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South Central Telehealth Resource Center

Telehealth 101

The Basics of Telehealth and Telemedicine

South Central Telehealth Resource Center



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The presenter has no disclosures.

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University of Arkansas for Medical Sciences (UAMS)

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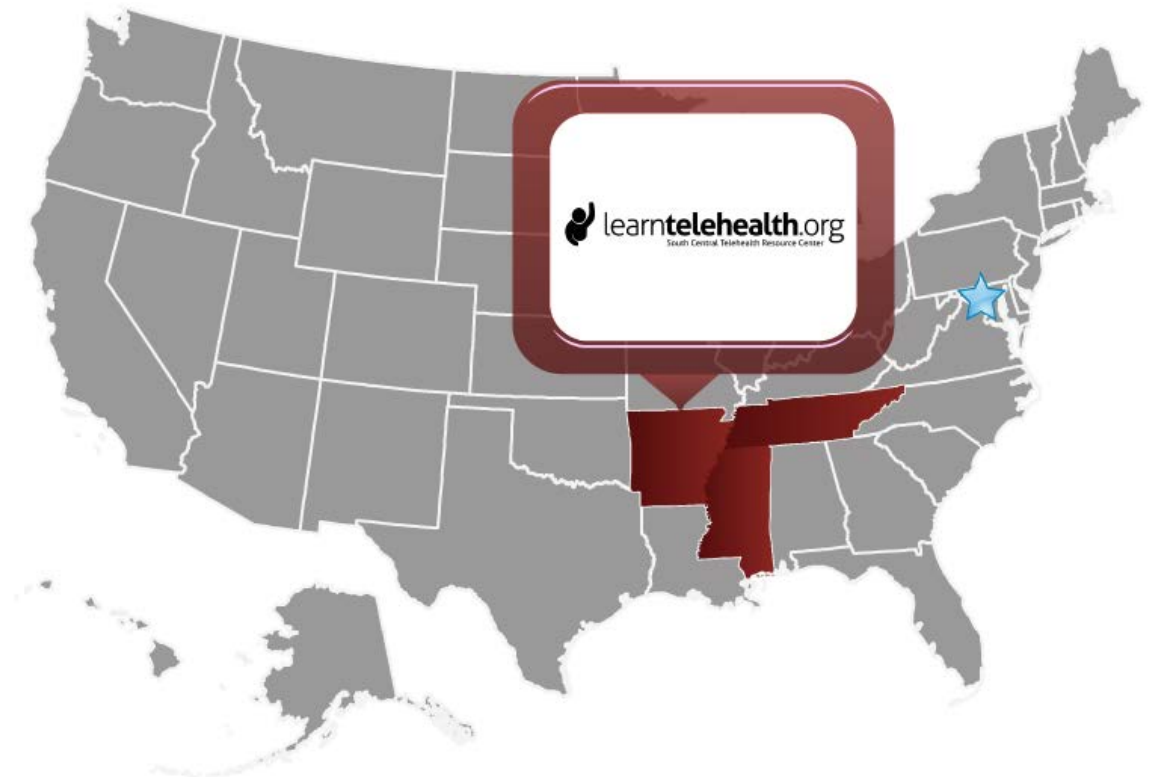
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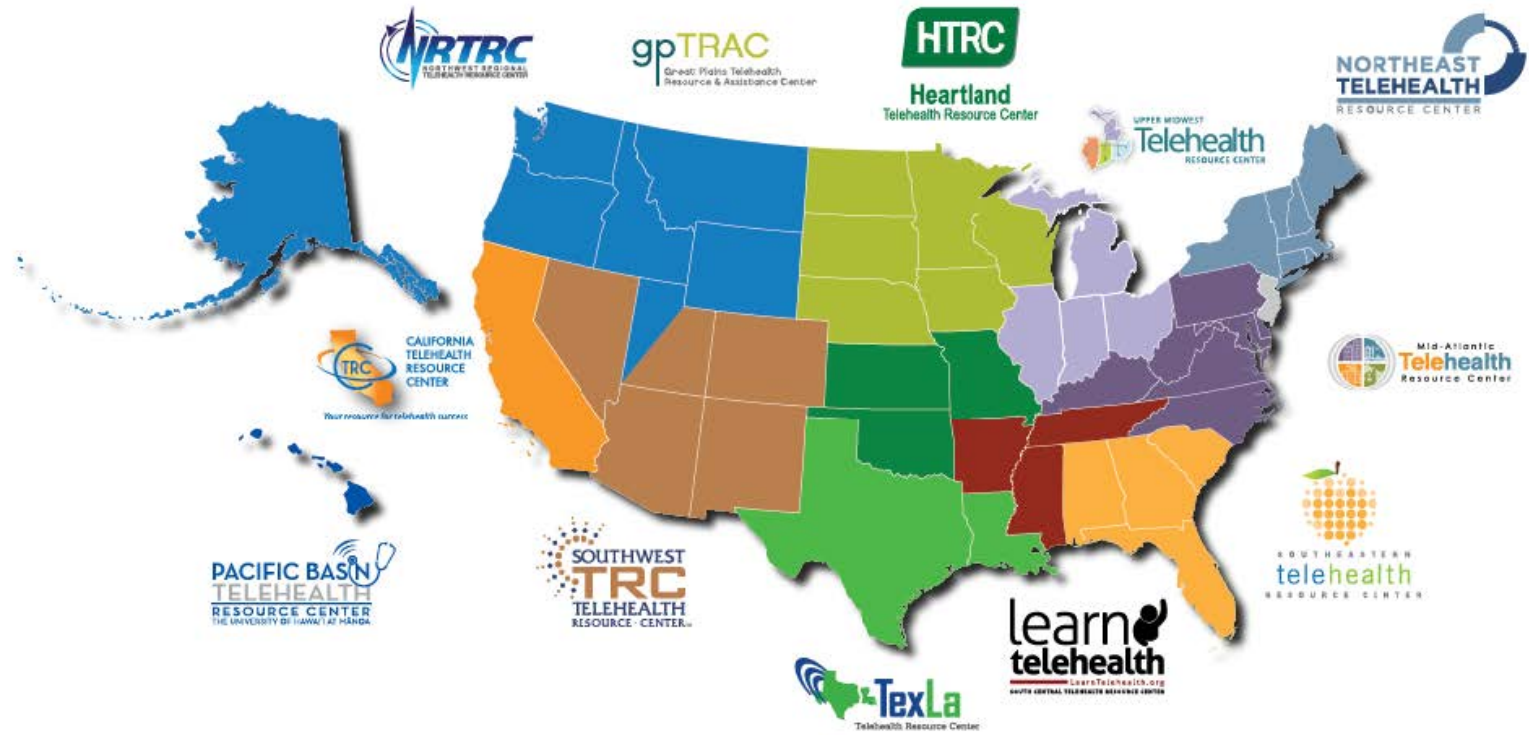
**| Institute for Digital
Health & Innovation**

South Central Telehealth Resource Center

- Located in Little Rock, Arkansas
- Serves Arkansas, Mississippi, and Tennessee
- One of 12 regional centers funded by the Office for the Advancement of Telehealth (HRSA)



TelehealthResourceCenters.org




TTAC TelehealthTechnology.org
National Telehealth Technology Resource Center

Center for Connected Health Policy
The National Telehealth Policy Resource Center

2 National Resource Centers

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

12 Regional Resource Centers



In this session, we will:

- **Define basic definitions**
- **Discuss benefits**
- **Describe potential applications**
- **Investigate technology**
- **Identify ways to increase knowledge**

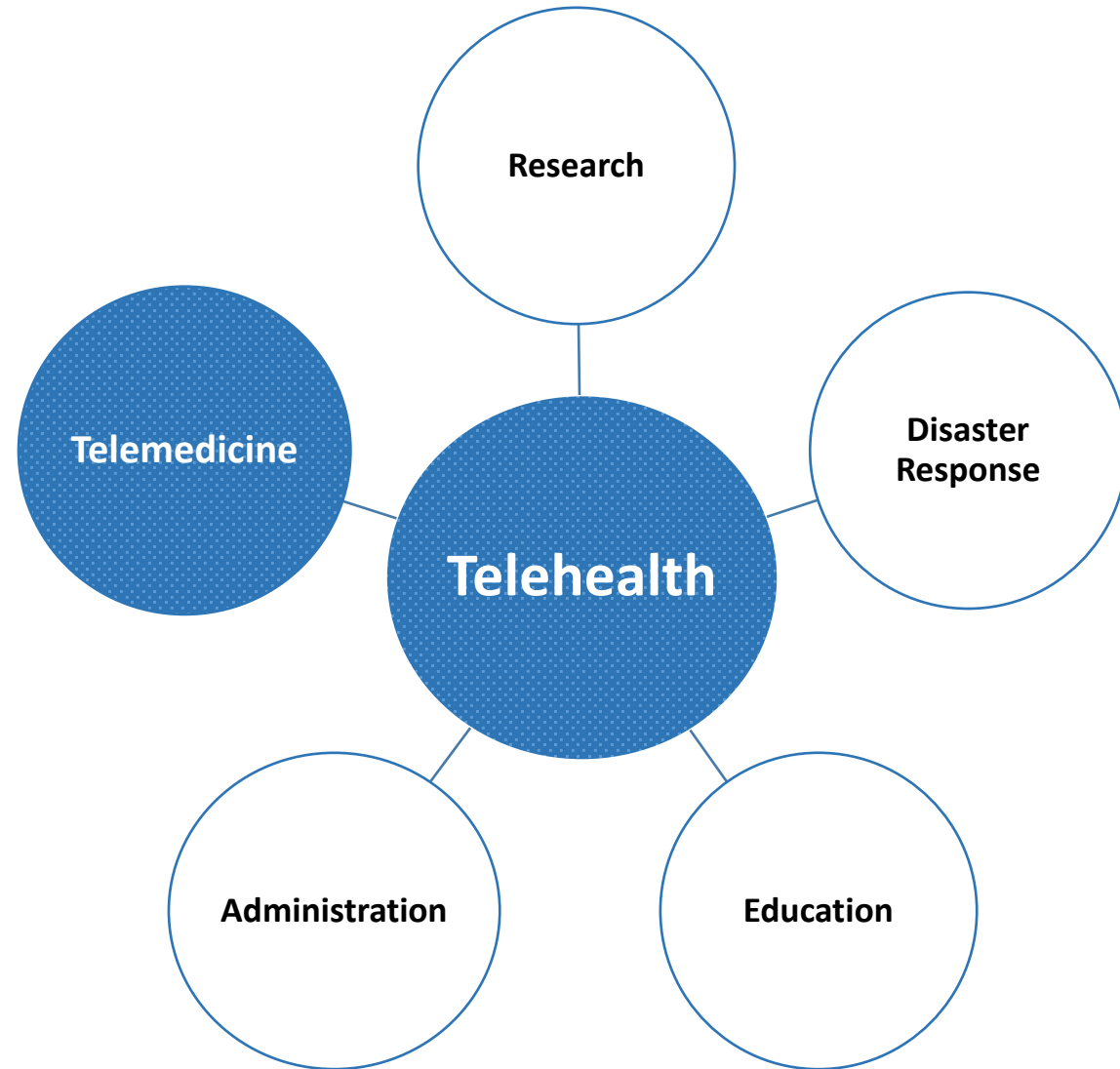


The Basics





Telemedicine
is part of the solution!





Telehealth



“The use of technology to deliver health care, health information or health education at a distance.” ~ www.hrsa.gov/telehealth/



Telemedicine

“The use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.”

~ American Telemedicine Association





Research Telemedicine Education



Jennifer's Story: A Telemedicine Tale

Telemedicine Delivery Methods

Live (synchronous)

Store and Forward (asynchronous)

Remote Patient Monitoring

mHealth (mobile health)

Live (synchronous)

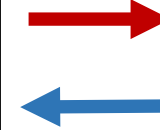
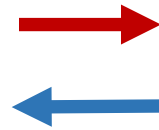
Originating Site

Location of Patient

Video + Audio Imaging

Distant Site

Location of Clinician





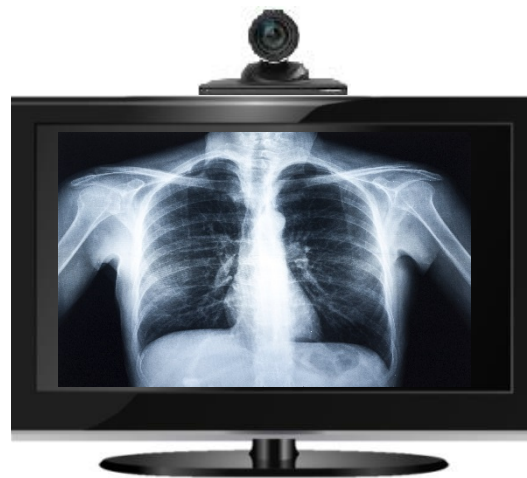
Store and Forward (asynchronous)

Originating Site

Location of Patient

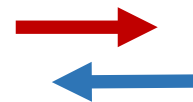


Digital or Video Imaging

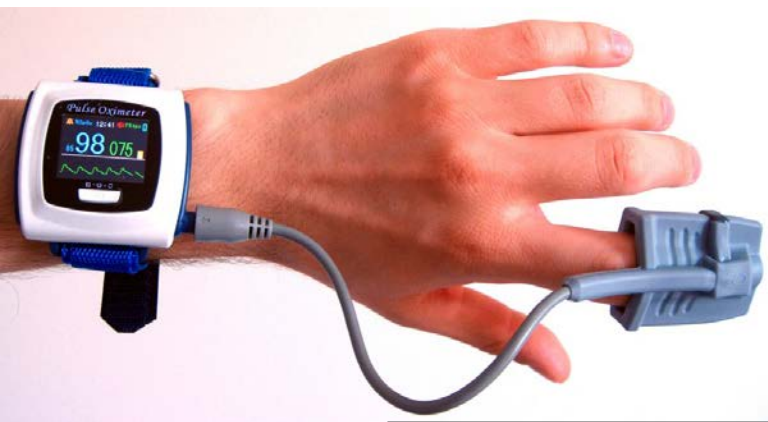


Distant Site

Location of Clinician

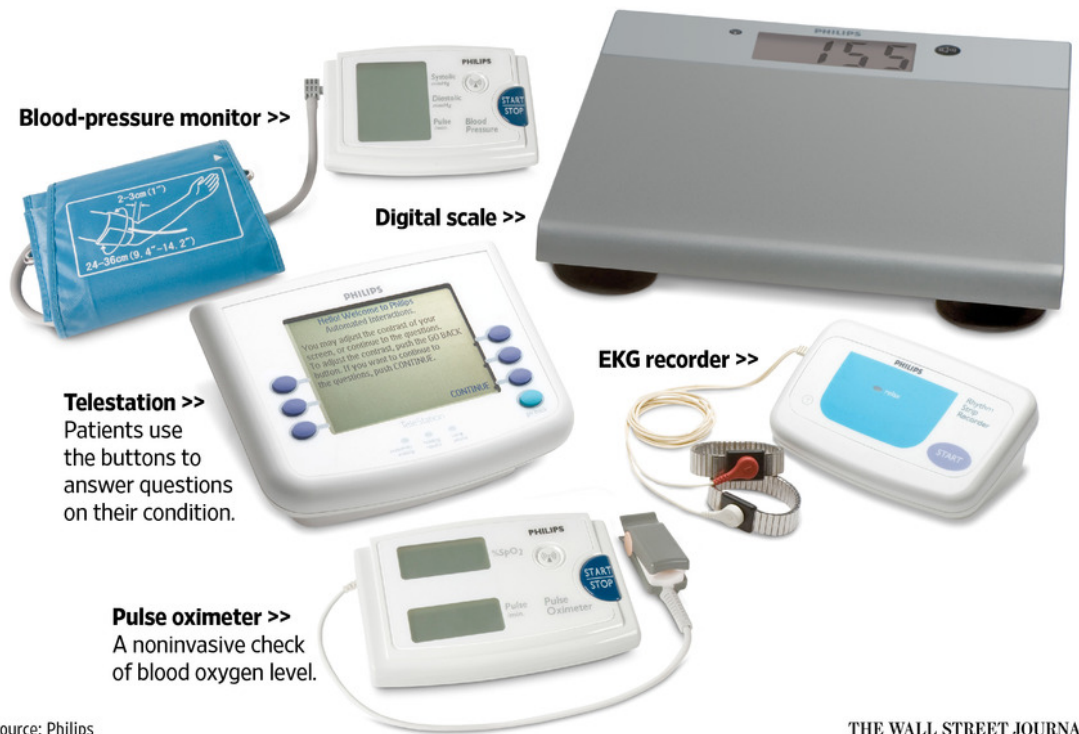


Remote Patient Monitoring (RPM)



Long Reach

Wireless devices for remote patient monitoring



Blood-pressure monitor >>

Digital scale >>

EKG recorder >>

Telestation >>

Patients use the buttons to answer questions on their condition.

Pulse oximeter >>

A noninvasive check of blood oxygen level.

Remote Patient Monitoring

hi mommy!!!



Mobile Health (mHealth)



Mobile Health is the provision of health care services and personal health data via mobile devices (also known as mHealth)



Who is Interested in Telehealth & Telemedicine?

- Providers
- Patients
- Clinicians
- Administrators and Directors
- Community Leaders

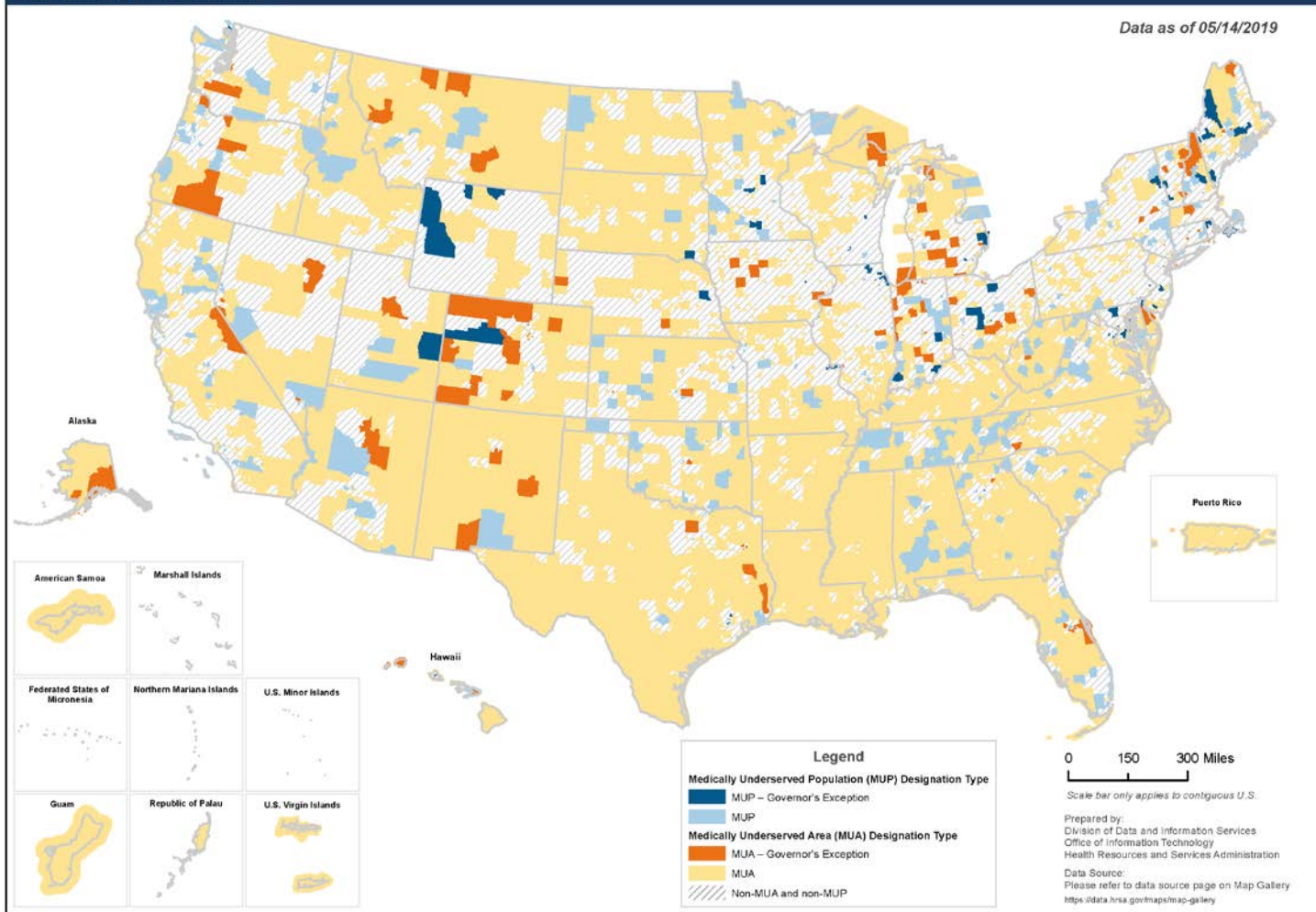




HRSA
Health Resources & Services Administration

Medically Underserved Areas/Populations

Data as of 05/14/2019



Where you live should not determine whether you live or whether you die.

~U2 'Crumbs From Your Table'



Review the Basics

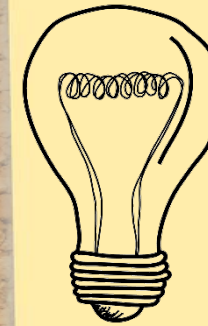
Telehealth

“The use of electronic information and telecommunications technologies to support long-distance clinical healthcare, patient and professional health-related education, public health and health administration.”

~www.hrsa.gov/telehealth



Telemedicine



“The use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.”

~ American Telemedicine Association

Live (synchronous)

Originating Site (patient location) communicates live via audio and video with Distant Site (Provider/Clinician location).

Store and Forward

(asynchronous)

Images are recorded at an Originating Site (patient location) and accessed at a Distant Site (Provider/Clinician location).

Remote Patient Monitoring

Digital technologies are used to collect and transmit data between a patient and a health care provider for assessment purposes.

Where you live should not determine whether you live or whether you die.

The Benefits



Save Travel and Time Expenses



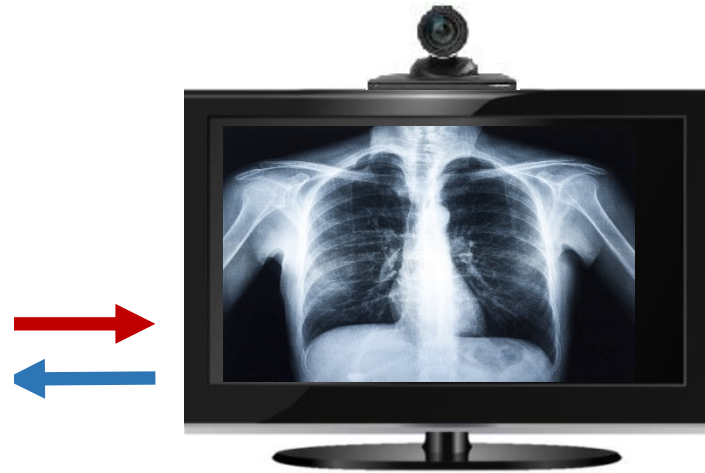
- For the provider or clinician in a multi-site practice
- For the patient living in an urban or under-served areas

Increase Access to Health Care Providers

Originating Sites
Location of Patient



Digital, Audio or Video Imaging



Distant Site

Location of Provider
or Clinician



Important Information can be viewed more timely!

Broader Access to Specialists and Sub-Specialists

Hand Consultations | OB | eICU | Psychiatry | Cardiology

- Connects patients to appropriate specialists
- Promotes coordination of care
- Can reduce errors
- Can improve quality of care





Support for the Local Community

- Increases clinic access for patients
- Enhances a rural clinic's reputation
- Keeps revenue in the community (ex: RX and groceries)



Review the Benefits

Increases Provider and
Clinician Access for
Remote Patients

Saves Travel and Time
Expenses

Supports the
Local Community

Provides Broader
Access to Specialists

Provides Broader
Access to
Sub-Specialists

Terms to Know:

Originating Site – Location of Patient

Distant Site – Location of Clinician

Telemedicine
Appointment Reminder!

Dr. Martin on Tuesday
At 10 a.m.



Potential Applications



Categories for Telehealth Applications

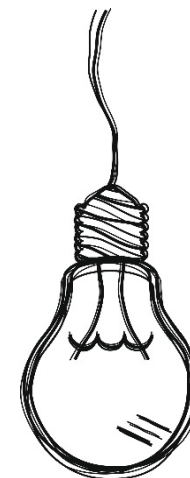


- Clinical
- Educational
- Administrative



Clinical Applications

- Trauma
- High-Risk OB/GYN
- Dermatology
- Diabetic Retinopathy
- Mental Health
- Tele-ICU
- Pediatrics
- Burn
- Telestroke



Areas of Growth

- Schools
- Work Places
- Language Interpretation
- Home Health
- Prisons
- Dentistry



Education

- Distance Learning
- Hands-On Virtual Training
- Research
- Community Education






Administrative Applications

- Virtual Meetings
- Multi-Location Interviews

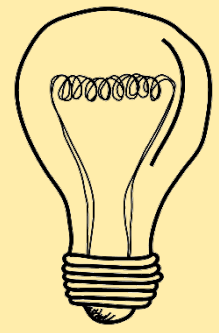




Review Potential Applications



Telemedicine Applications



- Clinical
- Educational
- Administrative





Telehealth Technology

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Telehealth and Telemedicine Technology



Clinical/
Non-Clinical
Carts



Desktop Unit



Room System



mHealth
(Mobile Health)



Clinical Cart



- HD Video Camera
- Monitor
- Microphone
- Encryption Software
- Peripheral Connection

Non-Clinical Cart



- HD Video Camera
- Monitor
- Microphone
- Encryption Software



Peripherals





Desktop Unit





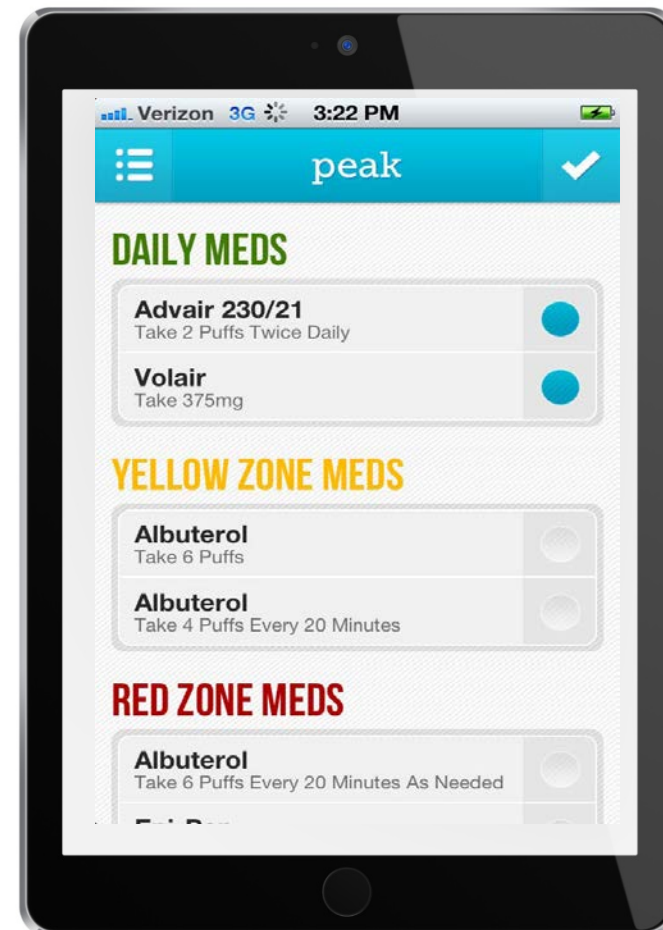
Room System





mHealth Devices

- Mobile Phones
- Tablets
- Wearables





mHealth Devices





Is a wearable device or health-related app considered HIPAA compliant?

If the device is purchased by the consumer, data collected with the device is generally not a HIPAA covered entity, which means the data collection is not protected under the law.

If a patient receives the wearable device through their hospital or provider, the health care data collected by the device is considered protected health care information (PHI) and is safeguarded under HIPAA.

It is important to understand the laws in the state where the patient lives. Each state can adopt its own laws regarding the collection of health care data.



HIPAA Compliant

- HIPAA regulations are followed as if consultation is taking place face-to-face
- Encryption software helps to protect a patient's health data



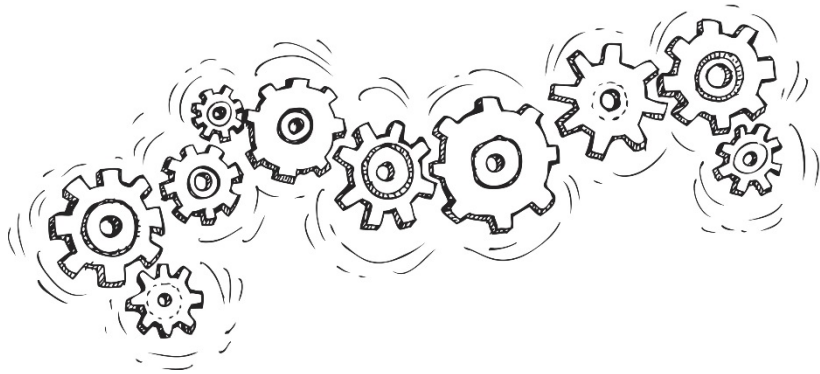
Encryption Software

PC to PC

- Cisco Jabber

Direct-to-Consumer Market

- American Well
- My Doc On Call
- Specialist on Call

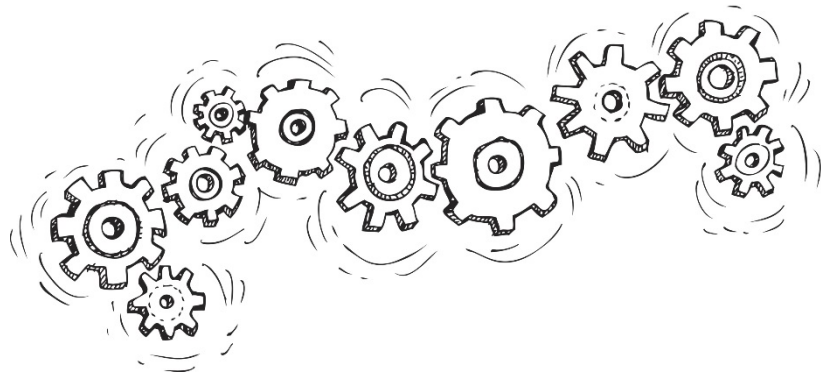




Making the Connection

Point-to-Point

- Similar to making a phone call
- No set up time

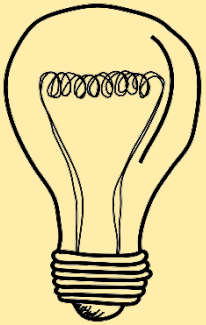


Bridge – Multi-Point Control Unit (MCU)

- Similar to a virtual meeting room
- Links multiple sites to a single conference

Review Telehealth Technology

Technology Components



- Clinical Cart
- Non-Clinical Cart
- Desktop Unit
- Room System
- mHealth
- Peripherals


Connect

- Point-to-Point
- Bridge

Encryption Software

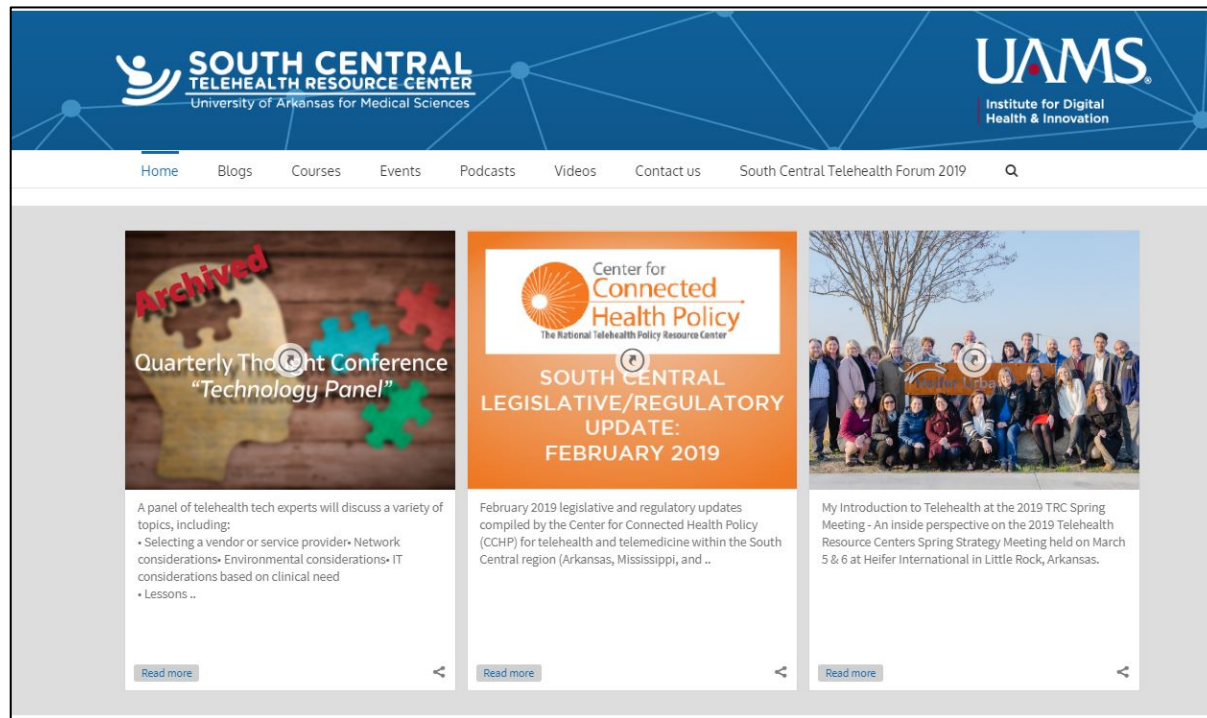
- PC to PC
- Direct-to-Consumer

**HIPAA
Compliant**



Increase Knowledge

Website

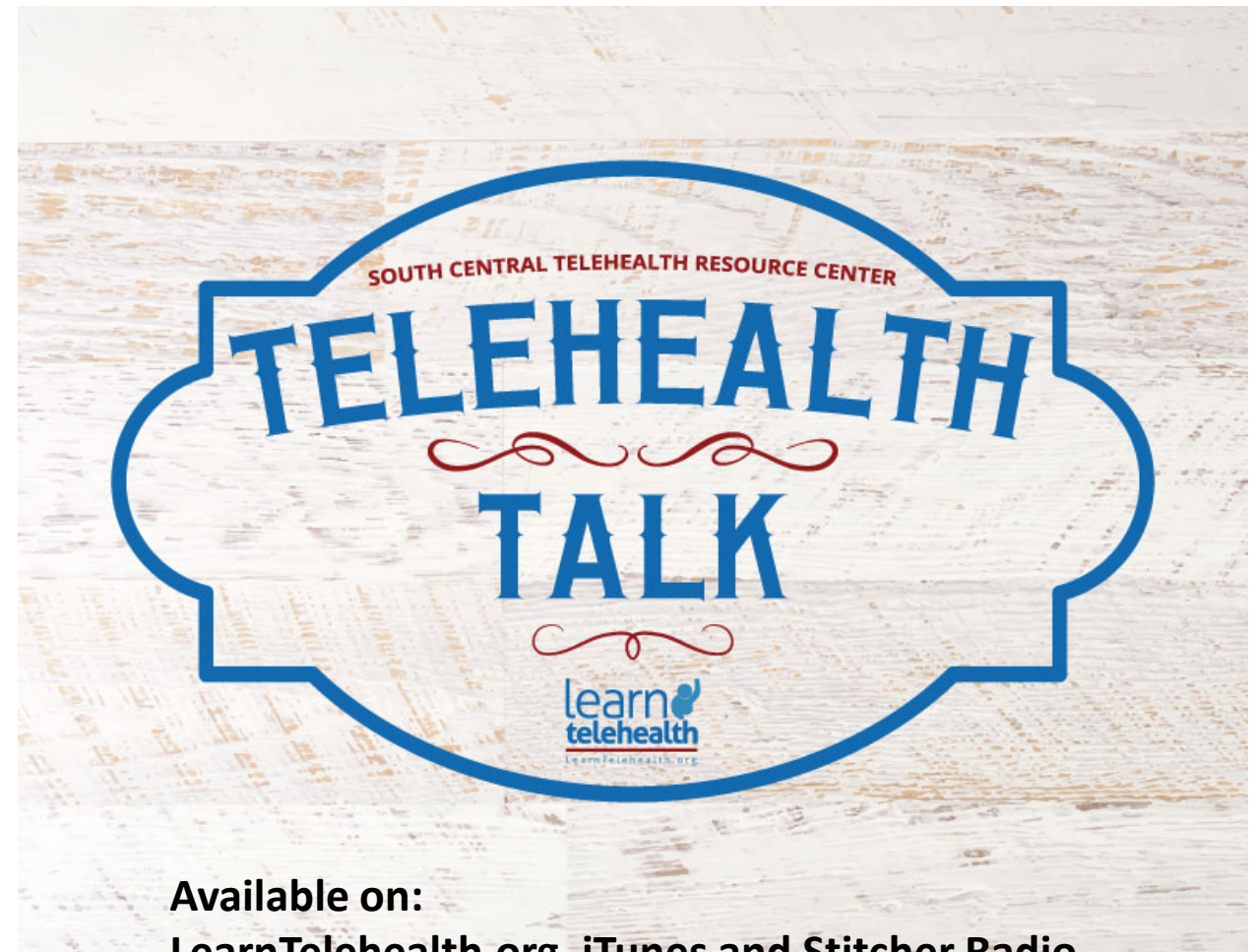


- Free Telehealth Courses
- Free Webinars
- Blog Posts
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The Only Podcast Devoted to Telehealth!

- Read the podcast summary
- Listen to the podcast



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Telehealth 101


The Easy Basics of
Telehealth and Telemedicine

Every Month on the Second Tuesday @ Noon CST

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ARCHIVED

Quarterly Thought Conference

"The Road to School-Based Health Clinics"



FREE WEBINAR!



National Telehealth Resource Centers



Questions?



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Thank you!

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