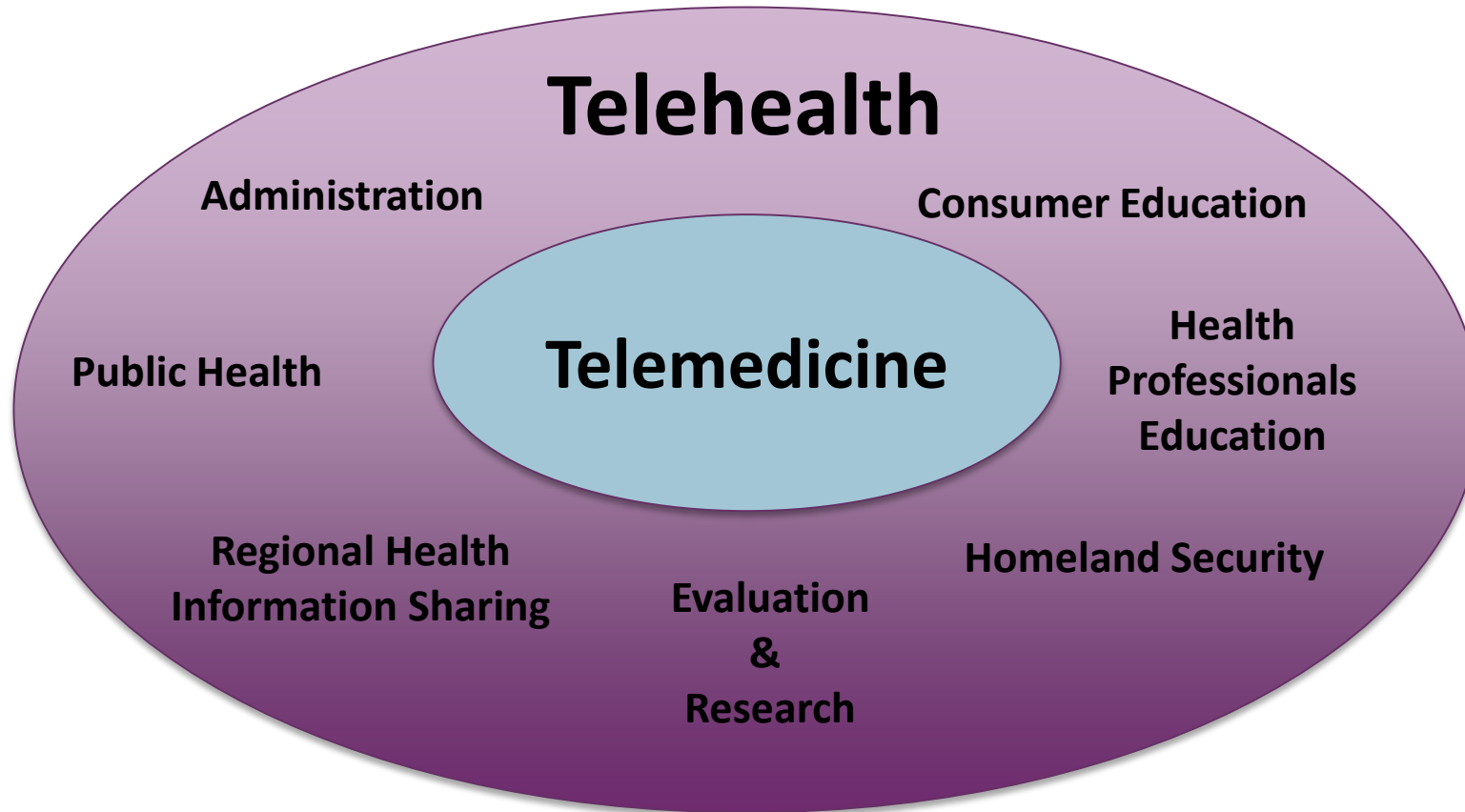




# Telehealth Training

# MODULE: OVERVIEW – WHAT IS TELEHEALTH



# OBJECTIVES

- After completing this course, you should be able to:
  - Define telehealth and its various delivery modalities
  - Describe aspects of telehealth licensing and interstate compact rules
  - Describe Emory Healthcare's Telehealth policy

# WHAT IS TELEHEALTH?

- **Telehealth** is providing care at a distance utilizing medical and related data transferred via audio, video, and/or other types of telecommunications technology to provide or support clinical and non-clinical services (e.g., education, administration, public health)
- **Telemedicine** refers specifically to remote clinical services
- These are the four most common telehealth **modalities**:



Live Video-conferencing



Store and Forward



Remote Patient Monitoring



mHealth

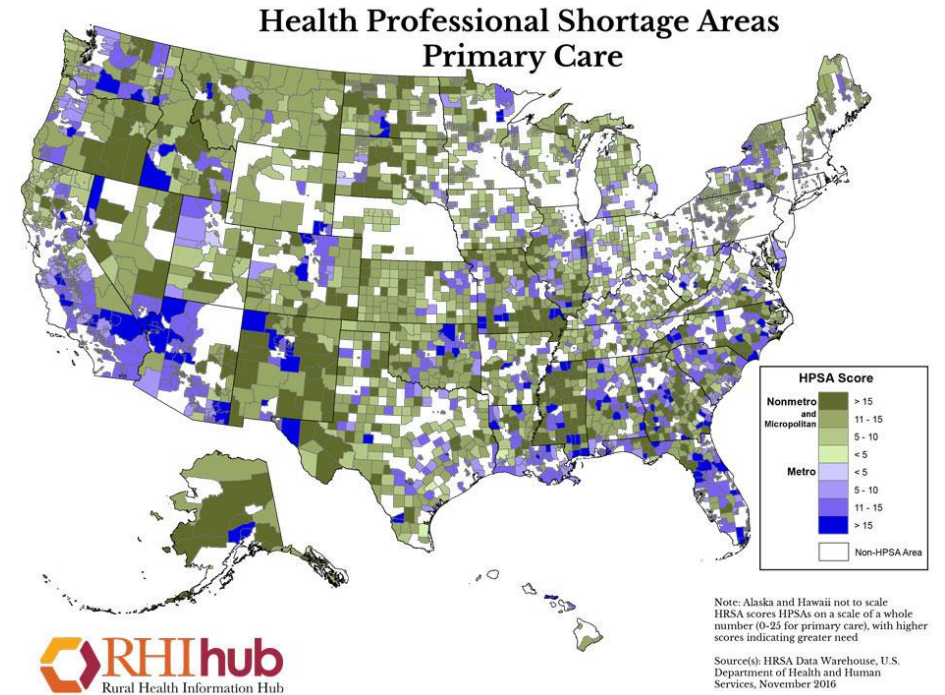
# GEORGIA'S DEFINITION TELEHEALTH

- Telemedicine is the use of medical information exchange from one site to another via electronic communications to improve patient's health status. It is the use of two-way, real-time interactive communication equipment to exchange the patient information from one site to another via an electronic communication system. This includes audio and video communications equipment.
- Closely associated with telemedicine is the term “telehealth,” which is often used to encompass a broader definition of remote healthcare that does not always involve clinical services. Telehealth is the use of telecommunications technologies for clinical care (telemedicine), patient teachings and home health, health professional education (distance learning), administrative and program planning, and other diverse aspects of a health care delivery system.

Source: GA Dept. of Community Health, GA Medicaid Telemedicine Guidance Handbook, p. 5, (April 1, 2019). (Accessed Apr. 2019).

# WHY TELEMEDICINE?

- Clinical provider shortages
- Misdistribution of providers
- Aging population
- Travel time, cost & hardship
- Language & cultural barriers
- Clinical education
- Disaster relief
- Rural & urban medically underserved populations
- Many others reasons for patients not receiving needed care



# TELEHEALTH BENEFITS

- Reduces barriers to access
- Increases efficiency for providers
- Reduces overall health care costs
- Reduces delays in care
- Retains resources locally
- Reduces travel
- Increases patient & provider satisfaction
- Supports Improved quality
- Improves health outcomes
- Literature contains numerous other benefits overall & by specialty



# TELEHEALTH APPLICATIONS

- Intensive care units
- Inpatient care
- Emergency departments
- Emergency response vehicles
- Skilled nursing services
- Outpatient services
- Screening services
- Chronic disease management
- Patient support groups
- Home monitoring programs
- Clinical provider education
- Patient education
- Interpreter services
- Provider to provider consultation





# BASICS – DEFINITIONS

**Originating Site:** Location of a patient at the time the service is provided. Provider must be licensed in the state of the originating site. Examples of originating sites include, but are not limited to:

- Patient's home
- Doctor's office
- Clinic
- Hospital
- School
- Work
- Correctional facility



**Distant Site:** Location of the provider rendering services at the time the service is provided. Examples of distant sites include but are not limited to:

- Provider's home
- Provider's office
- Clinic
- Hospital

# TYPES OF CONNECTIVITY

- POTS: Plain Old Telephone System
- ISDN: Integrated Services Digital Network
  - Digital Phone Line
- IP: Internet Protocol
  - T1, DSL, Cable, ISDN can all transmit IP Information
  - Public vs. Virtual Private
  - Quality of Service
- Wireless
  - Minimum 3G
- Microwave & Satellite



# LIVE VIDEO CONFERENCING (SYNCHRONOUS)

- **Live Video Conferencing:** Synchronous, real-time, two way consult between a patient (possibly with medical provider present) and a provider at a distant site
- **Technology:** Videoconferencing equipment, specially adapted diagnostic equipment, often referred to as peripherals, such as a USB Digital stethoscope
- **Example use cases:**
  - Telestroke visits where the patient is located in the ED and the Neurologist is remoting in from their home office when on call
  - Telepsychiatry & other mental/behavioral health applications where the patient is located in the ED and an evaluation could be done remotely with a psychiatrist to reduce the length of stay

# LIVE VIDEO CONFERENCING (SYNCHRONOUS)

- Effective & flexible in many situations & locations
- Equipment needed: camera, monitor/viewing screen, microphone & speaker, codec, peripherals (e.g., electronic stethoscope)
- Desired features
  - Pan tilt zoom camera
  - Far end camera control &/or automatic camera movement
  - Quality lens optics, high-resolution
  - Automatic color balance & automatic gain
  - Picture in picture
  - Full duplex audio



# STORE AND FORWARD (ASYNCHRONOUS)

- **Store and Forward:** Asynchronous, delayed transfer of diagnostic images, video and other data from one site to another in preparation for a consult or for direct consultation when face-to-face not necessary
- **Technology:** Digital camera, computer, radiology PACS, pathology whole slide imager, digital retinal imager
- **Example use cases:**
  - Radiology, pathology, dermatology, ophthalmology
  - Teledermatology: Primary Care Provider takes a digital photo of a patient's skin condition and sends the image via secure platform to a dermatologist for review and determination of treatment if needed



# REMOTE PATIENT MONITORING

- **Remote Patient Monitoring:** The use of a specific technology to enable monitoring of patients outside of traditional clinic settings to improve care and potentially reduce cost by providing the proper interventions at the right time
- **Examples include:**
  - Glucose monitoring for diabetes patients
  - Daily weights for heart failure patients
  - Bluetooth blood pressure monitors for hypertension
  - Monitoring of chronic conditions



# MHEALTH

- **mHealth:** The use of mobile phone and other wireless technology applications to monitor a user's health and provide education
- **Example use case:**
  - Apple Health app can integrate with a patient's electronic health record, allowing users to access their health data on their iPhone or iPad

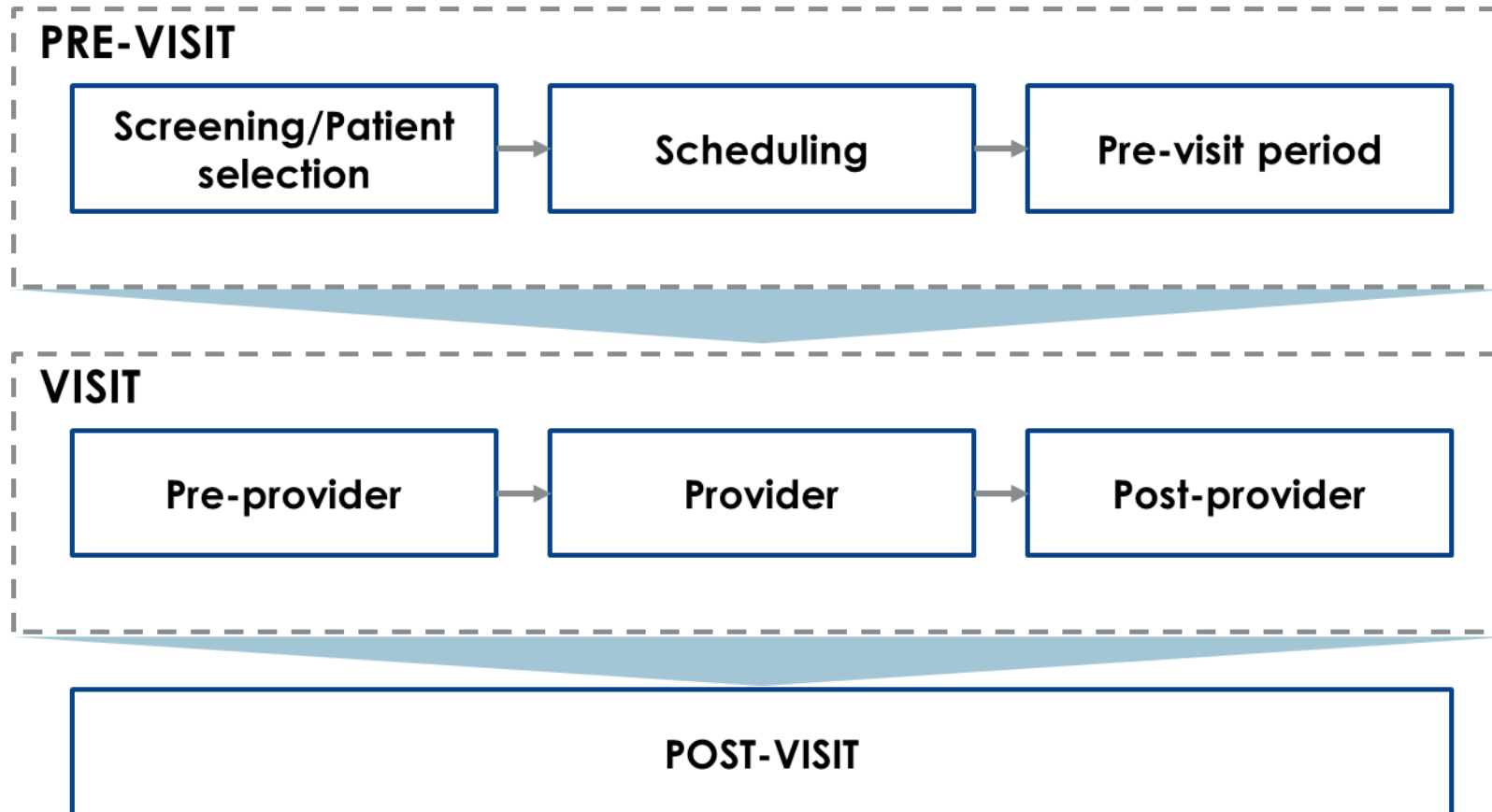


# EMORY'S TELEHEALTH POLICY

- Telehealth **use case development** must be done in partnership with the Emory telehealth team (ehctelehealth@emoryhealthcare.org)
- Emory Healthcare's **primary platform** for telehealth is provided by Cerner/American Well
- Alternative, **approved, HIPAA compliant platforms** can be used in certain circumstances
- Handling of **PHI and ePHI** must still follow current policies
  - Do not **capture or communicate** PHI using unsecured devices or platforms (phones, personal email, etc.)
  - Do not **store** PHI on unsecured devices or platforms



# MODULE: TELEHEALTH VISIT PROCESSES



# OBJECTIVES

- Following this module you will be able to:
  - Describe the stages of a telehealth encounter
  - Determine the optimal set-up for your technical equipment

# INTRO

- Once you have addressed operational and regulatory aspects of Telehealth, the final step will be to master the **delivery of a quality telehealth visit**
- These **skills** are learned by repetition and by making sure you **prepare properly** for each telehealth visit so you can be positioned to deliver **quality care** to your patients
- Requirements for **store and forward** applications include use of high-quality appropriately evaluated technology (e.g., digital camera, peripheral devices) & image/data acquisition **protocols** (e.g., proper views/angles and number of images for given conditions)
- **Real time** encounters require not only technology considerations but also “**webside manner**” skills
- All telemedicine encounters require **clear communication skills**, both written and oral

# TELEHEALTH ENCOUNTERS

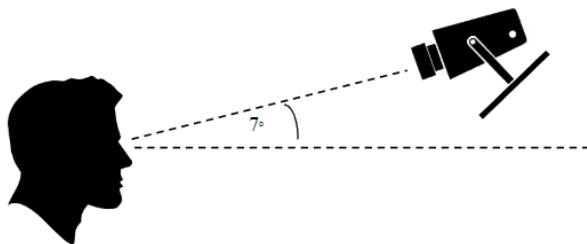
- All Telehealth encounter can be organized into three parts:
  - **Pre visit**
    - Technical setup
    - Encounter preparation (including **consent** if required)
  - **Visit**
    - Introduction
    - Conducting the visit
    - Ending the visit
  - **Post visit**
    - Documentation
    - Follow-up with providers & patient as necessary
    - Billing

# PRE VISIT – TECHNICAL SETUP (REAL TIME)

## Camera

- Placement should be above subject
- Position camera to estimate gaze and make it appear that subject is looking at the person on the other end while looking forward at the monitor

Camera Position



## Microphone and Speakers

- Make sure device is powered
- Test microphone
- Test speakers

# PRE VISIT – ENCOUNTER PREPARATION

- Ensure location is **quiet, private, and professional**
- Providers (and if possible patients) should be located in front of a **neutral background** for maximum visibility
  - Provider should wear colors that are camera friendly (**light blue** is ideal; do not wear white lab coats, bright/multi-colored patterns)
- Do not sit in front of a light source to prevent backlighting – **indirect light** is preferred
- Have access to patient's **Electronic Medical Record** readily available
- **Review** any patient information pertinent to the visit

# INTRODUCTION

- **Introduce** yourself
  - Share your specialty
  - Share where you are located
  - Summarize the conditions & limitations of telemedicine
  - Note possible need to end encounter & refer to in-person if necessary (e.g., emergency room)
- **Share** appropriate contact info in case your visit gets disconnected
- **Instruct** patient to call 911 if they are experiencing a medical emergency
- Follow **standard documentation/protocols** to ensure these items are addressed at the beginning of the visit

# CONDUCTING THE VISIT

- **Conduct your assessment**
  - Follow the guidance for a telehealth exam that is specific to your specialty
  - Important to take a thorough history
  - Observing the patient and their surroundings are vital during a telehealth visit
- **Tell a patient** if you need to divert attention away from the patient, look **off-screen** (at the EMR), or excuse yourself from the camera view
- **Documentation** should always follow the requirements for the specialty and appointment type
- Include in documentation the **modality** (e.g., real time, asynchronous, etc.) in which the patient was seen



# TELEHEALTH LIMITATIONS

Some limitations of a telehealth video visit can include:

- Cannot lay hands on or get other relevant information (e.g., smell liquor) about the patient for a physical exam (although with qualified adjunct at patient end information can be relayed)
- May not be able to perform certain diagnostic exams that require patient movement that is potentially out of camera range (e.g., gait, range of motion)
- May not be able to perform labs (e.g., swab for a strep test)
- Video and audio quality may vary depending on devices, equipment & internet service (bandwidth) used
- Limited diagnostic capabilities depending on peripherals (e.g., electronic stethoscope) available on patient end

# COMMON CONDITIONS AMENABLE TO TELEMEDICINE

## **Common Diagnoses capable of being made via telehealth include, but not limited to:**

- Sinusitis, URI, cough, sore throat
- Conjunctivitis
- UTI, cystitis and painful urination
- Cellulitis
- Rashes/abrasions/lacerations
- Insect or animal bites
- Sprains/strains

## **Other common conditions:**

- Behavioral health
- Chronic conditions and follow up
- Medication questions

# ENDING THE VISIT

- **Recap** the visit and provide **follow-up** instructions
  - Verify the patient's pharmacy to route the prescription
  - Review treatment plan
  - Discuss follow-up plan
  - Educate if necessary
- Invite the patient to end the visit first to ensure they are finished talking
- Complete Documentation

