

# Telemedicine for Rural America – Without Breaking the Bank

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# Introduction and Summary

**Health Challenge:** Rural healthcare is challenging and has barriers that include limited access to any type of healthcare, even less access to specialty care, limited public transportation, access to health insurance and indigent clients.

**Region:** Callie Clinic in Sherman, Texas is in the Texoma region. This is an interstate area of the US split between Oklahoma and Texas. It includes an eight-county area on either side of the state border along the Red River. The Texoma region has a population of ~337,518 with an area size that covers ~5,964 square miles. Much of the area is rural, ranging from the outskirts of larger towns to working farms and ranches on the fringes of these urban areas.

**Technology:** Telehealth is the provision of healthcare remotely by means of telecommunication technology. Telemedicine and telehealth are mostly interchangeable terms, although telehealth is a broader term encompassing varied technologies to remotely improve the health of patients. There are four main types of telehealth services including: Synchronous Audiovisual Conferencing, Asynchronous Video (AKA Store-and-Forward), Remote Patient Monitoring (RPM) and Mobile Health (mHealth). Telemedicine is more specific to a practitioner working with a patient in real-time.

## Methods

**Intervention:** A telemedicine program (Synchronous audiovisual conferencing) will improve access to quality healthcare for people living with HIV from rural areas (the Texoma Region) that lack specialized service providers (Infectious Disease & HIV Care) by reducing geographical and transportation barriers and providing accessible and affordable treatment for indigent, uninsured and underserved clients.

Clinic: Callie Clinic is a small rural Ryan White clinic in far North Texas/Texoma that developed a telemedicine model with low up-front cost and easy implementation.

Existing Facility: Exam Room

Existing Staff: ID Provider, Medical Assistant, Front Desk Receptionist and IT Director.

Existing EMR: NextGen

Existing Client Level Data Systems: ARIES and CAREWare

New Equipment Costs: \$2,238.45

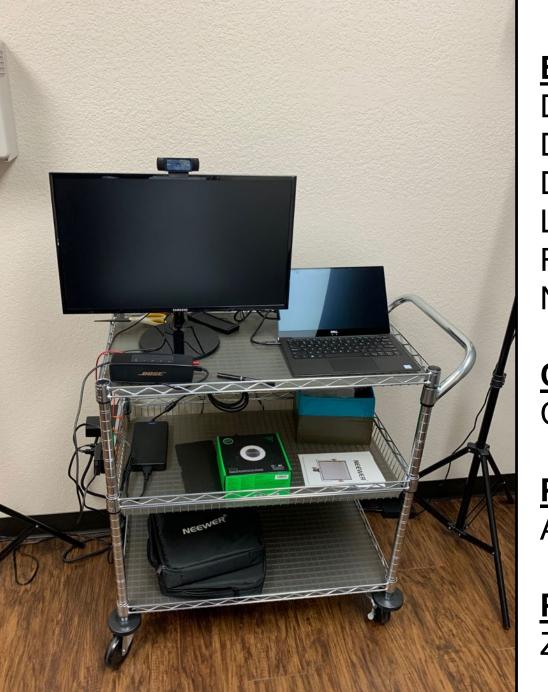
Annual Costs: Zoom for Healthcare \$2,400.00

(Comparison: Equipment Costs at Large Local University: \$11,723.00)

**Process:** Clinic offers visits on-site (with a Dallas doctor), MA checks vitals and partial interview, MA sends a Zoom email invite, provider accepts invite and then connects to patient.

Clinic also offers patient visits on their phone or home computer. MA does interview, then doctor connects through EMR. Physician interviews, counsels, reviews lab and med orders, care plan communicated to team.





#### **Existing Telemedicine Equipment:**

Dell 13" XPS Laptop
Dell TB 16 Thunderbolt Dock
Dell 19" Monitor

Logitech C920S Webcams Razor Kiyo Webcam with Light Neewer LED Lights

## Clinic

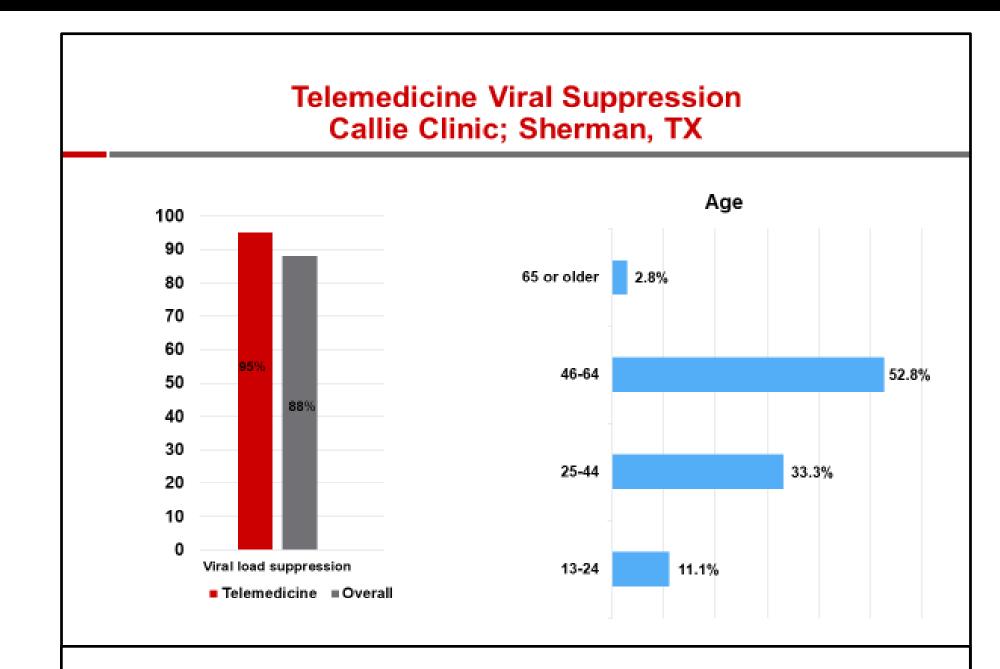
Cableone Provider (WAN) – 150 Mbps

### Provider:

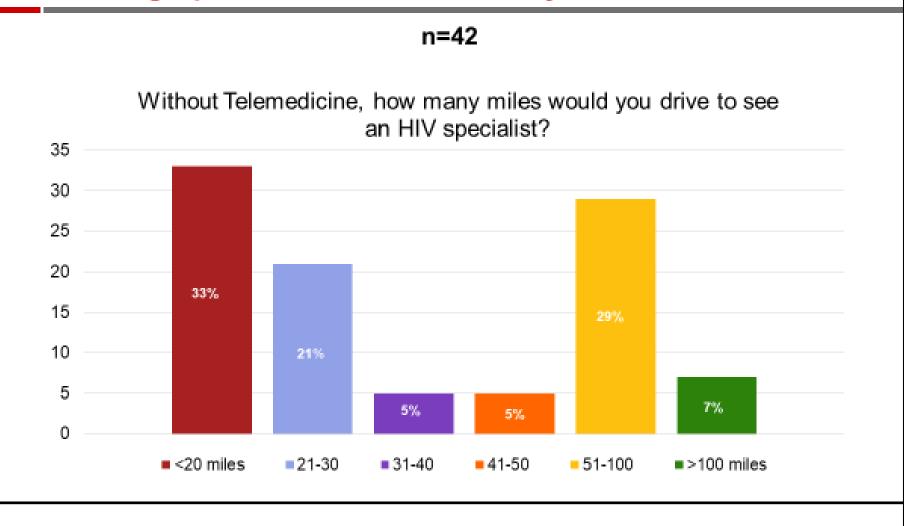
ATT Provider – 300 Mbps

## **Platform:**

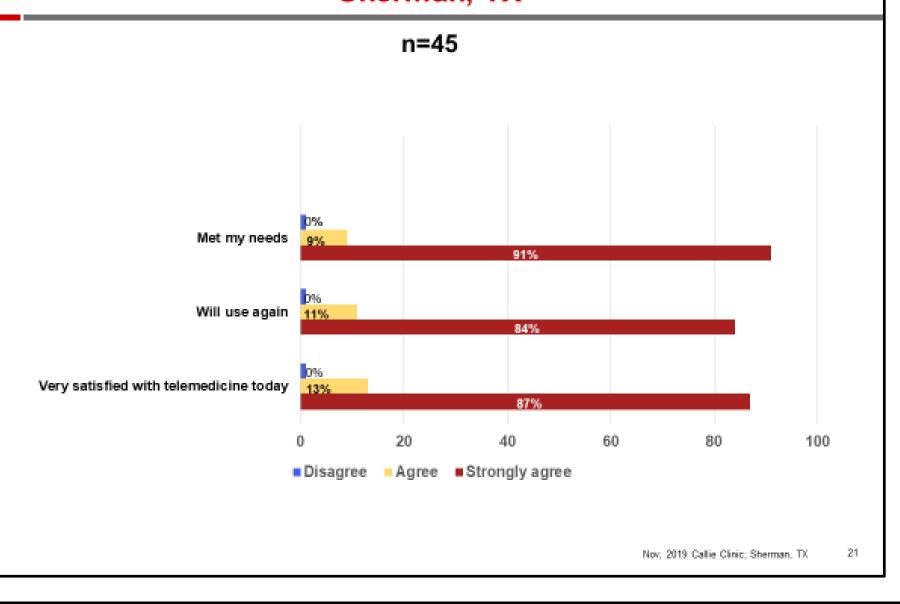
Zoom for Healthcare



#### Geographic Barriers for Rural Ryan White Patients



#### Telemedicine Patient Satisfaction at Callie Clinic Sherman, TX



## Results

Successful implementation of a telemedicine system at a small Ryan White clinic.

Based on annual client satisfaction surveys the program has been successful (n = 45, 87% very satisfied).

# ♦ Conclusion/Lessons Learned

- Fits rural (and some urban) Ryan White clinics well.
- Great for tapping urban providers in a rural setting.
- Easy and fun.
- Coding/billing doable.
- Addresses the gap for rural Texans living with HIV.
- During COVID, the existing Telemedicine Program allowed the clinic to transition smoothly to a safer environment for patients and staff.

#### **Clinical Staff**

