Arizona Telemedicine Program

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Southwest Telehealth Resource Center
Board Member ATIC
Board Member USDLA

How to put the TELE into Telehealth
Technology + Telecommunications = Telehealth/Telemedicine
www.telehealthresourcecenter.org
Southwest Telehealth Resource Center
www.southwesttrc.org = SWTRC

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

- Resources/where to shop
- How to shop
- Network and interview who has been doing what – with what!
- Pricing
- Ease of use/training protocols/end user
- Network support
- Contractual agreements/licenses/maintenance fees
- Efficiency?
Telepresenting
Hands-on!

Telemedicine =
Communication Technology

- Lights, Camera ACTION!
- Two way videoconferencing
- Web cams using secure sites over the internet
- Other devices or programs which connect to your laptop or desktop @home or bedside

Telemedicine

- Information needs to be medically accurate
- Teaches participants to practice being good listeners as only 1 person can speak at a time
- Patient benefits from the undivided attention of a physician
- Economizes the use of time for all participants
Elements of Production

• Sound
  - microphones
  - electronic stethoscope
• Lighting
  - color temperature
  - angle
• Space and geography of the room

• Same Elements of production whether you are in a state-of-the-art videoconferencing suite, using a videophone or a webcam @ your desktop!
• Background
• Lighting
• Audio
• Camera skills – be sure you are looking GOOD!
telemedicine
= medicine at a distance

Telehealth

Telehealth is sometimes discussed interchangeably with telemedicine. The Health Resources and Services Administration distinguishes telehealth from telemedicine in its scope. According to them, telemedicine only describes remote clinical services; such as diagnosis and monitoring, while telehealth includes preventative, promotive and curative care delivery.\[1\] This includes the above-mentioned non-clinical applications like administration and provider education which make telehealth the preferred modern terminology.\[2\]
Robots for Education
Sells IHS, AZ
HIPAA Health Insurance Portability And Accountability Act of 1996

Knock Knock!
-Who's there?
HIPAA!
-HIPAA who?
I can’t tell you that.
To be a good telepresenter you must be a good communicator.

• verbally
• non-verbally

SELFIES!
Teleconferencing Tips

• wear appropriate clothing and jewelry
• be aware of your body language
• use an agenda and facilitate introductions
• develop protocols for questions
• be familiar with the equipment
• test all equipment in advance

Technology

• Makes the world a smaller place
• Keeps people in their communities
Telehealth Technology Resources

Arizona Telemedicine Program
Telemedicine & Telehealth Service Directory
Southwest Telehealth Resource Center
National Telehealth Resource Centers
ATA American Telemedicine Association
USDLA United States Distance Learning Association
University of New Mexico Center for Telehealth
Project ECHO
  ATP Project ECHO
  UNR Project ECHO
TTAC Telehealth Technology Assessment
Resource Center

http://telemedicine.arizona.edu
www.southwesttcrc.org
www.telehealthresourcecenter.org
www.americanotelemmed.org
www.usdlia.org
http://hsc.unm.edu/community/telehealth/
http://echo.unm.edu/
http://telemedicine.arizona.edu/echo/
https://med.unr.edu/echo
www.telehealthtechnology.org

Telehealth Networking
Best Practices

• Technical Protocols
• Clinical Protocols
• Mock Patients
• Training

Distance Education
CE Requirements

- MD: 20 per year (AZ)
- PA: 50 every 2 years (AZ)
- RN: 15-30 every 2 years
- NP: 30 every 2 years
- EMS: 60 per 2 years
- DO: 20-50 per year

Participant Diversity

- MD
- Promotor
- Technology
- EMS, Fire, Safety
- Respiratory Therapist
- Behavioral Health
- Registered Dietitian
- DO
- PhD
- Education & Training
- Clinical Staff
- RPH/PharmD
- Radiology Technician
- Social Worker
- PA-C
- Nursing
- DDS
- Medical Student
- Physical Therapist
- Administrative Staff
Types of Events

- Grand Rounds
- Satellite Broadcasts
- Webinars
- Videostreaming LIVE or Recorded Archive
- Multi-Point LIVE Events, i.e. Emergency Preparedness
- Training
- Administrative

Types of Administrative Events

- Bioterrorism Task Force
- Statewide or Country Roundtables
  - Fires
  - West Nile Virus
  - Diabetes
- Special Interest
  - IHS
  - ADHS
  - CRS (HRSA)
  - ADOC
Video Conference Rules

1. Always assume that your microphone is on

2. Always assume that someone can see you
Barriers

- Time zone differences
- Room size
- Reduced travel

Benefits

- **Cost savings** (travel / registration fees)
- Reduced time away from work
- Wider variety of opportunities
- Convenience
https://echo.unm.edu/
ECHO=Extension for Community Healthcare Outcomes

Project ECHO: A Revolution in Medical Education and Care Delivery

Project ECHO is a lifelong learning and guided practice model that revolutionizes medical education and exponentially increases workforce capacity to provide best practice specialty care and reduce health disparities. The heart of the ECHO model™ is its hub and spoke knowledge sharing networks, led by expert teams who use multi-point videoconferencing to conduct virtual clinics with community providers. In this way, primary care doctors, nurses, and other clinicians learn to provide excellent specialty care to patients in their own communities.

People need access to specialty care for their complex health conditions.

There aren’t enough specialists to treat everyone who needs care, especially in rural and underserved communities.

ECHO trains primary care clinicians to provide specialty care services. This means more people can get the care they need.

Patients get the right care, in the right place, at the right time. This improves outcomes and reduces costs.

Project ECHO Hubs (Global)
Telerheumatology ECHO

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Clinical Case Presentation

Go through the steps required to set up, carry out and complete a clinical telemedicine referral.
How does this whole thing work, anyway?

- Who decides to refer a case via telemedicine?
- What is the procedure for referring a case? For consulting on a case?
- What kind of information does the teleconsultant require in order to staff the referral?
- Who organizes the case information, triages the case, does the scheduling, manages network connections, and facilitates the session?
Key Participants in the Referral Case Process

- **The Patient**
- Referring Healthcare Provider
- Telemedicine Site Coordinator (referring end)
- Telemedicine Case Coordinator (consulting end)
- Medical Director for Telemedicine (either end)
- Network Engineer(s); IT Staff
- Consulting Healthcare Specialist

Required Referral Case Information

- Patient Consent Form
- Patient History Form
- Patient Information Form
- Pertinent adjunct medical information (labs, progress notes, radiology/other imaging reports, digital images, outside consultation reports)
Referral Case Flow:
How referral cases are processed using the ATP model

• The organization of every telemedicine program is unique. Thus, infrastructure, types of services, utilization of support staff, and other operational processes will vary widely, are influenced by many factors, and should be designed to facilitate work flow as efficiently as possible.

• This next section outlines just one example of such a process that has been developed specifically for staffing non-emergent, provider-referred, appointment-based, multi-specialty outpatient clinical consultations (via either real-time interactive videoconference or asynchronous store-and-forward case review).

• The process does not apply to inpatient, trauma, teleradiology, or telepathology services, for which different technologies and separate protocols are used.
Telemedicine Site Coordinator with referring provider, reviewing and selecting case information for transmittance to the consulting site

Reviewing the steps in the telemedicine referral process and obtaining informed consent from the patient
Basic information sheet given to referral patients explaining the procedures, privacy, and research components of telemedicine

**Virtual Visit Information**

Telemedicine is an evaluation of your provider for a specialist at another hospital using video, audio, and computer data transmission. By using telemedicine, you may not have to travel to a major health center to receive care. You will receive the benefits of a specialist at this facility. Your local health care provider will be in control of all aspects of your care.

**Procedures**

A telemedicine session is similar to a remote medical office visit. At this session, special equipment may be used to record sound and pictures so the specialist can see or hear the patient. There should be no discussion from any of the equipment used. Your health history will be seen with the pictures. If it is a "live" telemedicine session, special video equipment will be used so that the specialist can see and talk to you. In this same way, you will be able to see and talk to the specialist.

**Privacy**

You will have the same privacy as you would in any examining room. The specialist is also in a private telemedicine room. All of your health history information and any photos used in the specialist will be kept confidential unless otherwise specified by you. Only photos and health information pertinent to your diagnosis will be recorded and sent to the specialist. Your medical file will be handled with the same confidentiality as at any exam in your local facility.

**Research**

The research component of telemedicine involves participating in research studies. The research will investigate ways to improve telemedicine services. If you provide your written consent, you will be asked to participate in a research study. If you decide not to participate in research, your care will not be affected, and you may still receive the benefits of telemedicine.

**Program Specific Information**

To receive the most accurate and appropriate treatment, the treating specialist may also request information from other specialists at the hospital. This information is shared only with the specialist you are seeing and is securely transmitted to ensure the privacy and confidentiality of your medical information. Your information is not shared with other specialists, facilities, or researchers who may contact you or send information to your treating specialist.
Ex: Poor diagnostic quality digital images for teledermatology referral case review 😞

Ex: Good diagnostic quality digital images for teledermatology referral case review 😊
Telemedicine Case Coordinator

• Receives the case information and records the teleconsultation request
• Compiles and inspects demographic and clinical case information (administrative review)

Telemedicine Case Coordinator

• Registers the patient
• Begins referral case processing and documentation
• Notifies Medical Director of request
Medical Director (Consulting site)

- Reviews the chart (clinical review)
- If further information is needed, notifies the TCC who then relays the request to the TSC
- If information is complete, permits the TCC to initiate scheduling

Telemedicine Case Coordinator

- For store-and-forward requests, schedules case review with teleconsultant

- For real-time videoconferenced requests, works with TSC to coordinate appointment scheduling for standing clinics
Using an online calendar to schedule network activities

Network Engineer

On the day of the scheduled videoconferenced clinic, sites may be dialed directly or a network engineer may enable the calls remotely.
The Telemedicine Coordinator may provide administrative and technical support during the session and is always immediately accessible if any needs or problems arise.

Telemedicine Case Coordinator

- Completes case management documentation and finalizes patient record
- Submits patient record to Medical Director for final chart review
- Submits patient record to Evaluation Coordinator for data collection
Telemedicine Case Coordinator

- Outside hard copy records are scanned into central EHR system on the consulting end (legal custodian of records)
- Integrated EHR system handles coding/billing
- Referral case process is complete

A Few Lessons Learned

- Regularly scheduled clinics tend to be more efficient than those scheduled on an as-needed basis.
- As much as possible, try to format telemedicine clinics after routine, in-person clinics (e.g., setting up a telemedicine suite close to patient exam rooms; following registration, prior authorization and patient check-in procedures).
- Appoint and train qualified back-up personnel. Cross-coverage is a must. On-going training is important.
- Design and post a case management work flow chart as well as step-by-step protocols (standard operating procedures).
- Clinical telemedicine practice standards and guidelines released by the American Telemedicine Association are available for free download at its website, www.americantelemed.org.
Thank you for your interest in attending this conference. We're glad you're here!
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