Health Practitioner Education in a Rural Alaskan Telemedicine System

Sarah Freeman, PharmD
Telehealth Program Development Director
AFHCAN Alaska Native Tribal Health Consortium
Objectives

• This discussion will review:
  • The unique training and educational needs of providers in rural and urban Alaska to deliver care using telemedicine technology.
  • Use of technology to deliver education to community healthcare practitioners
The Alaska Tribal Health System (ATHS)

- ATHS is a statewide voluntary affiliation of over 30 tribal organizations providing health services to Alaska Natives/American Indians
- Serves approximately 130,000 Alaska Natives across the state
  - 70% of whom live in rural communities
- Average Alaska village: 350 residents
- 6 Regional Hubs with Hospital Services
- 180 Small Village Health Centers
  - 550 Community Health Aides/Practitioners
Alaska Native Medical Center (ANMC)

- ANMC is the tertiary care institution of the Alaska Tribal Health System
- Located in Anchorage and provides:
  - Specialty Care services
  - 150-bed hospital
    - adult and pediatric medical/surgical services, ICU, NICU, PICU
  - Level II trauma center
Relative Size of Alaska and the Contiguous US

Referrals from Alaska Tribal Health partners to Anchorage follow a hub and spoke pattern.
Alaska’s Remote Health Care Issues

- Doctors are NOT where the Patients are
- 59% of the state’s residents are in medically underserved areas
- Travel into Anchorage for healthcare is:
  - Not possible via the road system for the majority of the state
  - Weather-dependent
  - Disruptive to patient’s and families’ lives
  - Expensive – average plane ticket is $900
    - often involving multiple stops, small planes, intermittent flight schedules

Distance also limits training access for rural providers
The AFHCAN Telehealth Program

- A federally funded department within ANTHC
- Helps strategically plan for telemedicine use
- Develops and supports both “store and forward” and live videoteleconferencing (VtC) technology to deliver care
- Provides the software, hardware, training, and education needed to implement telemedicine programs and services
Areas Identified for Health Practitioner Education - Specific to Telemedicine

Practitioners need to know:
• how to use the software and equipment
• how to conduct a patient-visit by VtC ("telepresence")
• when to leverage telemedicine as a care delivery method
• novel clinical uses of telemedicine
• what the licensing and credentialing requirements are related to telemedicine
• what the current and future payment models and challenges are for telemedicine
Challenges with Training

- 25-30% of the users are using the AFHCAN system for the first time.
- Broad range of education-level of practitioners
The AFHCAN Telemedicine Cart - A Primary Care Tool

• Ear Disease
  • Audiometer, Tympanometer, Video Otoscope

• Heart Disease
  • ECG & Vital Signs Monitor

• Respiratory Illness
  • Spirometer & Vital Signs Monitor

• Trauma, Skin & Wound
  • Digital Camera

• Dental Problems
  • Dental Camera

• General
  • Scanner & Forms

• Urgent Care / Critical Care
  • Video Camera

Education made easier by design
A User Interface designed for the Community Health Aide Practitioner (CHAP)

- Simplicity is key for capturing medical data
- Minimize need for keyboard skills
  - Touchscreen
  - Color coded
Educational “Moments”

Indicates you have pressed the CAL button on the Earscan module.

During tests, the LCD display on the Earscan module is your primary source of information.

This is a synopsis of the procedure for doing a calibration; full instructions are provided in this manual and in your training.

Instructions:
1) Remove earcuff (if any) on probe.
2) Place probe in calibration cavity.
3) Observe Earscan display.
4) Hold steady while testing.
5) Remove probe from cavity.
A Web Interface Designed for the Consulting Provider

• Designed by Clinicians
• Has an intuitive look and feel similar to most standard email applications
Videoconferencing tools must be easy to use

Easiest to train on technology that:

• Has a simple dialing scheme
• A provider can use without IT support

...“So, why can’t I just use Skype or Facetime?”

The technology needs to facilitate HIPAA Compliance and be secure!!
Using Telehealth Technology and Techniques as Educational Tools

- Use of VtC to participate in a patient visit with multiple providers
  - Oversight of Community Health Aide Practitioner
  - 3 way visits with patient, primary and specialty care providers to transfer knowledge
- “Teleminute” videos and other recorded instructional videos
- Online telemedicine courses offered through the University of Alaska
Using Telehealth Technology and Techniques as Educational Tools – Cont.

- Specialist on-site rounds at regional centers to provide grand rounds
- On-site, hands-on training of providers on software
- Webinars for clinical provider education
- Train the trainer courses
- Online competency training for telemedicine privileging
Impact of Training /Education

• Increases familiarity with technology
• Retention of providers
• Sense of “connectedness” with other providers
• Creates “relationships” between urban and rural providers
• Increases usage of telehealth services and adoption
• Providers have begun brainstorming ways to use the equipment to expand services
Practitioner Satisfaction

Provider Feedback FY2001-2013
("Please Rate the Following Statement")

The telemedicine system played a role in EDUCATING THIS PATIENT (n=8651) - 58%

Telemedicine will improve the QUALITY OF CARE for this patient (n=8133) - 81%

Telemedicine improved PATIENT SATISFACTION (n=8116) - 71%

Telemedicine helps me COMMUNICATE with a doctor (n=8667) - 82%

I am SATISFIED with how the EQUIPMENT worked (n=8236) - 77%

Percentages of cases created to which the provider “Agreed” or “Strongly Agreed” with the statement.
Average case load was 2.6 cases/month prior to the CME visit.

This rose to 7.9 cases/month for each organization and was sustained for 18 months after the CME visit.

The net effect is that approximately 250 more patients are being seen per year.

These 250 visits represent a savings in 80 man-years of waiting time.
Technology Evaluation Toolkits

Choose one of our telehealth technology-related toolkits to read at your convenience!
Thank you!

Sarah Freeman, PharmD
slfreeman@anthc.org

Online Telehealth Resources:
http://afhcan.org/
http://www.telehealthtechnology.org/
http://www.americantelemed.org/
http://telehealthpolicy.us/