



Janet Major, B.S. **Associate Director for Telemedicine Outreach, Education & Facilities Arizona Telemedicine Program Southwest Telehealth Resource Center Executive Committee ATA Technology SIG** ATIC/AZBSN/Covid-19 Digital Task Force jmajor@telemedicine.arizona.edu







## Resources













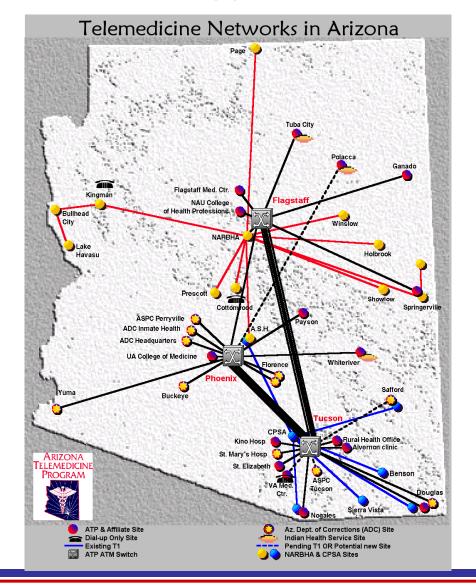




### Arizona Telemedicine Program Charter Sites

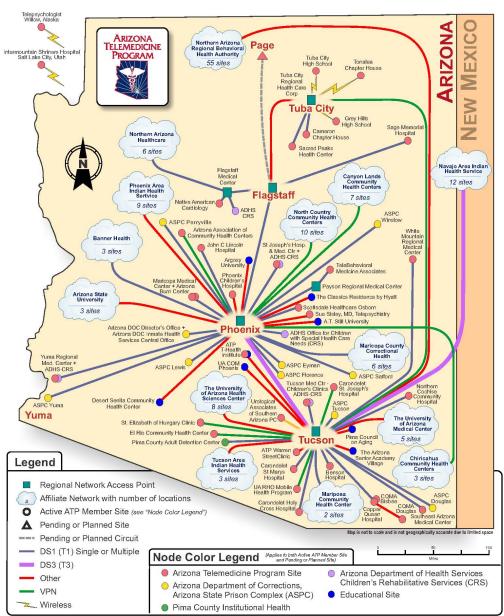


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#### ARIZONA TELEMEDICINE NETWORK





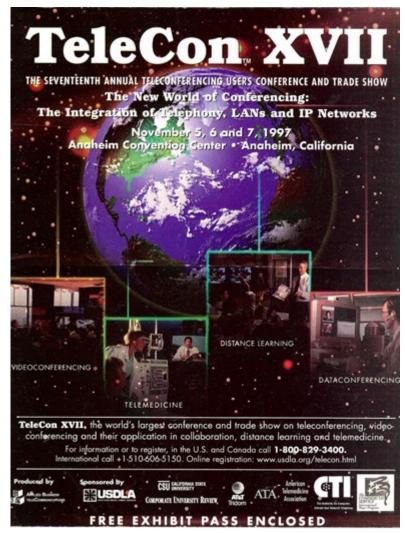
# How to put the TELE into Telehealth for Educational & Clinical Applications







### TeleCon 1997











Technology for Telehealth: No longer the tail wagging the dog!





## Multi-Purpose Cameras & Devices























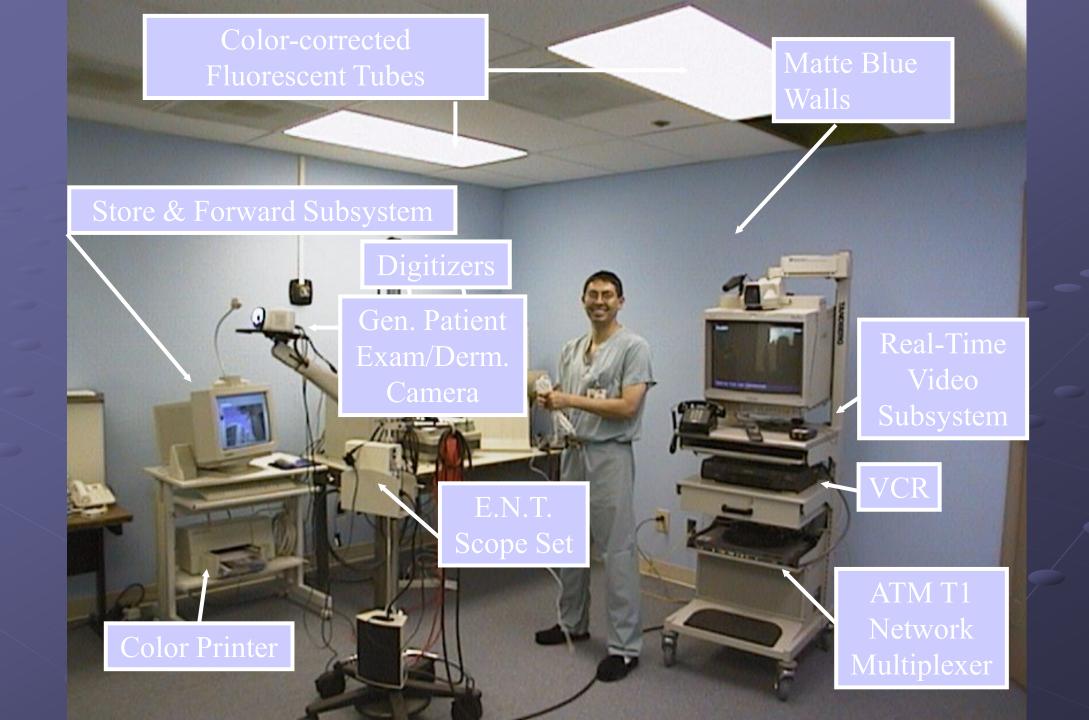


## 2006









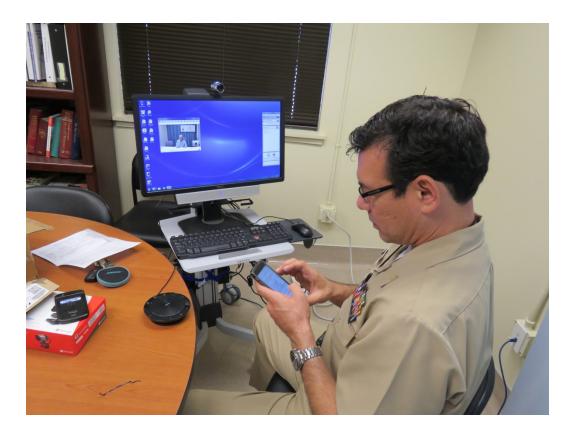






## Sells IHS, AZ













## Telegenetics HRSA Grant Collaboration

https://www.westernstatesgenetics.org/telegenetics/

PLUS check out their great videos! LINKS ON THE NEXT 2 SLIDES

#### Telehealth Best Practice

For patients, there is information about what to expect from a telegenetics visit, how to prepare for a visit, and how to find telegenetics providers. To learn what to expect from a telegenetics visit, watch the video below.





What to Expect from a Telegenetics Visit

For patients, there is information about what to expect from a telegenetics visit, how to prepare for a visit, and how to find telegenetics providers. To learn what to expect from a telegenetics visit, watch the video above. The video is also available in:

- Mandarin
- Samoan
- Spanish
- Vietnamese
- Tagalog





### Telehealth Best Practices



Telehealth Best Practices

Video developed by the Hawaii Department of Health Genomics Section and available on the Pacific Basin TRC Website www.pbtrc.org





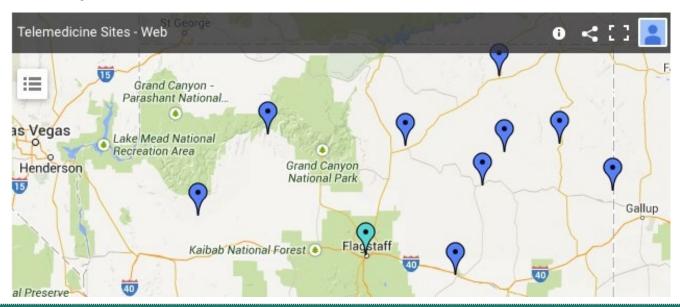
# What to Expect from a Telehealth Visit https://www.youtube.com/watch?v=5joffD8qOi8







# Flagstaff Medical Center https://nahealth.com/telemedicine



#### Care Beyond Walls and Wires: In-home monitoring

Using remote monitoring tools, this program is designed to improve the quality of life for people with chronic health conditions, helping patients and families get the care they need without leaving home.

With daily access to information including blood pressure, weight and symptoms of illness, care teams and patients can co-manage treatment plans. It's also possible to detect changes in a patient's health status early on and intervene at the right time to avoid unnecessary travel and hospital care.





#### Mobile Telehealth

**TELE-HOME HEALTH CARE:** 

#### 'Care Beyond Walls and Wires' **Enhances Life for Patients with Congestive Heart Failure**



More than 5 million people in the U.S. suffer from congestie heart failure (CHF), a Disease Control and Prevention (CDC). The annual cost is estimated at more than

improve CHF patients' health and reduce health care costs.

Case Study medications, and lost earnings, the CDC says. Northern Arizona Healthcare's "Care Beyond Walls and Wires" can

Woody Smith and his daughter, Rita twice a month from their home on the Navaio Reservation to Flagstaff Medical Center, nearly two hours away. Mr. Smith is living with congestive heart failure, with symptoms so severe he required frequent hospitalizations.

transferred to a smart phone that transmits the information to Northern Arizona Healthcare's care coordination office, which provides the smart phone, monitoring equipment and backpack to every patient enrolled in Care Beyond Walls and Wires.

Some of the program's patients have no

The San Diego telecommunications company Qualcomm was chosen to lead the project, with Maryland-based Zephyr Technology and Verizon providing software, smart phones and remote-monitoring

Northern Arizona Healthcare agreed to aduct a pilot project involving 50 patients. ct got under way in

But Mr. Smith can no months without h called Care Bey telemedicine-e program that h improve the hea with congestive

The program als room visits and stay for those w

"It's phenomena registered nurs for Flagstaff-ba Healthcare, wh Walls and Wire Flagstaff Medic Medical Center

Ms. Yazzie says Wires "is the be best thing for m two hospital read

And at 90, Mr. Smith has been able to return to his favorite activity: riding his horse.

Care Beyond Walls and Wires provides patients with a backpack containing the equipment they need to check their blood pressure, measure their oxygen level, and check their weight daily; the latter because patients with CHF can gain and drop weight suddenly. The data are automatically

"Care Beyond Walls and Wires is the best thing ever for me, and the best thing for my dad."

Rita Yazzie

perspective, the idea for Care Beyond Walls and Wires originated with the National Institutes of Health Office of Public and Private Partnerships, which was looking for better ways to monitor patients with CHF who live in rural areas. The goal was to provide better care while keeping the patients out of the hospital, thus reducing health-care costs.

the study if you lived amily support," Ms. could live in Supai and Canvon) or on on. Our patients lispanic, and white to early 90s."

Care Beyond Walls hen it ended on Arizona Healthcare tinuing the program.

around \$650. Ms. Sorenson says, ell phone charges.

h the investment." atients benefiting, penalizes hospitals onditions, including are readmitted discharged.

atients like the feeling that they have more control over their health, Ms. Sorenson says. "We couldn't have asked for anything more. It's a global win."

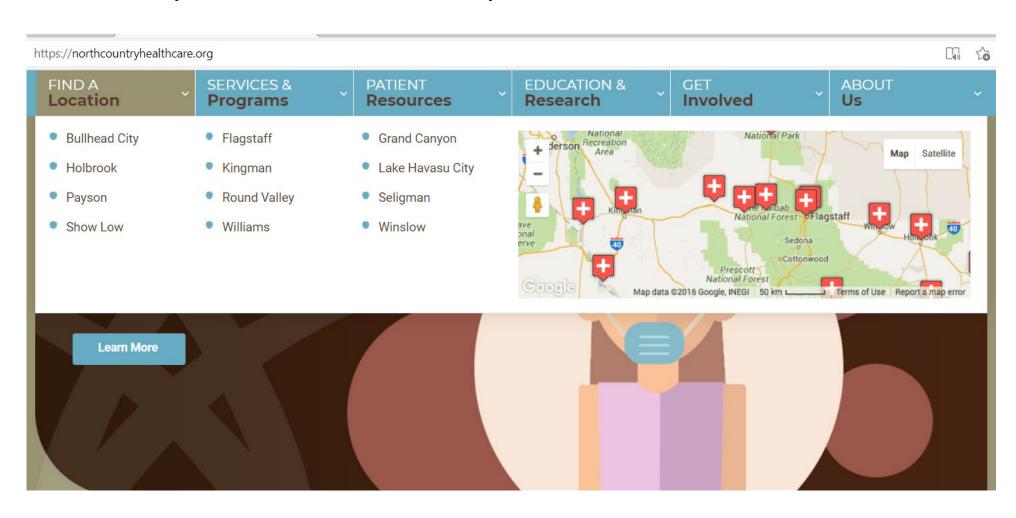
## "Care Beyond Walls and Wires": In-Home Monitoring YouTube Videos @www.youtube.com

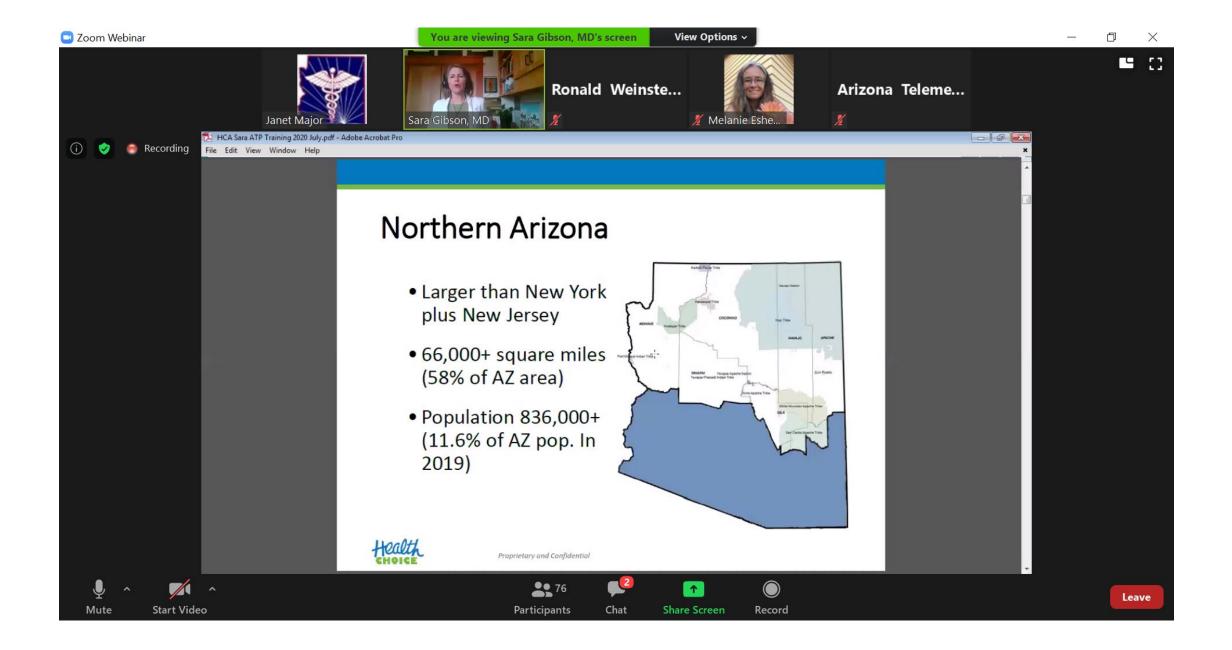
- https://www.youtube.com/watch?v=qHXGRDtdjuc
   Four Corners Navajo Area
- https://www.youtube.com/watch?v= 4wvQbK EPM
   Winslow, AZ





## North Country Healthcare Primary Care Clinics Spokes/Flafstaff Hub Model





## Mayo Stroke Program













### **ENT Scope**















#### Features

- 1280 x 1024 resolution
- Captures microscopic pictures and videos
- . See more patients and reduce patient visit time with more efficient record documenting
- Variable magnification up to 150x (digitally) and up to 50x (optically).
- . Observes and records in real time (30 FPS)
- · Easily integrates with telehealth solutions
- · Built-in snapshot button
- Multi-layered glass lenses
- Rugged industrialized construction
- · View the DE550 Wireless Video Otoscope here













## http://telemedicine.arizona.edu/blog/telehealth-valuable-addition-hands-comfort-care

#### Telehealth is a Valuable Addition to Hands-On 'Comfort Care'

By Kimberly Shea, Ph.D., RN on Oct 15, 2015



Dr. Shea consults with a remote hospice patient via telemedicine.

I am an assistant professor at the University of Arizona, College of Nursing, a full-time position that includes research in my chosen field of health care systems and informatics, in which I have a PhD.

I also work one day a week as a hospice nurse, providing palliative care, which is focused on comfort and quality of life for patients nearing the end of life.





## https://telemedicine.arizona.edu/blog/ua-researchers-using-telemedicine-tackle-asthma-tucson-school-children

#### UA Researchers Using Telemedicine to Tackle Asthma in Tucson School Children

By Jane Erikson on October 01, 2015



Each weekday morning at 20 Tucson elementary schools, more than 260 children with asthma report to their school nurse or health aid. Each child is given their own corticosteroid inhaler, inhales the medication, then returns to class.

The children are part of a multi-year, NIH-funded study of an asthma prevention program that is school-based for a number of reasons. The study was launched in the fall of 2014 in 20 schools in the Tucson Unified School District (TUSD).

Asthma is one of the most common chronic diseases of childhood, affecting about 10 percent of children in the U.S. It's also described as the most common cause of school absenteeism due to illness, according to the Centers for Disease Control and





## ATA Technology SIG/Special Interest Group







IMMEDIATE PAST CO-CHAIR Associate Director Facilities Arizona Telemedicine Program



IMMEDIATE PAST CO-CHAIR Adjunct Professor Pace University Katonah, NY







Phonos property of Care on Location. All rights reserved.

## https://echo.unm.edu/







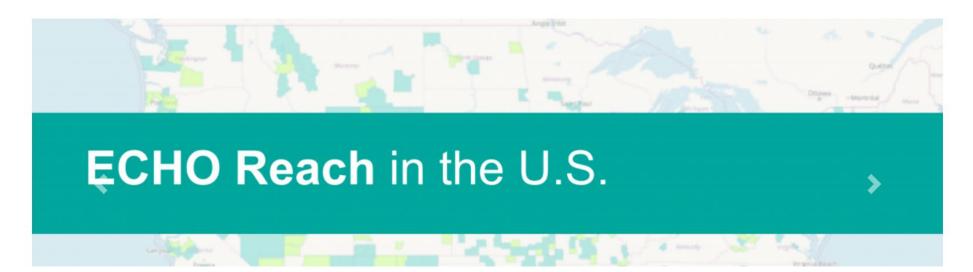






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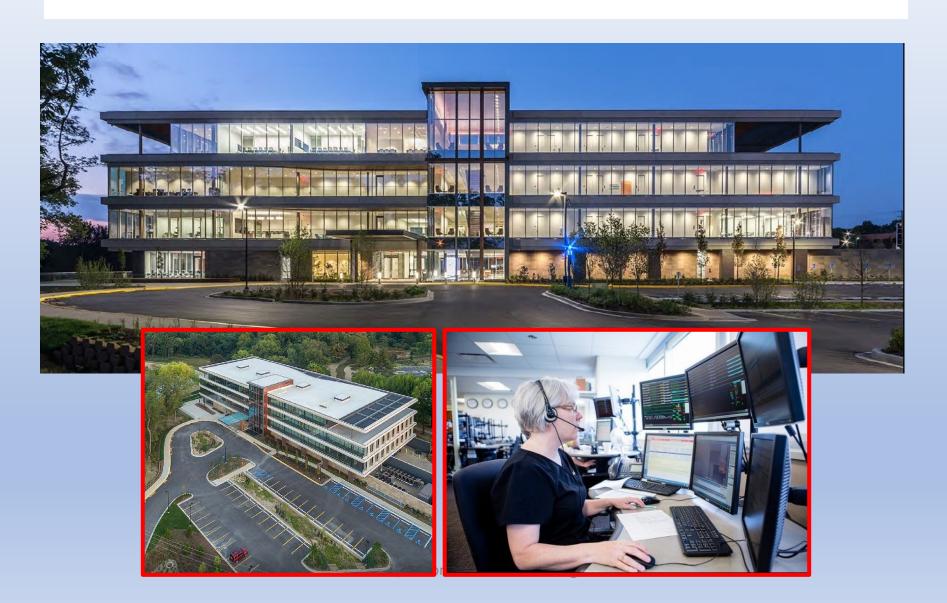






## Mercy Virtual Hospital

Chesterville, MO - 2017





## Arizona Diabetes Virtual Center of Excellence



Arizona Diabetes
Virtual Center of Excellence

Amado WiFi Project



An economic development foundation of the Governor's Strategic Partnership for Economic Development (GSPED)

Arizona Telecom Directory Search Cyber Security Committee Government Affairs Committee Strategic Planning Committee Arizona Telecom Orgs

ATIC > WIFI Security Project for First Responders

### **ATIC DHS WiFi Security Project for First Responders**

This project is one of several national information technology demonstration grants awarded by the Information Technology and Evaluation Program (ITEP) of the Department of Homeland Security (DHS) in 2004. It is a "proof of concept" to initiate Phase I of securing Wireless Broadband (WiFi) along a 30 mile corridor between Rio Rico and Green Valley, Arizona (see full size image [340k JPEG]). It utilizes existing and new 802.11x access points, strategically placed for rural users, including law enforcement, first responders, or civilians, to obtain broadband connectivity along the corridor. Corridor users will have access while mobile. The long term plan calls for expanding the end-user categories to include private individuals, businesses and organizations along the corridor, who do not have broadband connectivity today.

The Arizona Telecommunications and Information Council (ATIC) is leading the implementation effort for the Award Grantee, the Arizona Division of Emergency Management (ADEM).

#### First Resonders Survey Form

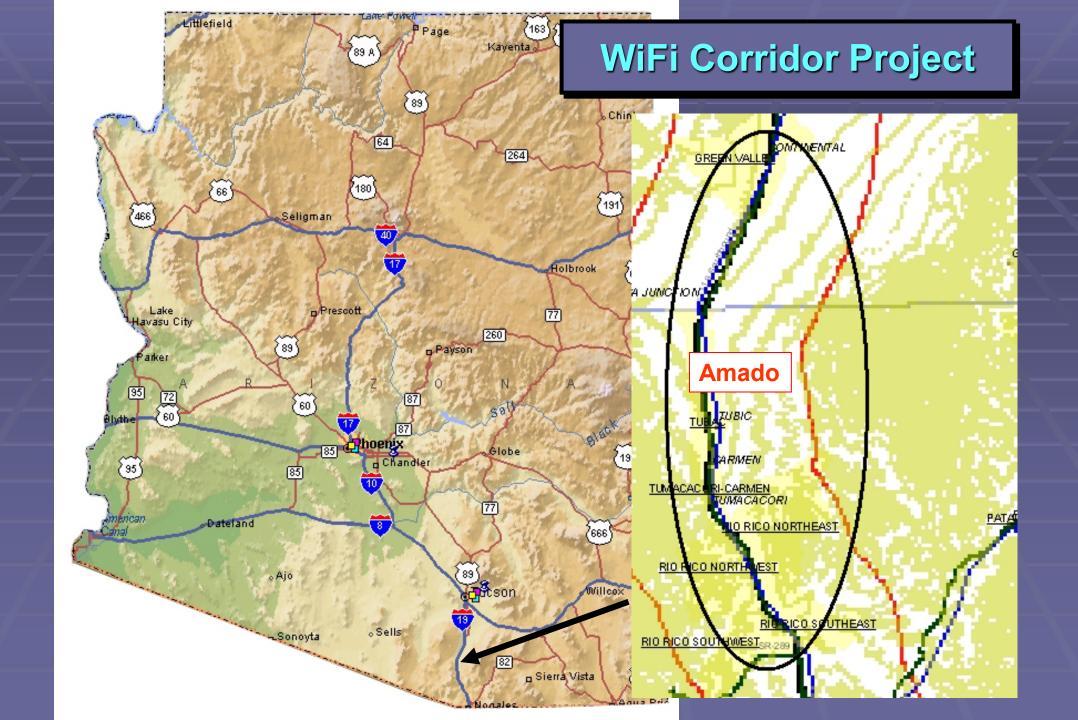
Help us out with this project by providing some details about your most recent WiFi experience.

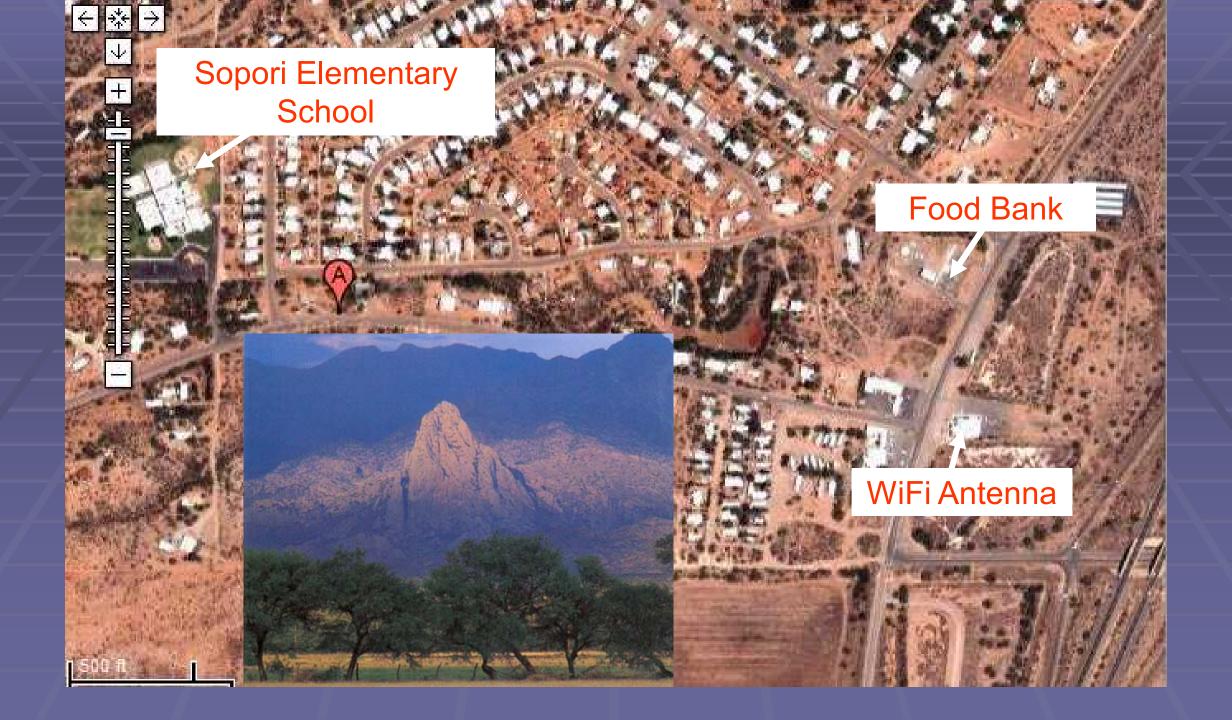
GO TO SURVEY

### Here are some additional details on the project.

A 30-mile stretch of the CANAMEX Corridor near Mexico will be "secured" as a First Responder WIFI "hot spot" with sufficient access points to enable in-vehicle "WiFi ready" devices moving into and through the area to have mobile access to the Internet or Internet based Virtual Private Networks (VPNs), and with various applications associated with those resources, at broadband (1 Mbps +) speeds.











### Rural Health Office – Mobile Health Program

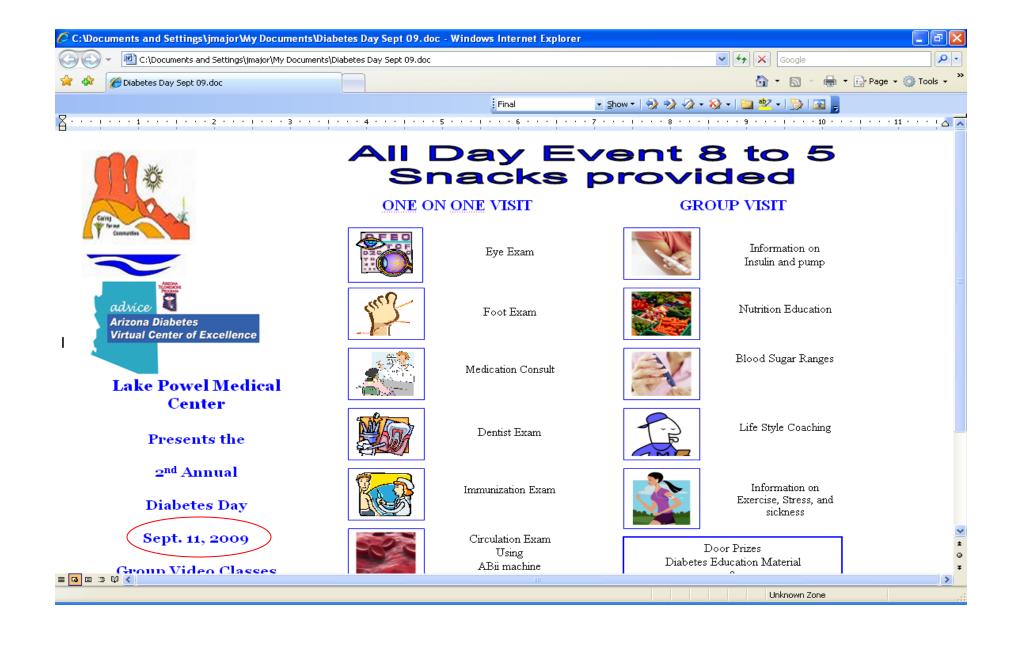


- Storage of 6 x jpgs
- Click Software vs Review Software
- Medical History Form
- Fax
- Billable Services
- Additional Business
- Referral Pattern



### **TelePodiatry Technology Testing**



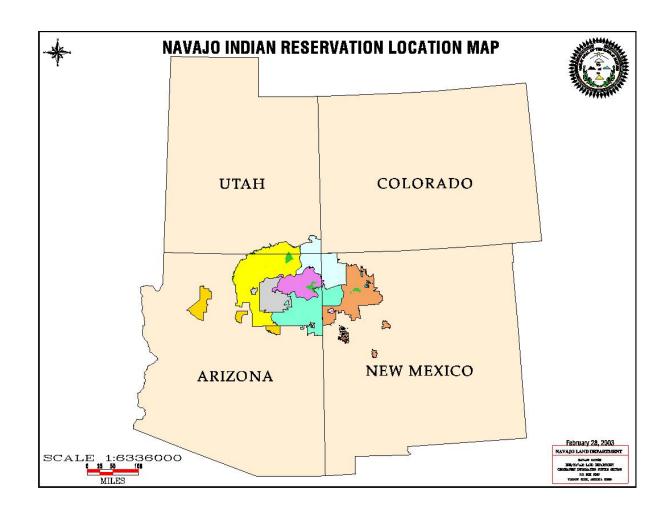


Dr's Initial		Initial	
	Eye Screening		Labs done
	Foot Screeening		Insulin & Pump
	Medication Consult		Nutrition Education
	Dentist Screening		Glucometers Education
	Immunization Screening		Gestational Education
	Circulation Screening		Effects of Diabetes
Name:		D.O.B:	
Clinic:		Provider:	
comments:			















# KIOSKS













Health Screening Kiosks Telemedicine Solutions v Industries v About v Blog Contact

#### **Our Telemedicine Solutions**



#### **Health Screening Kiosks**

Models available with blood pressure, weight, pulseox, and body composition testing and intuitive touch screen interfaces.

Visit Texas Medical Screening 🕑



#### Mobile Telemedicine Solutions

The X-1 Mobile Unit is a self-contained telemedicine system designed to provide remote, diagnostic screenings while connected securely to a medical professional through a telehealth portal.

View Products 🕑



#### Diagnostic Telemedicine Kiosks

This cutting-edge healthcare kiosk allows healthcare providers an easy way to establish secondary locations for patient screenings and/or diagnostic testing while staying connected to the medical professional and the medical records system.

View Products 🕑



#### **Diagnostic Telemedicine Clinics**

This fully enclosed, private telemedicine clinic leverages the diagnostic and telehealth capabilities of the X-1 Kiosk while providing for more advanced, personal care in a completely private environment all while connected securely to a

View Products ①

Welcome to CSI Health, ho















### AZ Companies & Community Partnerships

Public Places for
Private Conversations
about our health



# Delaware Libraries Telehealth and Teleservices Initiative August 19 @11am PDT

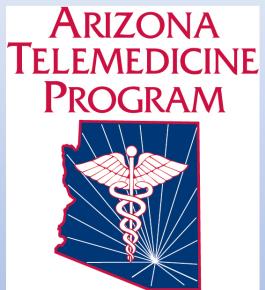
https://us02web.zoom.us/webinar/register/WN mx7J-MaNTZK9Hbl86NiQXA

Establishing a Telehealth Center in Your Library (Indiana) August 20 @2pm EDT

https://us02web.zoom.us/webinar/register/6016279336529/WN - ewVq 0VSxWRcYZhY1xmNQ

### **Telemedicine COVID-19 Resources**

https://telemedicine.arizona.edu







FOR HEALTHCARE PROVIDERS

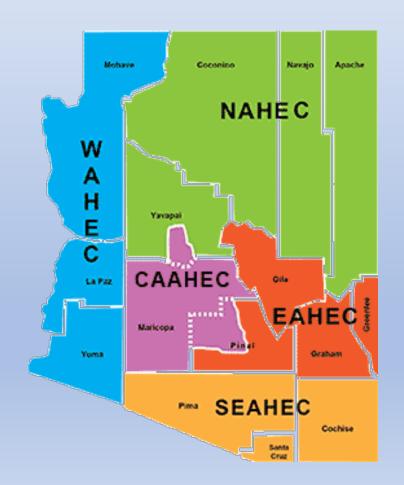
STATE-SPECIFIC INFORMATION

**CONSUMER RESOURCES** 

**COVID-19 NEWSLETTERS** 

**VIRTUAL OFFICE HOURS** 

### Arizona AHEC Area Health Education Centers Tribal Area Health Education Center https://azahec.uahs.arizona.edu/



September 19 – 25, 2021 https://telehealthawareness.americantelemed.org/







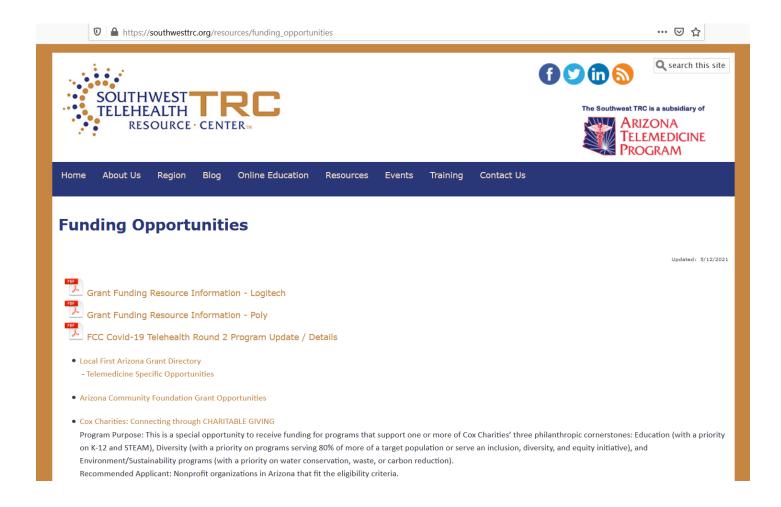


### https://southwesttrc.org/













# Telemedicine & Telehealth Service Provider Directory https://telemedicine.arizona.edu/servicedirectory









Video: Directory Overview

**Welcome** to the Telemedicine & Telehealth Service Provider Directory, a service of the Arizona Telemedicine Program. The directory is a resource for hospital and healthcare administrators and other decision-makers who want to expand or improve their healthcare services to their patients, employees, clients, etc. The directory lists companies providing medical specialty services (such as radiology, rheumatology, neurology, psychiatry) and ancillary services (such as patient education and language interpretation) through telemedicine to healthcare providers such as hospitals, clinics, nursing homes, private practices and urgent care centers.

Service Providers: List your company here.

#### **Search the Directory**















Video: Directory Overview

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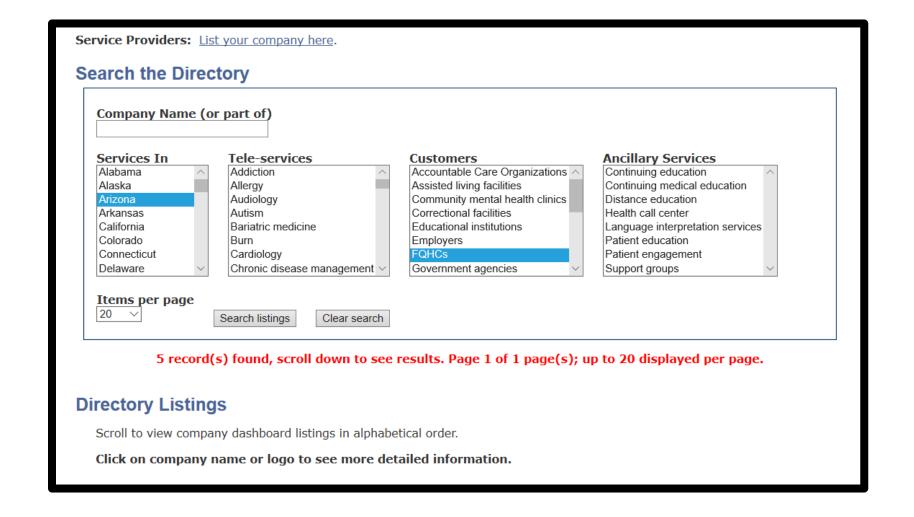
Service Providers: List your company here.

### **Search the Directory**













# Arizona Telemedicine Program Training Tracks

**Arizona Telemedicine Training Program** 

https://teleme



### TRACK 1: Developing a Telemedicine Program

- January 11, 2021
- May 24, 2021
- September 13, 2021

#### Course Content:

This course gives a broad overview of a variety of telemedicine topics, including:

- Clinical services
- Telecommunications and infrastructure development/operations
- Evaluation
- · Business aspects
- Equipment demonstration virtual tour

**Register Now!** 





### https://telemedicine.arizona.edu/

### **Events**

HB 2454 and the Impact in Arizona for Healthcare Professionals (Webinar) Aug 4, 2021 2:00pm to 3:00pm MST

Pediatric Lungs & COVID-19 (Webinar) Aug 17, 2021 8:00am to 9:00am MST



Developing a Telemedicine
Program (Training)
Webinar
Sep 13, 2021 9:00am to 2:00pm MST

How to Counteract
Ransomware Attacks
on Healthcare
(Webinar)
Sep 22, 2021 6:00pm to 7:00pm MST







### **NATIONAL CENTERS**





















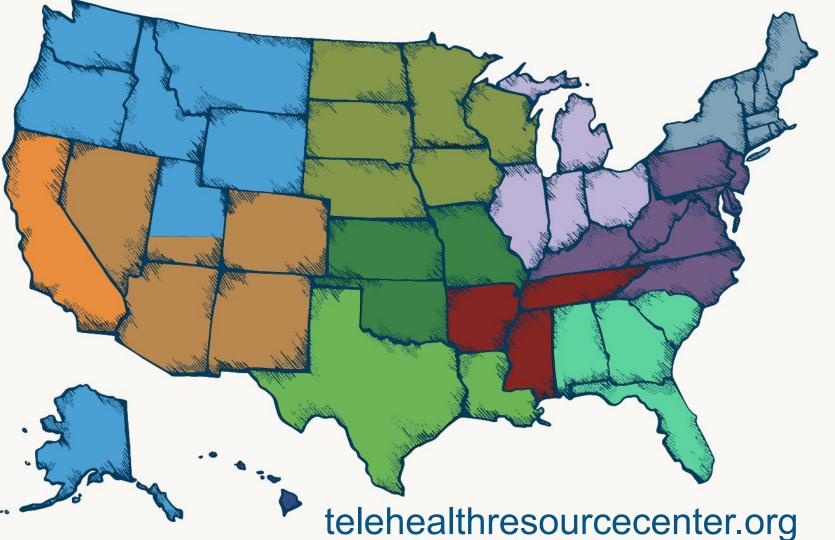










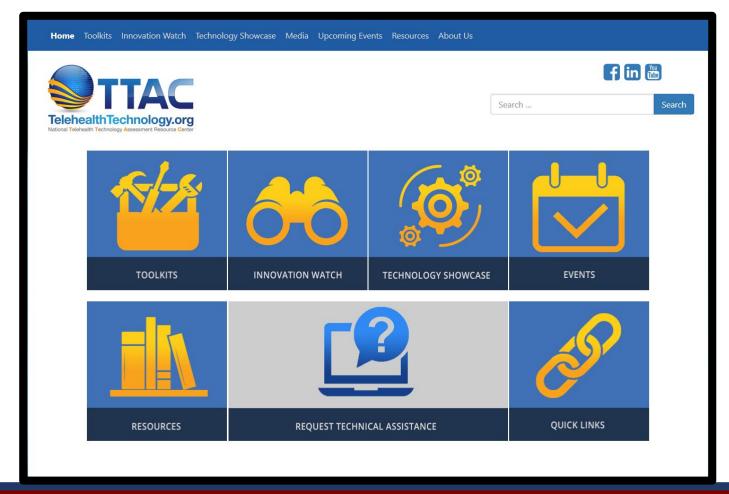








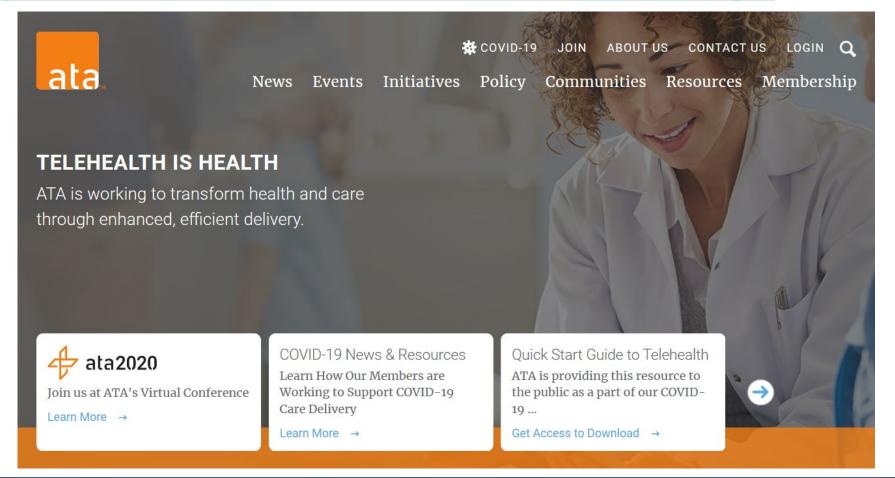
### TTAC National Telehealth Technology Assessment Center telehealthtechnology.org







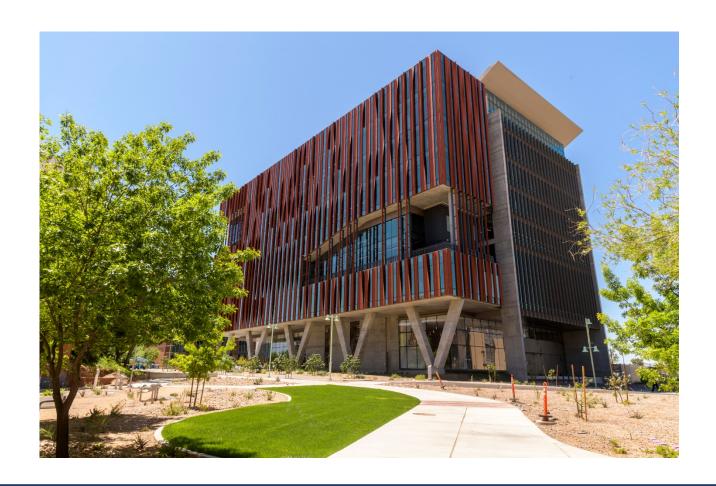
# ATA American Telemedicine Association <a href="https://www.americantelemed.org/">https://www.americantelemed.org/</a>







# UAZ College of Medicine "Tomorrow is HERE!"









Thank You, Merci, Gracias y CIAO! jmajor@telemedicine.arizona.edu



