Arizona Telemedicine Program

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Southwest Telehealth Resource Center
Board Member ATIC
Board Member USDLA

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How to put the TELE into Telehealth

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Technology
+
Telecommunications
=
Telehealth/Telemedicine

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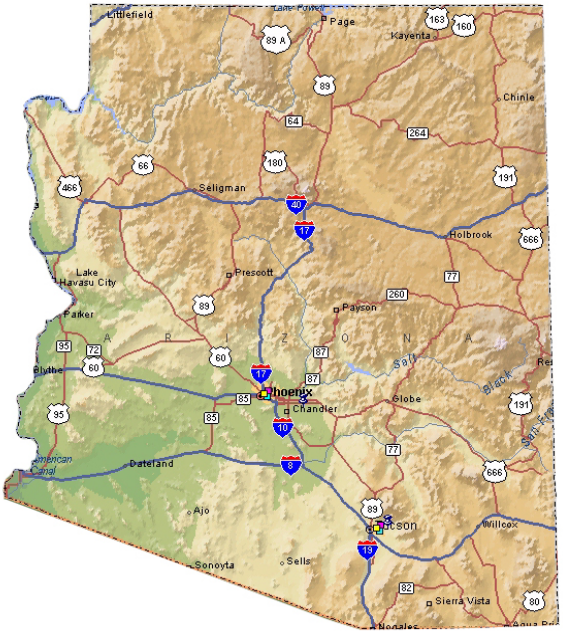

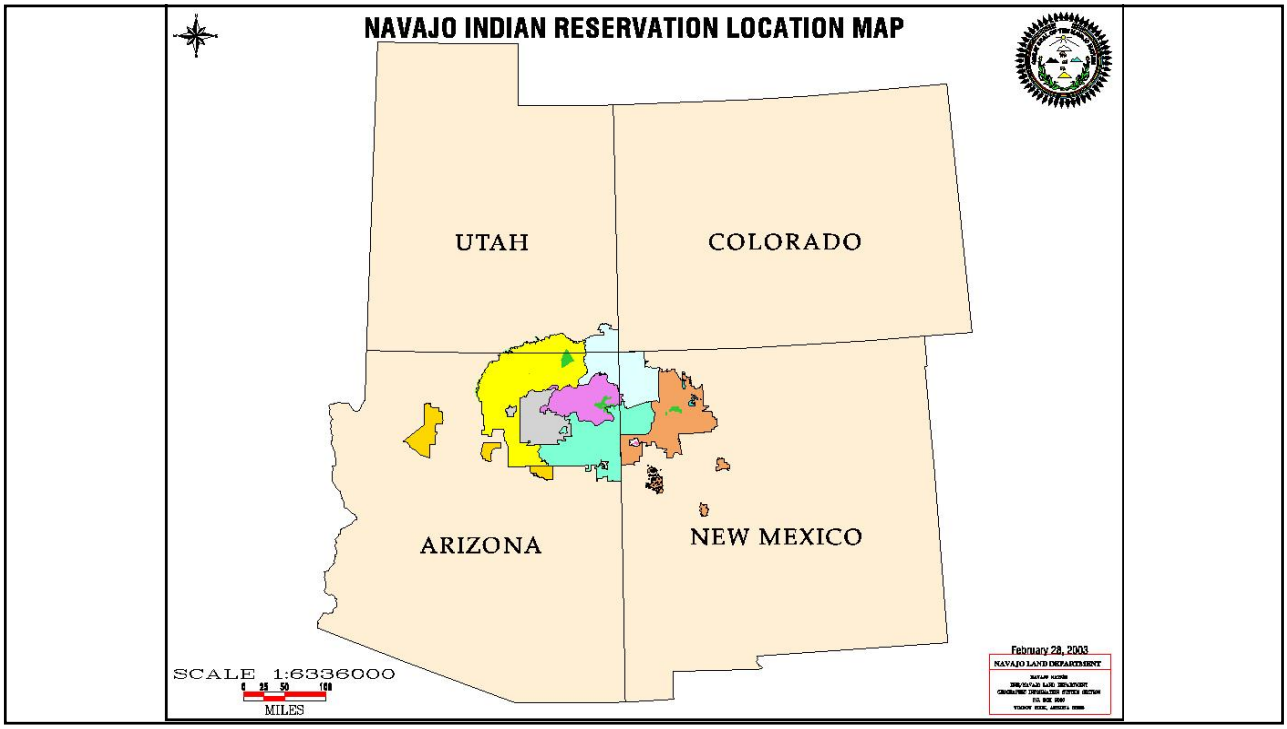

www.telehealthresourcecenter.org

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Southwest Telehealth Resource Center
www.southwesttrc.org = SWTRC

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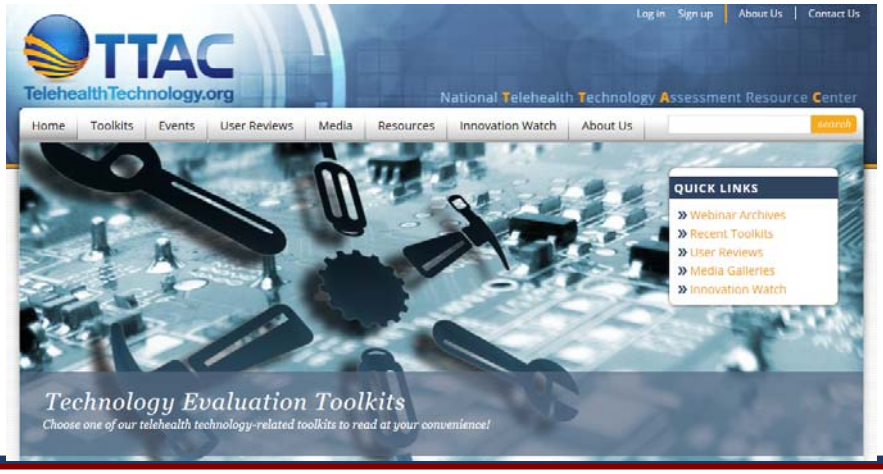
TTAC National Telehealth Technology Assessment Center
telehealthtechnology.org



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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?

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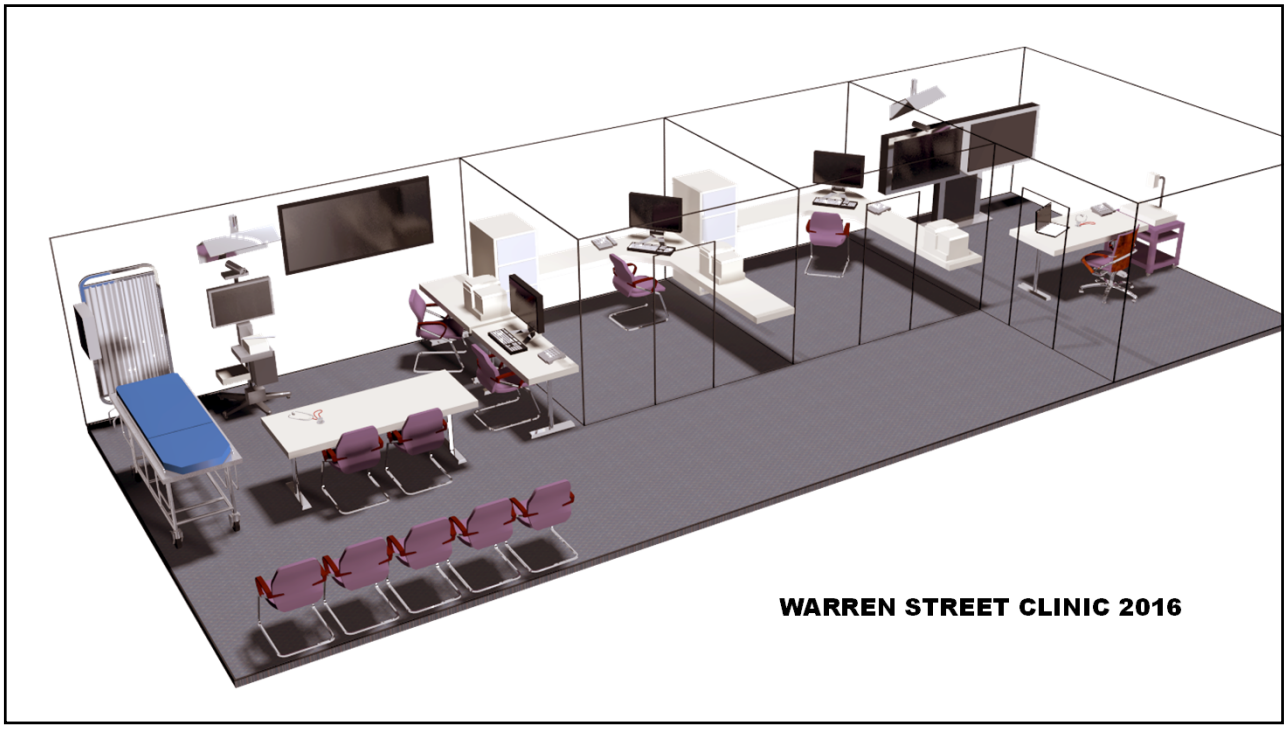
Telepresenting


WARREN STREET CLINIC 2016

Hands-on!

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Telemedicine =

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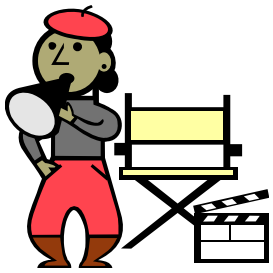
Communication Technology



- 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

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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

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Elements of Production

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

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- **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!**

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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

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Sells IHS, AZ

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HIPAA Health Insurance Portability And Accountability Act of 1996

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To be a good telepresenter you must be a good communicator.

- **verbally**
- **non-verbally**

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SELFIES!

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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

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Technology

- **Makes the world a smaller place**
- **Keeps people in their communities**

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Telehealth Technology Resources

Arizona Telemedicine Program	www.telemedicine.arizona.edu
Telemedicine & Telehealth Service Directory	http://telemedicine.arizona.edu/servicedirectory
Southwest Telehealth Resource Center	www.southwesttrc.org
National Telehealth Resource Centers	www.telehealthresourcecenter.org
ATA American Telemedicine Association	www.americantelemed.org
USDLA United States Distance Learning Association	www.usdla.org
University of New Mexico Center for Telehealth	http://hsc.unm.edu/community/telehealth/
Project ECHO	http://echo.unm.edu/
ATP Project ECHO	http://telemedicine.arizona.edu/echo/
UNR Project ECHO	https://med.unr.edu/echo
TTAC Telehealth Technology Assessment Resource Center	www.telehealthtechnology.org

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Best Practices

- Technical Protocols
- Clinical Protocols
- Mock Patients
- Training

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Distance Education

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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

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Participant Diversity

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

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Types of Events

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

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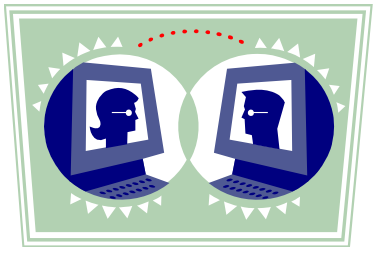
Types of Administrative Events

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



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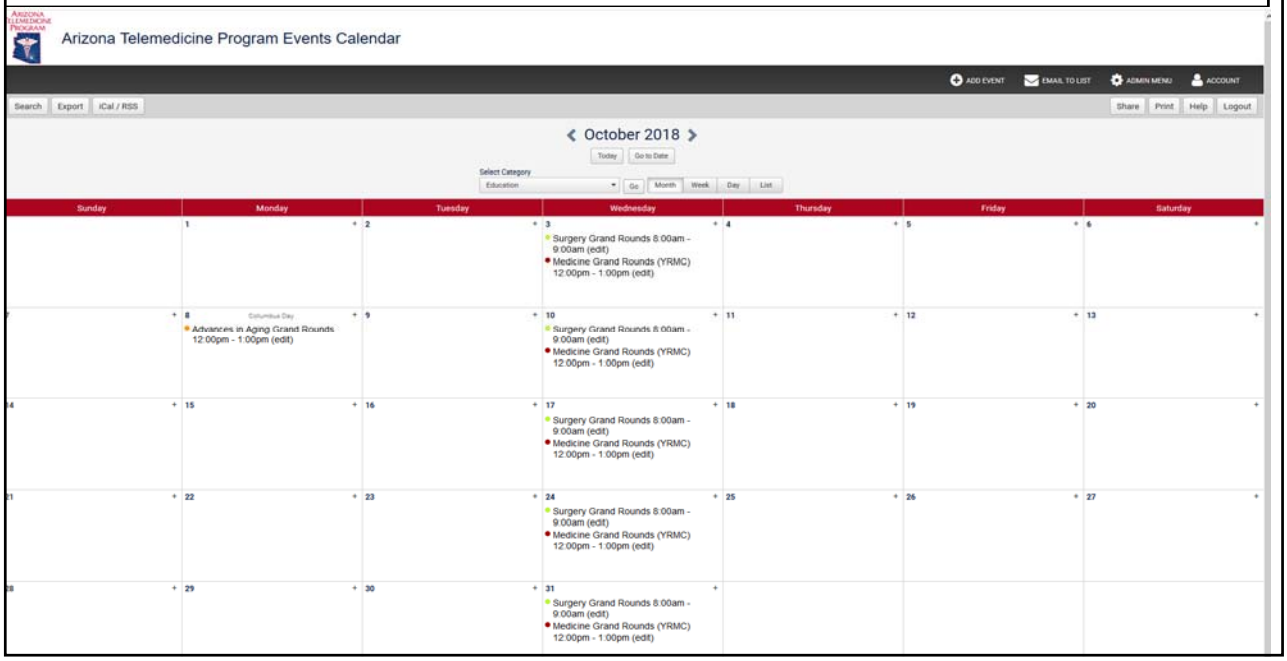
https://www.calendarwiz.com/arizonatelemedicine



Video Conference Rules

1. Always assume that your microphone is on

2. Always assume that someone can see you

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Barriers

- Time zone differences
- Room size
- Reduced travel

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Benefits

- Cost savings (travel / registration fees)
- Reduced time away from work
- Wider variety of opportunities
- Convenience

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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.

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Telerheumatology ECHO

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Tracy Skinner
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Clinical Case Presentation

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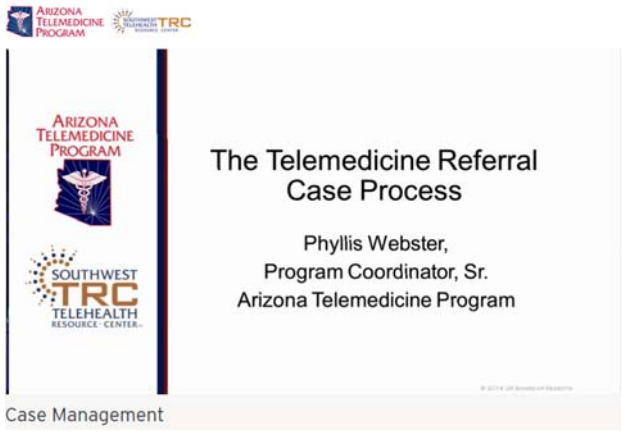

Go through the steps required to set up, carry out and complete a clinical telemedicine referral.

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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?

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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

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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)

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Referral Case Flow:

How referral cases are processed using the ATP model

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- 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.

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Telemedicine Site Coordinator with referring provider, reviewing and selecting case information for transmittance to the consulting site

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Reviewing the steps in the telemedicine referral process and obtaining informed consent from the patient

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Basic information sheet given to referral patients explaining the procedures, privacy, and research components of telemedicine

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Information for Telemedicine Referral Patients

What is Telemedicine?

Telemedicine is an evaluation of your problem by a specialist at another hospital using video, audio, and computer data connections. By using telemedicine, you may not have to travel to a major health center to receive care. You will receive the benefit of a specialist at this facility. Your local health care provider will be in contact with experts who will be playing an important role in your care.

Procedures

A telemedicine session is similar to a routine medical office visit. At this session, special instruments may be used so that sounds and pictures can be sent to the specialist. There should be no discomfort from any of the specialty equipment used. Your health history will also be sent 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. At the same time, 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 pictures sent to the specialist will be kept confidential unless released in writing by you. Only pictures and health information pertinent to your diagnosis will be recorded and sent to the specialist. Your medical file will be treated with the same confidentiality as if it were at your local facility.

Research

PROGRAMA DE TELEMEDICINA DE ARIZONA

Información para Pacientes Enviados a Telemedicina

¿Qué es la telemedicina?

Telemedicina es la evaluación de problemas de salud por un especialista desde un hospital distante de la localidad del paciente. Para esta evaluación se utilizan conexiones de video, audio y datos computarizados. Mediante la telemedicina es posible que Ud. no tenga que viajar a uno de los principales centros de salud para recibir su atención médica. Usted tendrá aquí el beneficio de los servicios de un especialista. Su proveedor de servicios de salud estará en contacto con expertos que desempeñarán un papel importante en su atención médica.

Procedimientos

Una sesión de telemedicina es similar a una consulta regular. En esta sesión puede ser que se utilicen instrumentos especiales para poder enviarle sonidos y fotos al especialista. El equipo especializado que se utilice no le causará a Ud. ninguna incomodidad. Su historia clínica también será enviada con las fotos (o imágenes de video). Si la sesión de telemedicina es "en vivo" se usará equipo especial de televisión de modo que el especialista pueda verlo y platicar con Ud. Igualmente, Ud. podrá ver al especialista y platicarle.

Privacidad

Ud. tendrá la misma privacidad que tendría en cualquier sala de examen. El especialista estará también en una sala privada de telemedicina. Toda la información de su historia clínica al igual que las fotos enviadas al especialista serán confidenciales a menos que Ud. autorice cederlas, por escrito. Únicamente las fotos y la información sobre su salud que sean pertinentes para su diagnóstico serán grabadas y enviadas al especialista. Su expediente clínico será guardado con la misma confidencialidad como si fuera archivado en el centro médico de su localidad.

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AMERICAN TELEMEDICINE ASSOCIATION

PRACTICE GUIDELINES FOR

DERMATOLOGY

April 28, 2016

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Ex: Poor diagnostic quality digital images for teledermatology referral case review ☹

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Ex: Good diagnostic quality digital images for teledermatology referral case review ☺

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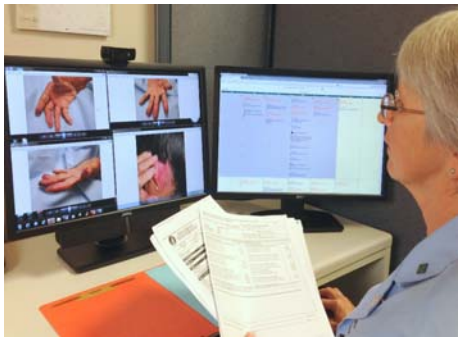
Telemedicine Case Coordinator



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

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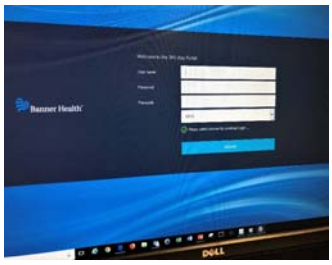
Telemedicine Case Coordinator



- Registers the patient
- Begins referral case processing and documentation
- Notifies Medical Director of request

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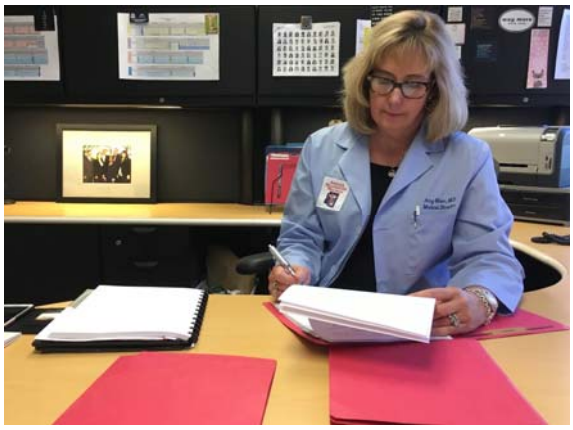
Medical Director (Consulting site)



- 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

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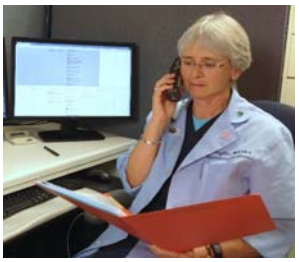
Telemedicine Case Coordinator

- 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



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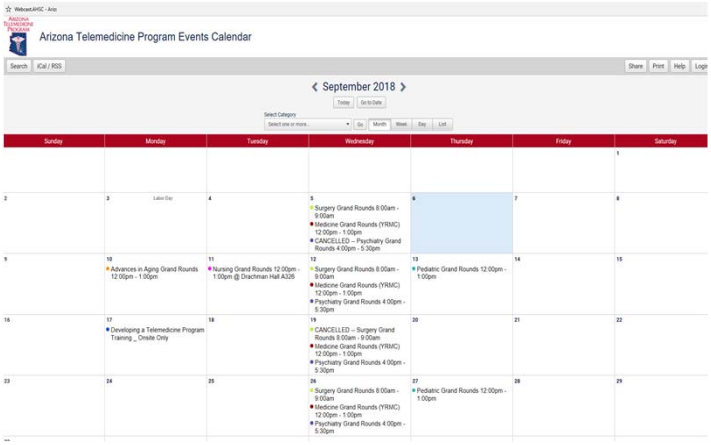
Using an online calendar to schedule network activities



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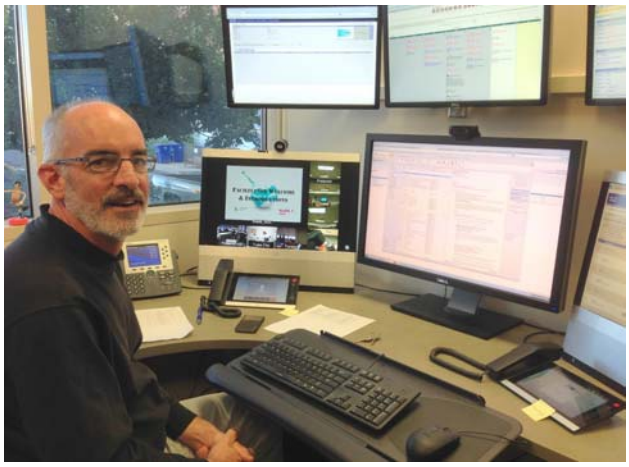
Network Engineer

On the day of the scheduled videoconferenced clinic, sites may be dialed directly or a network engineer may enable the calls remotely.



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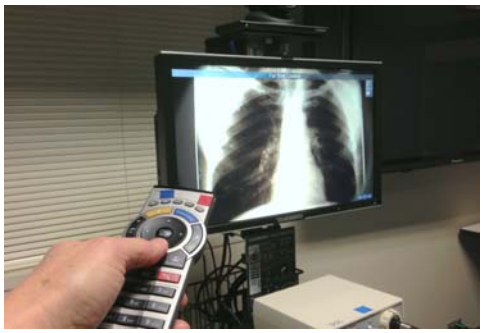
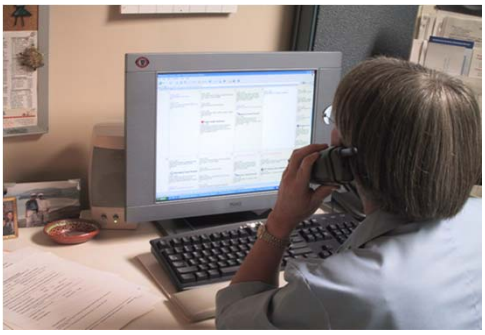
The Telemedicine Coordinator may provide administrative and technical support during the session and is always immediately accessible if any needs or problems arise





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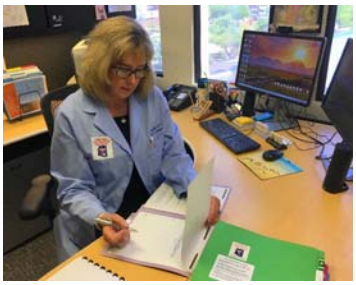
Telemedicine Case Coordinator



- 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

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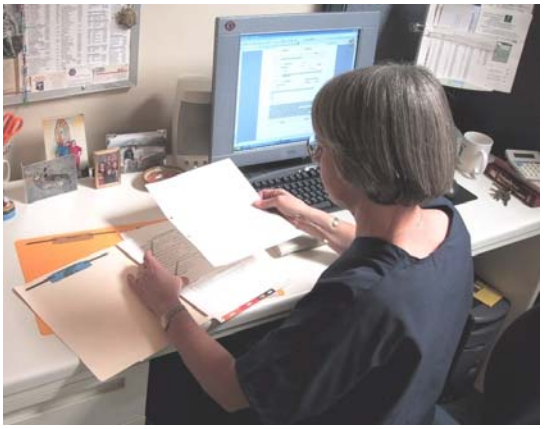
Telemedicine Case Coordinator



- 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

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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.

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Thank you for your interest in attending this conference.
We're glad you're here!

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