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 (MD, DO, PA, NP, OD, PhD)
- Telemedicine Site Coordinator (referring end)
- Telemedicine Case Coordinator (consulting end)
- Medical Director for Telemedicine (either end)
- Network Engineer(s); IT Staff
- Consulting Healthcare Specialist

Telemedicine “Case” and “Site” Coordinators serve as liaisons between participants at either end

- Referring Site A Telemedicine Site Coordinator
- Referring Site B Telemedicine Site Coordinator
- Referring Site C Telemedicine Site Coordinator
- Consulting Site Telemedicine Case Coordinator
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, 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.

• Typically, the referring healthcare provider and patient decide to request a consultation with a specialist via telemedicine format.

• The Telemedicine Site Coordinator (TSC) works with the referring healthcare provider and patient to compile and transmit the appropriate case information to the Telemedicine Case Coordinator (TCC) at the consulting site.
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

**Arizona Telemedicine Program**
Información de la Telemedicina: Pacientes Referrados

**What is Telemedicine?**
Telemedicine is an evaluation of your problem by an expert located at a major health center or hospital. You will not have to travel to a major health center to receive care. Your local health care provider will have access to expert medical care at no extra cost to you.

**Procedures**
An interactive session is similar to a routine medical office visit. At this session, special instruments may be used to scan your skin and pictures can be sent to the specialist. These should be done in addition to any of the usual procedures used. Your health history will be taken by the specialist. 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 case, you will be asked to come and talk to the specialist.

**Privacy**
You will have the same privacy as you would in any ordinary room. The specialist is also in a private telemedicine room. All of your health history information and any photos sent to the specialist will be kept confidential unless required 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 it is treated at your local facility.

**Research**

**Programa de Telemedicina de Arizona**
Información para Pacientes Refinados

**¿Qué es la telemedicina?**
La telemedicina es la evaluación de problemas de salud por un especialista desde un hospital lejos de la localidad del paciente. Para una evaluación, se utilizan consultas de video, audios y fotos computarizadas. Mediante la telemedicina es posible que Usted no tenga que viajar a los principales centros de salud para recibir el mismo tratamiento. Cada vez más, el uso de las tecnologías de la telemedicina es parte de la atención médica. Los proveedores de servicios de salud están contactando a pacientes que desean visitar un hospital de alta tecnología.

**Procedimientos**
Un acto de telemedicina es similar a una consulta de rutina. En este acto, puede que se utilice un equipo de video para medir la piel y enviar fotos al especialista. El especialista explorará las fotos que se envíen en la consulta a fin de encontrar enfermedades. El historial clínico también se enviará con las fotos. El especialista puede requerir la aprobación de la misma para enviar fotos de rutina. El historial clínico es tratado de manera confidencial como se hace en otros centros de atención médica.

**Confidencialidad**
El historial clínico es tratado con confidencialidad. Los datos de los pacientes se envían con la misma seguridad que se envía cualquier otra información médica. Cada vez más, el uso de la tecnología de la telemedicina es parte de la atención médica. Los proveedores de servicios de salud están contactando a pacientes que desean visitar un hospital de alta tecnología.
Ex: Poor diagnostic quality digital images for teledermatology referral case review 😞

Ex: Good diagnostic quality digital images for teledermatology referral case review 😊
Preparing to transmit an electronic (store-and-forward) case file from the sending site workstation using a medical software application via a secure, encrypted network.

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.

Utilizing network applications and videoconferencing systems for monitoring events or troubleshooting connectivity issues
Telemedicine Site Coordinator

Using medical peripheral devices
Presenting the patient to the teleconsultant may require the clinical presenter to abstract information from the medical record, write orders, and to perform specialized physical examinations.

Teleconsultant interfacing with presenter and patient, each in different locations.
Real-time pediatric echocardiography evaluation

One-on-one oncology genetics counseling session
The Telemedicine Coordinator may provide administrative and technical support during the session and is always immediately accessible if any needs or problems arise.

Teleconsultant generating a progress note between patient consultation appointments.
Telemedicine Case Coordinator

• Forwards finalized progress note to Telemedicine Site Coordinator for distribution to referring provider and incorporation into the local patient record
• If shared EHR systems are in place, no need for paper

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.
• Specific responsibilities should be clearly defined and thoroughly understood by each participant in the referral case process.

• Imperative that each participant is able to follow through on assigned tasks (accountability).

• Maintain communication between all participants involved in the process, especially with regard to the status of a pending referral case. Everyone on the team should be “on the same page.”

• In this model, smoothness of the operation is heavily dependent upon the performance of the Telemedicine Coordinator at both the referring and consulting ends.

• Maintain high quality standards clinically, administratively, and technically, as all of these areas are tightly integrated in telemedicine and affect the overall quality of service.

• Remember that the goal is to ensure that patients are well served and to strive for excellence in the delivery of health care.
Thank you for your interest in attending this conference. We’re glad you’re here!

Please feel free to contact me if you have additional questions about this presentation: pwebster@telemedicine.arizona.edu.