

TELEMEDICINE TECHNOLOGY: GETTING CONNECTED

October 16, 2020



Objectives

- Learn the basic technology needs for telehealth
- Identify equipment and platform choices for different types of telehealth services
- Discuss telehealth connectivity challenges and resources

Technology Can Limit Telehealth

- The technology does guarantee a successful telemedicine program.
- But failing to make the right technology will likely lead to a failed program.
 - “The equipment is too difficult to use”
 - “Nobody showed me how to use the ...”
 - “The audio or video quality made a diagnosis impossible”
 - “Equipment fails repeatedly”

Common Technology Types

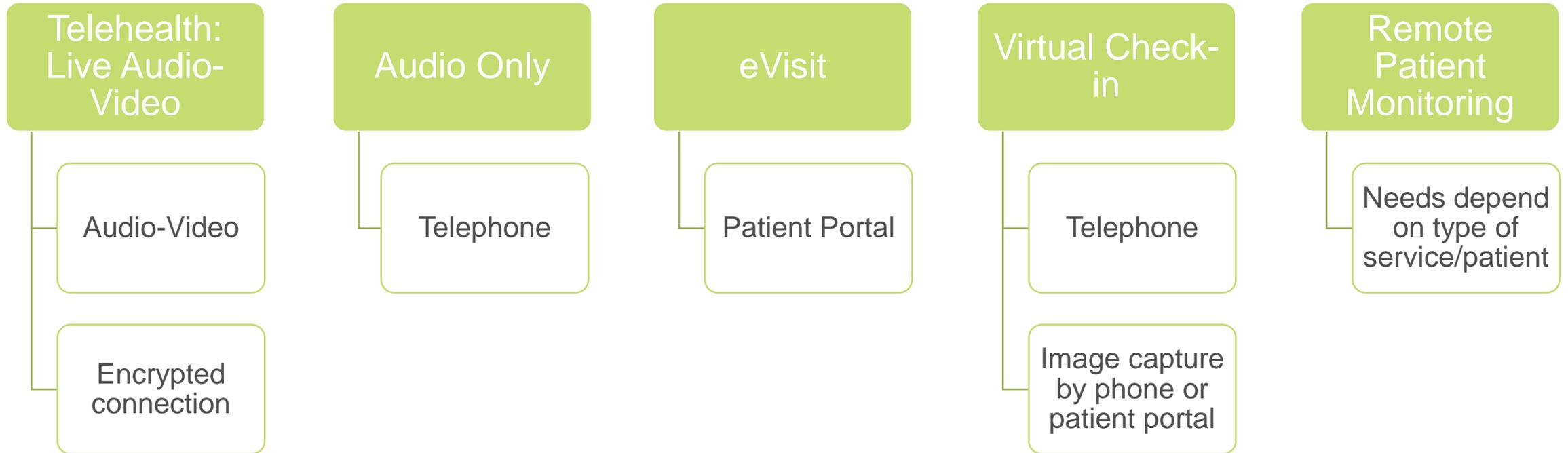
- Videoconferencing Software
- Peripheral Devices
- Telemedicine Carts
- Remote Patient Monitoring Equipment
- Smartphone Apps and Devices

Telemedicine technology was cited as the most important asset relative to program success.

2017 US Telemedicine Benchmark Survey, REACHHealth

Technology Needs for Telemedicine

Types of Telehealth



**Medicare (and some other payers) define “telehealth” as live audio-visual visits only*

Common Software and Equipment

- Videoconferencing Software
- Desktop or laptop, tablet, camera, speakers
- Peripheral Devices
- Telemedicine Carts
- Remote Patient Monitoring Equipment

Connectivity

Suitable internet bandwidth to support at least a 512kbs video call with overhead

- Will require 1000kbs (1MBPS) of bandwidth uplink and downlink for HD video
- Via DSL, cable, or direct fiber connection
- 4G data network, hot spots

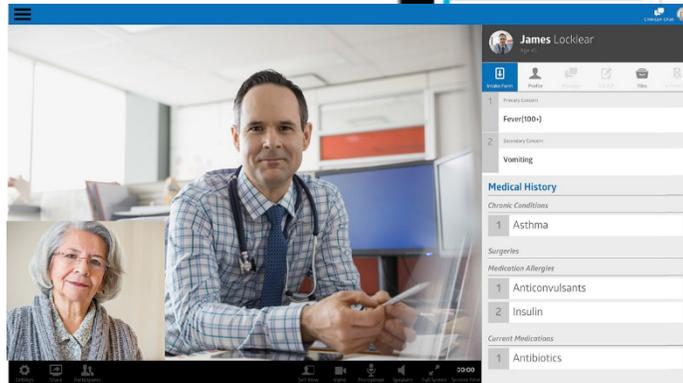
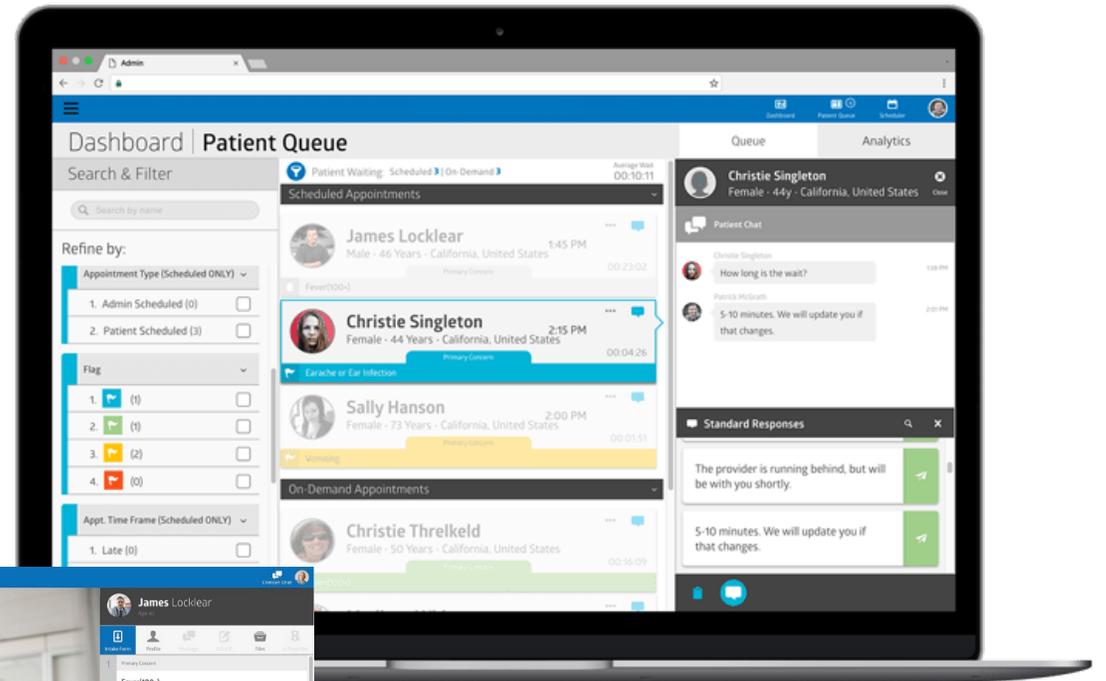
Connectivity: Behavioral/Mental Health

- HIPAA defines a Transmission Security standard (technical)
- Also a professional and ethical mandate for digital confidentiality
- You will need:
 - Computer, camera, and speakers at both sites
 - Videoconferencing software that provides for encryption
 - Ability to operate at a bandwidth of 384 Kbps or higher

Platforms

Functions

- Integrated audio and video
- Patient virtual waiting room
- Scheduling
- May interface with EHR
- Patient intake/secure registration
- HIPAA compliance
- Support workflow



Selecting a Vendor

When selecting vendors, consider:

- Software and hardware compatibility
 - Integration into your electronic health record
 - Cost (one time and monthly/annual)
 - End-user/patient experience and ease of use
 - Provider experience/ease of use
 - Regulatory requirements (HIPAA, documentation, etc.)
- Always test equipment and software before purchase



Equipment Choices

What Equipment Do I Need?

- How will you use telemedicine?
- What type of exam is needed?
 - Dermatology – skin and lesions
 - Primary care – multiple exam types
 - Dental and ENT – oral imaging
 - Surgery – skin, wounds, anatomical landmarks



Telemedicine Cart



Peripherals

- Exam cameras
- Stethoscopes
- Otoscopes



Other Peripherals



- Tympanometers
- EKG
- Retinal Screening
- Vital Signs

Devices for Telehealth to the Home



Tips for Selecting a Vendor

- **Plan ahead**
 - Number of Connections?
 - Bandwidth and existing IT/HIT structure?
- **Research**
 - Search vendors online
 - Contact current users
- **Demo**
 - On-site demo and pilot testing
- **HIPAA Compliance**
 - BAA
- **Long-term**
 - Recurring fees and upgrade costs
 - Will vendor remain in the market?
- **Feedback**
 - All Stakeholders
 - Interoperability with partners?

Broadband and Internet Challenges

Connectivity Challenges: COVID Effect

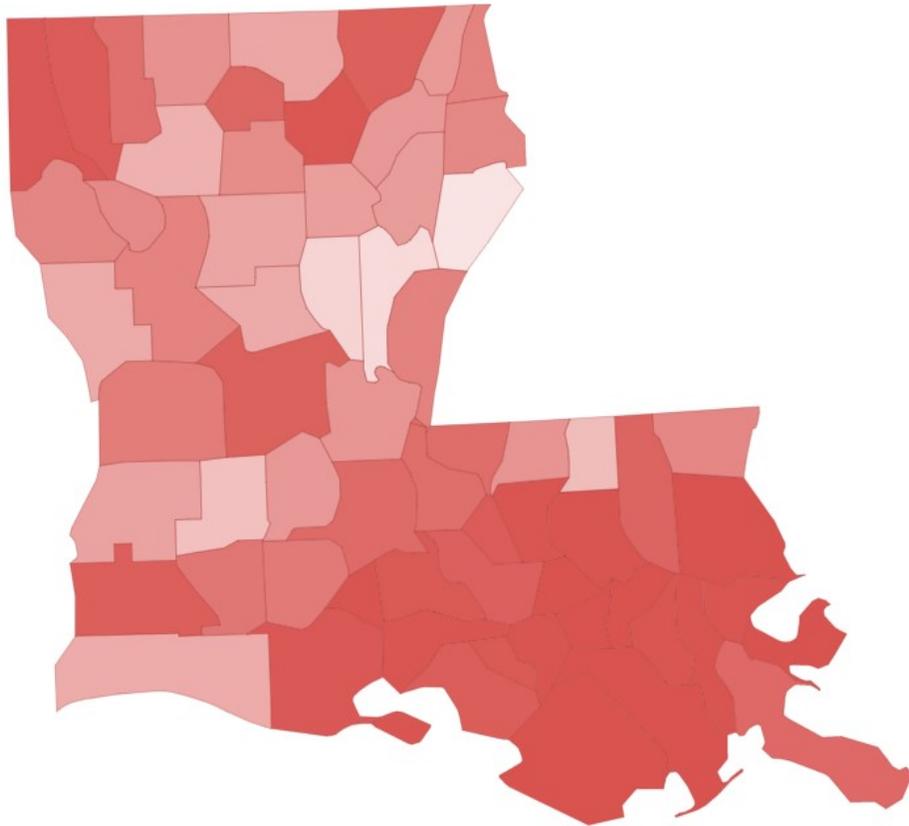
- Social distancing
- Work from home
- School from home
- Now more healthcare from home
- Health inequities magnified

Has internet availability become a social determinate of health?

Internet Access in Louisiana

By Parish 25+ MBPS

COVERAGE BY COUNTY

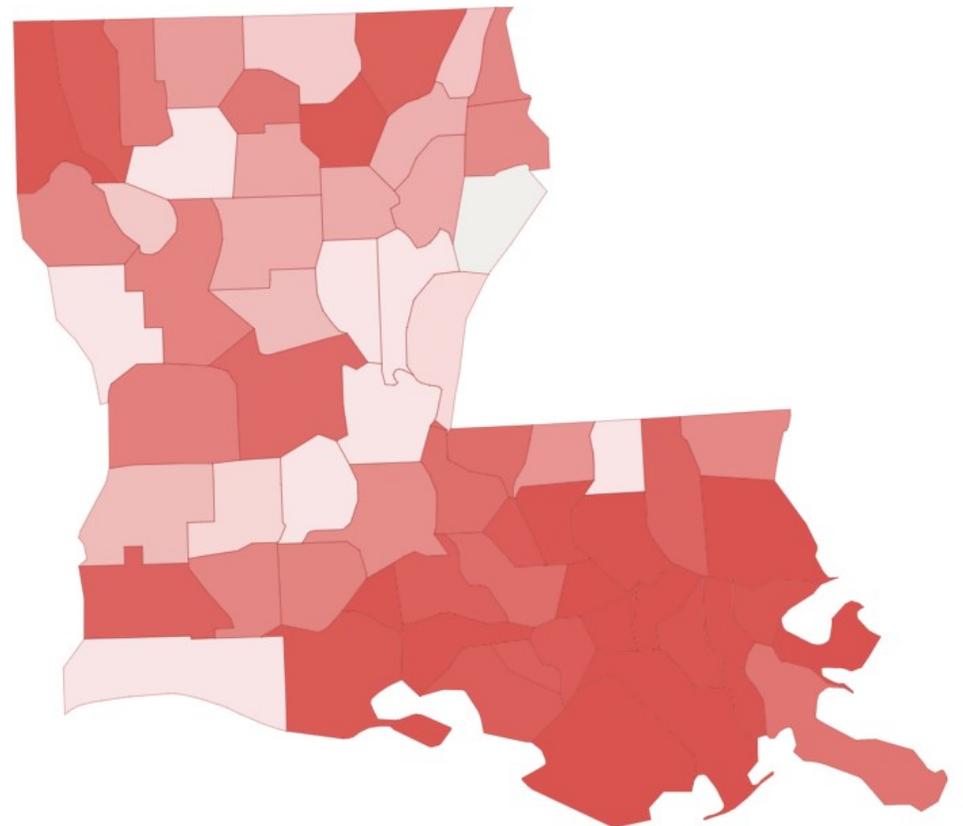


25+ MBPS 100+ MBPS 1 GIG

Louisiana Broadband Coverage © BroadbandNow

By Parish 100+ MBPS

COVERAGE BY COUNTY



25+ MBPS 100+ MBPS 1 GIG

Louisiana Broadband Coverage © BroadbandNow

Patient Resources

- **Broadband Now**
 - Affordable internet for low- & fixed income households
- **Telehealth for Seniors**
 - Access to devices and free tech-support for seniors and low-income communities
- **FCC - Keep Americans Connected**
 - Telehealth program support – CARES Act
 - Funding to expand telehealth during COVID-19 pandemic

Resources

TelehealthResourceCenters.org



TTAC
TelehealthTechnology.org

Center for Connected Health Policy
The National Telehealth Policy Resource Center

2 National Resource Centers

TRC
TELEHEALTH
RESOURCE CENTERS

NRTRC	gpTRAC	NETRC
CTRC	HTRC	UMTRC
SWTRC	SCTRC	MATRC
PBTRC	TexLa	SETRC

12 Regional Resource Centers

Resources

TTAC: National Telehealth Technology Assessment Resource Center

<http://www.telehealthtechnology.org/>

- Toolkits for equipment and platform selection
- User reviews
- Technology Showcase:
www.texlatrc.org



Search ...



Questions?

CONTACT INFORMATION

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