Allows for quality videoconferencing (large amounts of data)
 - Allows meaningful use of electronic health records and multiple telehealth data transmission applications
- Information transmitted can help in assessment, diagnosis and developing treatment plans through quick access to records, labs, radiology, external images, sounds (e.g. stethoscopy), etc.

Internet Access & Telemedicine

- "Last Mile" refers to getting telemedicine into a patient's home
- According to the FCC (2019 report), "24 million Americans and 31% of rural households do not have access to broadband internet at home. Certain internet service providers simply refuse to cover these rural areas, while some rural Americans can't afford broadband access, which can easily cost over a \$100 a month."
- The more remote, the greater the need for telemedicine
- The worse the experience, the less likely the provider or patient is to try it again

Supporting in Home Telehealth

40% of our Communities are on 2G

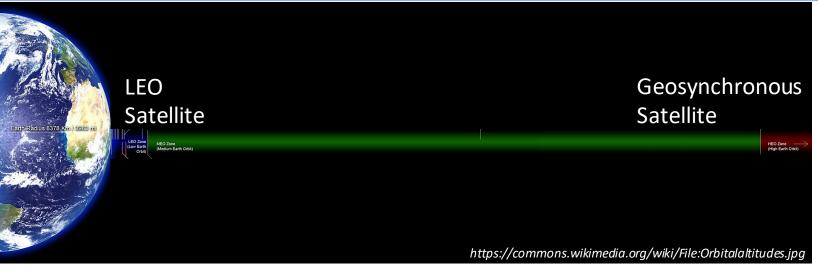


Current Hot Topic (few funding examples)

- Feb 2021 Tribal Broadband Connectivity Grants Program \$1B
- Jan 2021 HHS \$8M funds Telehealth Broadband Pilot program
 - Aims: design and deploy technologies to measure bandwidth and quality of connectivity in clinics and homes, and relate these measurements to the quality and ability to conduct telehealth in rural areas
 - \$6.5M to ANTHC's TTAC to implement in communities in AK, MI, TX and WV.
 - \$1.5M to University of AR to evaluate the program in communities & serve as a resource
- Jan 2021 USDA \$4.6M for broadband in underserved areas in rural Georgia
- Dec 2020 FCC selected 180 companies / \$9.2B to implement broadband networks in unserved areas in the US & Northern Mariana Islands.
- Dec 2020 Congress included \$7B new funding for broadband purposes targeting traditionally underserved communities

Low Earth Orbit Satellites

50% AK Tribal Health
 System relies on
 satellite connectivity
 and terrestrial (ground
 based) for the rest.
 Both very expensive.



- LEOs are about 20X closer to the earth, round trip time (ground to satellite & back) much improved over the geosynchronous 0.6 seconds
- Availability per user in rural areas would be very high
- Cheaper to start, operate and pick up transmissions likely that it could greatly reduce cost & increase access for rural homes, schools, etc.
- Download & upload speeds both excellent critical to telehealth

CONNECTIVITY (USF Funded) IS REQUIRED FOR PATIENT CARE

of Tribal Health Organizations in Alaska rely on a hosted EHR located in the lower 48.

of all tribal health care sites in Alaska depend on connectivity to reach the EHR being used at the facility.

100% of all tribal health sites rely on connectivity to communicate to the next level of care to transfer patients, to communicate with patients, and to manage care of their patients.

Tribal Health Organization

Alaska Native Tribal Health Consortium

Aleutian Pribilof Islands Association

Chugachmiut

Copper River Native Association

Eastern Aleutian Tribes

Kenaitze Indian Tribe

Kodiak Area Native Association

Maniilaq Association

Mount Sanford Tribal Consortium

Native Village of Eklutna

Native Village of Eyak

Norton Sound Health Corporation

SouthCentral Foundation

SouthEast Alaska Regional Health Consortium

Yakutat Tlingit Tribe

Chickaloon Native Village

Knik Tribal Council

Native Village of Tyonek

St. George Traditional Council

Native Village of Chitina

Bristol Bay Area Health Corporation

Arctic Slope Native Association

Metlakatla Indian Community

Yukon-Kuskokwim Health Corporation

Sel dovia Village Tribe

Ninilchik Traditional Council

Council of Atha bascan Tribal Governments

Ketchikan Indian Community

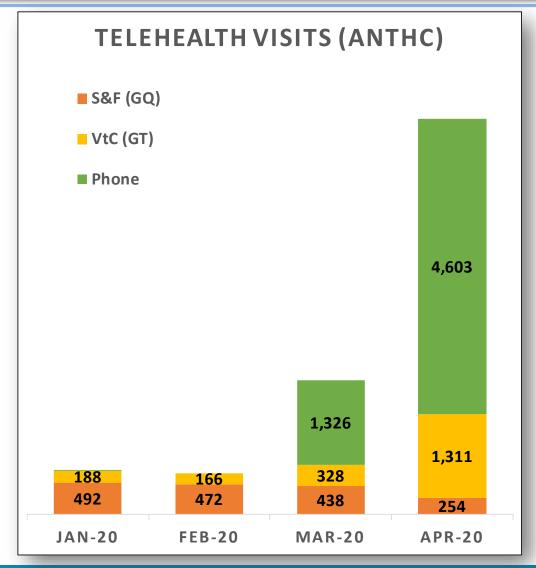
Tanana Chiefs Conference

Tanana Tribal Council

Native Village of Karluk

North Slope Borough

2020



- Total Telehealth Visits jumped from 650/mo to 6,200/mo
- Phone visits are the dominant usage
- We needed to actually "see" more patients with video

Tested in Our World

REAL WORLD

LOW SPEED: 40% of our communities are on 2G

BIT LIMITS: Many communities have a 7 GB data cap/month

PRODUCTS

Doxy.me—primarily suited for DTP/DTC.

AmWell – market leader
InTouch Solo –works for DTP/DTC
and clinic-to-clinic.

Zoom – great general purpose VtC **Cisco Meetings (IHS)** – May work

for clinical care, worth looking at

for general purpose VTC

Microsoft Teams – May be good general purpose VTC
Vidyo Connect –current solution and include as the baseline

Vidyo IO – Next generation Vidyo

LAB TESTS

- Variable Speeds
- Clean
 Terrestrial
- Clean Satellite
- Dirty Satellite
- Horrible
 Network
- Functionality



Connectivity Outcomes

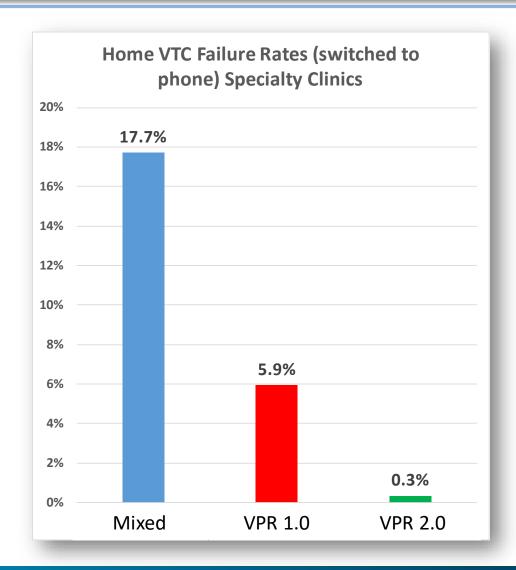
Visit "Failures" for ANMC Specialty Clinics

Mixed VTC platforms 554 (98 failed, 18%) & Processes

Standard process, 1,096 (65 failed, 6%) prior platform

Standard process & 614 (2 failed, <1%)
Zoom platform

Some success due to figuring out areas where video was impossible



Telehealth is Not Just About Bandwidth

- All solutions aren't equal some work better in certain situations
 - Satellite vs. fiber vs. microwave
 - Download vs. upload speeds
- Jitter, latency, reliability and dropped packets also contribute to quality
- Cost governments, businesses, schools & individuals
- Patients may run out of bytes & have to pay for more or may not even purchase in the first place

Provider Education About Broadband

- Know what is available and what is not
- Know how to use tools & troubleshoot problems
- Be ready with a back up plan for technology failure
- Lobby for improvements

Leverage Technology

ZDONOTUSEIP TWO

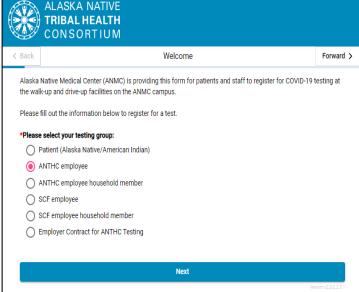
VIRTUAL

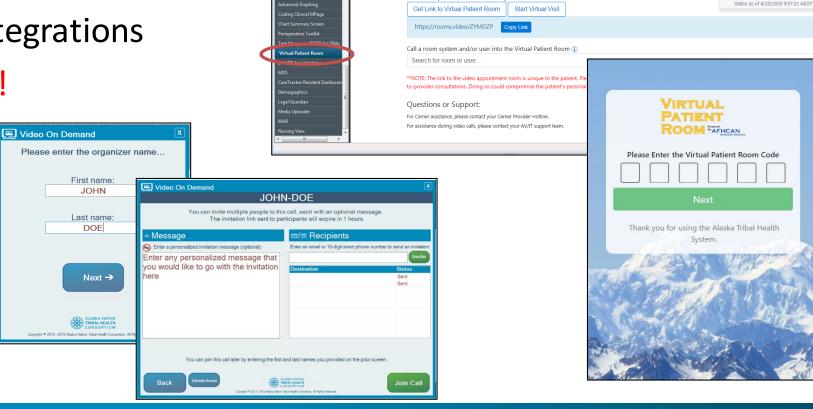
ROOM FAFHCAN

Generate a patient room link and/or join the room

No Outside Document

- Design for and with patient and provider input
- Intuitive, time saving, simple access
- Prompts/helps, Integrations
- Need connectivity!





🛂 New Sticky Note 🤧 View Sticky Notes 🎅 Tear Off 🎇 Suspend 🦽 Charges 🤣 Charge Entry 📲 Exit 📋 Calculator 🍇 AdHoc 💵 Medication Administration 🚣 PM Conversation 🕶

List → Mar Recent •

Room status

@ The room is currently open.

Click the button to lock it

🗇 Full screen 👼 Print 💸 10 minutes ag

April 10, 2020 9:57 AKDT

REIMBURSEMENT ISSUES & REGULATORY CONCERNS

Reimbursement

- Who pays? Medicare, Medicaid, Private Payers, ERISA (self-insured company plans), Patients (self-pay)
- Center for Telehealth and eHealth Law (CTEL)
 - The absence of consistent, comprehensive reimbursement policies is often cited as one of the most serious obstacles to total integration of telehealth into health care practice. This lack of an overall telehealth reimbursement policy reflects the multiplicity of payment sources and policies within the current United States health care system.

https://www.hrsa.gov/sites/default/files/healthitBACKUPJan6-17/telehealth/reimburse.pdf

- Rules vary according to modality, patient location, type of practitioner, type of service, payer, state, etc.
- Phone encounter reimbursement needs to continue for areas where video will not work at all
- Telehealth reimbursement policy needs to align with logic applied for other encounters and based on assessment done and care provided.

Regulatory Issues

- Licensing (state regulated)
 - Applies to where patient is physically located
 - Interstate compacts, telemedicine special purpose licenses, some narrow exceptions during the PHE
- Credentialing & privileging at the facility where patient is located when required
- Prescribing
 - Individuals have to look at definitions that pertain to their practice, organization, board & state related to patient-provider relationship, what an "adequate" physical exam means, different rules for controlled substances, etc.
- Malpractice coverage in all states where patients are located
- Security & Privacy provider physical space, patient physical space and virtual space

TELEHEALTH EDUCATION

Programmatic Knowledge

- Many come out of school unprepared for telemedicine
 - OJT is terribly inefficient
 - Standards of care do not change, but how you meet them may
 - This often leads to either pushing forward without needed support or not utilizing a needed mode of service delivery for patient care

- Many don't appreciate the complexity & risks involved: need to collaborate with experts
 - Licensing & Credentialing
 - Billing & Coding
 - Health Information Management
 - Informed Consent
 - Prescribing
 - Security & Privacy
 - Malpractice
 - Workflow design & patient selection
 - Technology
 - Payers and legislators
 - Boards



Practical Knowledge

- Choosing the right equipment and knowing how to use it
- How to get the best possible assessment & escalate as needed
- Security & protecting patient information
- Documentation
- Partnerships internal, between organizations, with payers, legislators, boards, grant funders, etc.
- Processes to maximize efficiency
- Tele presenting & patient communication/education
- Regulatory as guidance applies to individual's practice

Recommendations

- Fund training programs for current providers as well as work with state/national boards for consistency in education programs
- Work with state/national boards on standardizing regulatory issues
- Lobby to continue reimbursement for phone telehealth & lobby for appropriate reimbursement levels for all telehealth modalities
- Continue to push for greater rural connectivity that is practical and affordable which includes legislative and funding changes where still needed as well as further research on rural connectivity; affordability, availability, support & infrastructure

"I just got off the phone with a patient and he said that we are doing amazing work and he applauds us, and that he is so proud of how we have everything set up so easy to follow instructions, and he said that this wouldn't be possible without our hard work. KUDOS TO YOU ALL! Told us all to take care and keep up the great work."

"We really appreciate what you all are doing and keeping us safe. I definitely needed to see the doctor and am so thankful I can still see my doctor and still communicate what I need help with, safely."



OUR VISION:

Alaska Native people are the healthiest people in the world.