# Telehealth 101

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Objectives

- **Provide overview basic considerations starting TM program**
  - **Administrative**
  - **Technical**
  - **Clinical**
- **Review resources available to help**
- **Build excitement & confidence to just do it!**
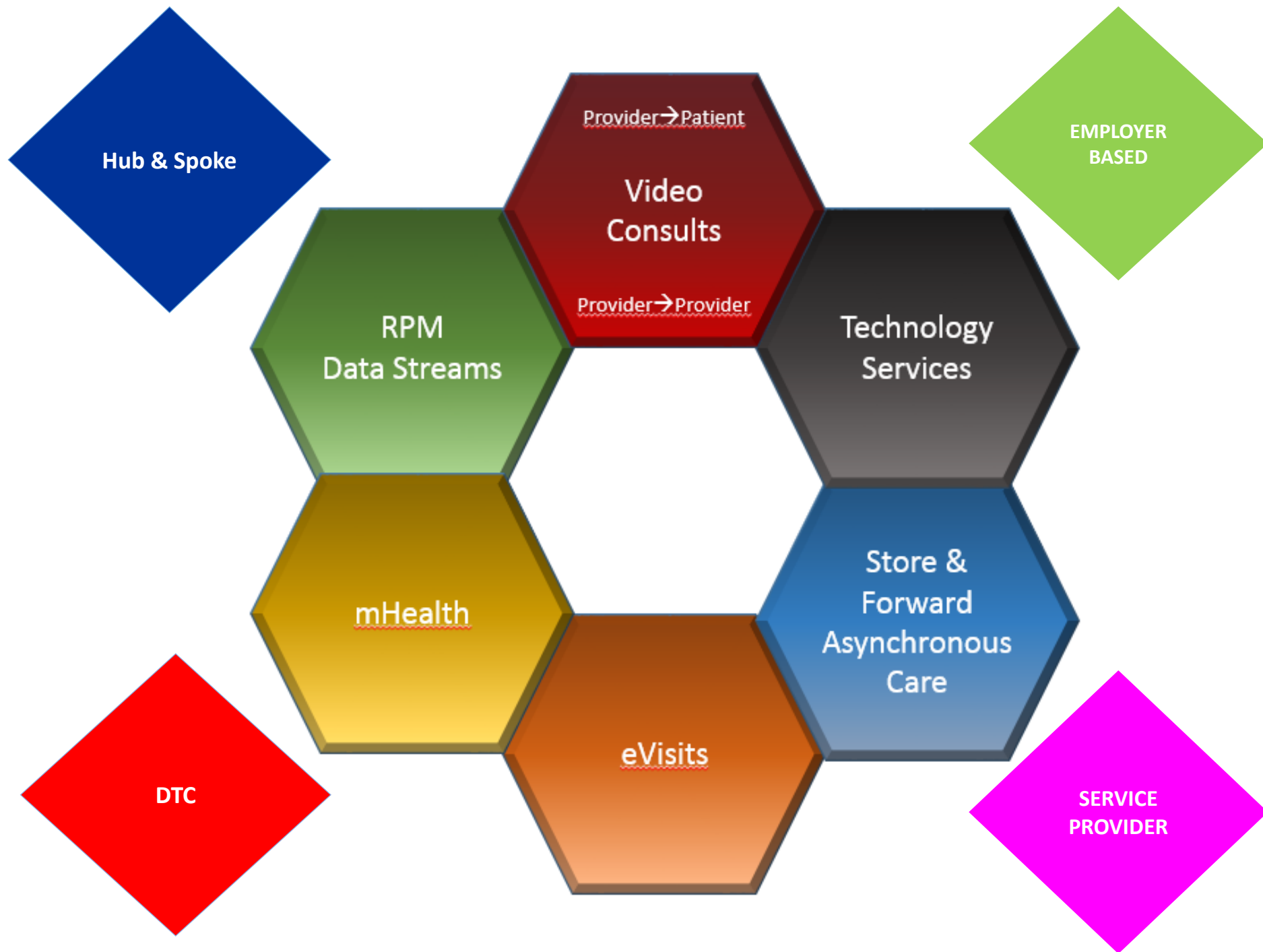
ECHO MODEL

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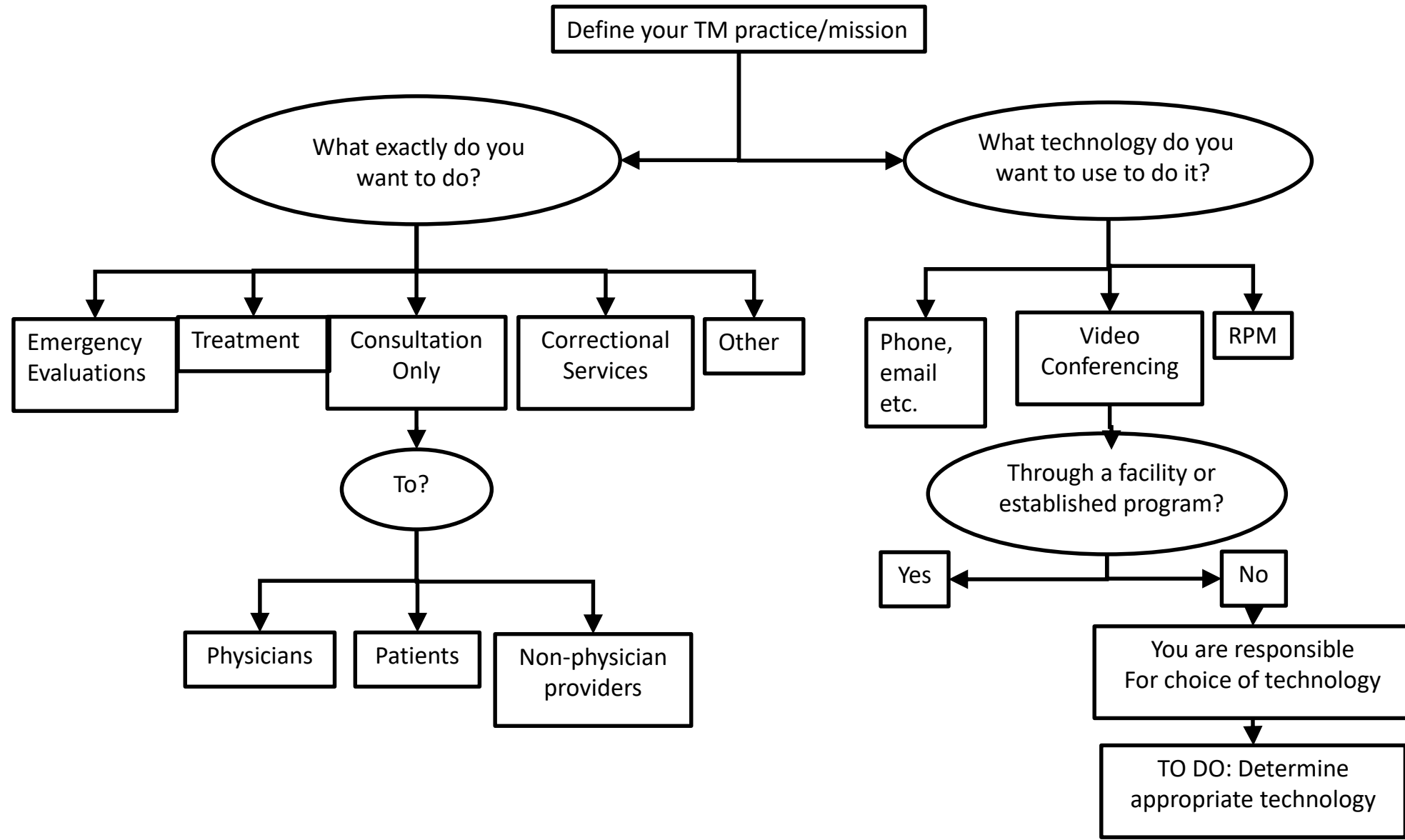
ECHO trains primary care clinicians to provide specialty care services. This means more people can get the care they need.

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

http://echo.unm.edu/

Define your TM practice/mission

What exactly do you want to do?

What technology do you want to use to do it?

Emergency Evaluations | Treatment | Consultation Only | Correctional Services | Other

Phone, email etc. | Video Conferencing | RPM

To?

Physicians | Patients | Non-physician providers

Through a facility or established program?

Yes | No

You are responsible For choice of technology

TO DO: Determine appropriate technology

Adapted from: (PRMS), Professional Risk Management Services, Inc. 2010 & Robert Caudill

ADMINISTRATIVE & REGULATORY ISSUES

- **Regulatory**
  - **Malpractice**
  - **Licensure & Credentialing**
  - **Standard of Care**
  - **Ryan Haight/Prescribing**
- Administrative
  - **Protocols and procedures**
  - **Workflow**
  - **Economic models (Billing and re-imbursement)**

REGULATORY – MALPRACTICE

- **Need as usual for TM**
- **TM vs. traditional**
  - **Some carriers cover TM as part of standard coverage; others have additional policies & may require additional coverage for TM services**
  - **Check if specific services are covered by existing malpractice carrier**
- **Standard of care** **= TM *does not alter SOC* to which physician held – same SOC would apply if patient was in physician's office or facility**

REGULATORY - LICENSURE

- **Need state license <u>where patients located</u> regardless where provider located**

- **Some states have conditions like documentation & in-person exam requirements**

- **Must be familiar with & conform to SOC specified by state license where practice**

- **Some exceptions & variations**
    - **Some states offering special TM licenses (AL, LA, MN, NV, NM, OH,OR, TN)**
    - **Special considerations for physician-physician consultations & federal (VA & HIS)**

- **In Federal physicians with single state license can be credentialed in federal systems to practice across multiple states**

- **Licensure & billing are separate considerations**
    - **http://www.cchpca.org/state-laws-and-reimbursement-policies**
    - **https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf**

PRESCRIBING

- Controlled & non-controlled substances (CSs)

- Federal vs. State law

- EPCS (Electronic Prescribing of Controlled Substances)

- Ryan Haight Act
  - Prohibits distributing, dispensing, delivery CSs by Internet without valid prescription
  - Requires practitioner conduct at least 1 in-person medical eval before remote prescribing CS
  - "in-person medical eval" = patient physical presence with practitioner
  - Exemptions for TM
    1. Treatment in hospital or clinic
    2. Treatment in the physical presence practitioner
    3. Indian Health Service or tribal organization
    4. Public health emergency declared by Secretary HHS
    5. Special registration (still doesn't exist)
    6. VA medical emergency
    7. Other circumstances specified by regulation

WORKFLOW

- **Evolving – need to reimagine workflow! TM not direct substitution for usual care**
  - **Clinical vs. non-clinical settings**
- **Modifications to treatment as usual**
- **Adjunctive technologies & personnel**
  - **Secure Communications with scheduling**
  - **Electronic prescribing/EPCS**
  - **Use of telefacilitators**
- **Prior to initiating *shall* have set SOPs that *should* include (but not limited to):**
  - **Roles, responsibilities (i.e., coverage), communication, emergency issues**
  - **Agreements to assure licensing, credentialing, training, authentication practitioners as well as identity authentication of patients according to local, state, national requirements**
  - **Systematic quality improvement & performance management process (assessment) that complies with any organizational, regulatory, or accrediting, requirements for outcomes management**

4 Key Features Technical Aspects TM

- ✓ **Videoconferencing application**
- ✓ **Device characteristics**
      Mobility
- ✓ **Network or connectivity features**
- ✓ **How privacy & security maintained**

TECHNICAL REQUIREMENTS

- **Will depend on use case(s)**
- **Much easier today & less expensive**
- **Videoconferencing platform requirements**
- **SF & hybrid requirements**
- **Integration VTC into other technology & systems**
  - **Privacy, Security, HIPAA**
- **Physical Location/Room Requirements**
  - **Privacy**
  - **Camera placement**
  - **Asynchronous set ups**

PERSONAL EQUATION

- **110% increase animation**
- **Be aware how come across (body language, space, perception)**
- **Increase small talk**
  - **Ask everyday questions (activities, current events, weather, home environment)**
  - **Slight increase appropriate self-disclosure (bridge virtual gap)**
- **Increased inquiry on patient status & active listening**
- **Gaze angle & eye contact**
- **Framing**
  - **Close up to empathize & emphasize**
  - **Far back to create space, distance, perspective**
- **Background, lighting, noise etc.**
  - **Clothes (solid colors, appropriate dress to clientele, not distracting)**
  - **Backgrounds (balance between over busy & bland/neutral)**

Loud Shirt Day

CLINICAL CONSIDERATIONS

- **CULTURE: Be culturally competent to deliver services to populations serve so familiarize self with cultures & environments; use site visits & cultural facilitators to enhance knowledge**

- **TECH SKILL: Assess patient's previous exposure, experience, comfort with tech & conduct ongoing assessment patient's level comfort over course treatment**

- **COMMUNICATION: Clear policies for communications; describe boundaries patients communicate with provider; which content appropriate to share over different tech platforms; anticipated response times; how & when contact provider; impact different tech on rapport**

- **EMERGENCIES: ID platforms acceptable for communication emergency & expected response times; be familiar with local resources**
  - **9-1-1 local call; *know emergency number for where patient is located***
  - **Understand where patient located *during each session***
  - **Keep list emergency contacts**
  - **Document where patient is or claims to be located**
  - **Identify process engaging others *while* connecting with patient &/or emergency personnel**

CLINICAL CONSIDERATIONS

- For DTC written & verbal instructions should be provided about how best configure computer to maintain privacy & confidentiality
- Use simple easy-to-understand language & document all aspects instruction
- Acknowledge patients may intentionally or unintentionally fail to follow instructions
- Document, document, document!
  - Patient appropriateness for online health
  - Emergency management plan
  - Plan for technical disruptions
  - Protection health information by provider & education patient about same
  - Billing for sessions where technical difficulty

INFORMED CONSENT & INFO

- **Standard Consent**
  - **Consistent with consent procedures for same-room care**
- **Consent related to videoconferencing**
  - **Fully inform patient beforehand of special conditions related to conducting health care via videoconferencing**
- **Nature privacy when using technology**
  - **Description encryption in lay terms**
- **Process by which treatment data stored & kept secure**
- **Contact between session- frequency, nature (including technology), expected response time**
- **Procedures for coordination of care with other providers**
- **Possibility &conditions under which provider may determine TM may be inappropriate & referral for same room care made**

USEFUL PRACTICE GUIDELINES

- Operating procedures for pediatric telehealth
- Practice guidelines for telestroke
- Practice guidelines for telemental health with children & adolescents
- Practice guidelines for teleburn care
- Practice guidelines for teledermatology
- Practice guidelines for live, on demand, primary & urgent care
- Clinical guidelines for telepathology
- Guidelines for teleICU operations
- Core operational guidelines for Telehealth services involving provider-patient interactions
- Practice guidelines for video-based online mental health services
- Telehealth practice recommendations for diabetic retinopathy
- Practice guidelines for videoconferencing-based telemental health
- Evidence-based practice for telemental health

AMERICAN
TELEMEDICINE
ASSOCIATION

Table 1. Lexicon of Assessment and Outcome Measures for Telemental Health (TMH)

Item No.	Item	Definition	Measurement	Considerations
2.1.1	Patient satisfaction	Patient's subjective satisfaction and experience with the TMH service provided.	The perception of the patient's satisfaction during the TMH visit with usability of the technology, patient-provider communication, and convenience of receiving care via this approach. Does the patient believe that the service met her/his health needs? Would patient do this again? Would patient refer others to this service?	There may be overlap with other constructs such as "Satisfaction with Usability of Technology." Satisfaction does not necessarily require in-person comparison. It could be comparison to no care (i.e., non-inferiority testing). Use of validated measures of TMH satisfaction because measures exist. Measure satisfaction with experience as well as with technology.
2.1.2	Provider Satisfaction	The extent to which the provider values telehealth when interacting with patients.	The following metrics may serve as surrogate markers: retention and recruitment of providers, ease of transition in technical competency, ease of integration into clinical workflow, perceived value of better diagnosis, treatment and disease management.	Satisfaction metric must be considered longitudinally. Include both referring PCMs and consulting provider satisfaction surveys.
2.1.3	Coordination of care	Care coordination is the development and implementation of a shared plan to support patient wellness.	Care coordination measurement consists of both the number of telehealth encounters and the number of different participants involved in the shared plan (e.g., consultant-primary care provider, consultant-teacher, etc.) and the type of telehealth interaction (asynchronous and synchronous).	The nature of the communication, external technologies such as electronic health records and quality of encounters can all impact care coordination.
2.1.3	Integration of care	Integration of care is the efficient assimilation of multiple components within a health system in order to decrease redundancy, delay, and cost.	Measurement of the integration of care includes the type of the telehealth interactions assessed on standardized questionnaires of care coordination or other measures of communication (i.e., participant A to participant B).	The nature of the communication, external technologies such as electronic health records and quality of encounters can all impact integration of care.
2.1.4	Usability	1) The ease (preference, comfort, fit, readiness) of patients to communicate digitally with their providers. 2) Includes technology availability, simplicity of use, service availability, technology native vs. non-facile.	Measurement should include: provider retention rate, patient drop out and rationale, support staff required, technology ease of use, technology down time, and subjective ratings of comfort.	Subjective and objective measurements from both the patient and provider perspective. Part of the evaluation should include how "seamless" the interaction was between people/technology, to include latency and failure of technology. This can be used as both a process/acceptability and an access measure, but definition should remain the same. Patient/provider preferences should also be included.
2.1.5	Rapport	When two or more people feel	Self-reported level of direct and/or indi-	Transcends cultural, racial, ethnic, religious, gender, age,

		that they are connected and understand one another.	rect evidence that the condition of rapport is present between the patient(s) and the professional(s).	geographic, etc. differences and experiences. Try to link clinical outcomes which could be related to rapport.
2.1.6	Stigma	Preconceived, often negative, association with an illness, diagnosis, therapy, technique etc. that may interfere with the provision and/or acceptance of care.	Measures should evaluate stigma among health care providers/staff, patients, and social networks and include, at minimum, the following concepts: Stereotyping/discrimination such as beliefs about mental illness, mental health treatment, TMH and the use of technology to deliver care. Labeling/disclosure such as acceptance of diagnosis, willingness to diagnose appropriately, help seeking and delivering behaviors, willingness to use or conduct TMH sessions.	Perceived stigma should not simply focus on the recipient of care but the providers of care and those giving support. Concerns about stigma should focus on both mental illnesses in general and on the type of delivery (e.g., TMH). From a research and programmatic perspective this is best evaluated pre/post introduction of a TMH service. This can be related to both general access to care and readiness.
2.1.7	Motivational readiness	Assessment of an individual's or organization's willingness to change and adopt TMH services. This is different from preparedness, which is an assessment of individual and organizational ability to adopt TMH services.	Includes: stage of change for individuals and organizations, situational self-efficacy (confidence), trans theoretical model-based measures (pros & cons of change, processes/strategies for change, situational self-efficacy).	Defining criteria for moving into the action stage. Relationship between individuals and institutional readiness and motivation. How interrelated are individuals and institutional motivation? Self-report can be inaccurate, but necessary.
2.2.1	No shows	A patient or clinician who does not attend session, or is more than 15 minutes late.	Percent of no shows as compared to a disease-state specific comparisons in-person group. No shows defined as 15 minutes late or more to appointment. No shows need to be identified as either clinically related or a systems issue (scheduling, time zones, etc.).	Determine cause of no show, i.e., was it lack of transportation, lack of ability to maintain a schedule, did they show up late and have to reschedule, dissatisfaction with treatment. Examine the reasons for the no shows i.e. technology failed or could not be used, the use of technology (vs. travel) made it easier to keep the appointment, etc.
2.2.2	Accuracy of assessment	How well the modality of TMH impacts the reliability and validity of the assessment when compared with the traditional behavioral health care standards for the construct in question.	Comparison of standard measures of assessment (reliability, validity) of TMH vs. in-person (national standard) vs. other telehealth modalities. Measurement should also include session time and number of sessions needed for specific assessments comparing TMH with in-person services at patient site.	Proxy measures to track providers comfort with reliability of assessment through tracking utilization of tests and consults comparing TMH with in-person services at patient site.
2.2.3	Symptom outcomes	Change in identified clinical symptoms over time.	Use of measures of symptom change that are appropriate and psychometrically sound (validity, reliability data published in the literature). Need to be appropriate for the population being treated/assessed	How is this information documented so it is meaningful? Include measure used, cutoff criteria, inclusion/exclusion, what they are comparing outcome to, effect size of intervention. Symptom outcomes are part of a larger universe of outcome metrics that need to be considered. Consider adding

				intervention/treatment outcomes with symptom outcomes as a subset as well as other outcomes such as Quality of Life, work attendance/absenteeism, compliance/adherence or psychosocial measures (unit cohesiveness, social isolation).
2.2.4	Completion of Treatment	Degree to which appointments, treatments and completion of treatment plans occurred within the prescribed time frame.	Average number of visits according to treatment plan, average number of visits in given time period, duration of treatment, number/percentage of modules completed; percentage of patients who completed treatment; pre/post functional measures	Third party payers use Axis 5 (Global Assessment of Functioning) to evaluate progress and completion, although this will evolve with the conversion to DSM-V criteria.
2.2.5	Quality of Care	Quality of care represents the process of delivering services and includes both the technical and interpersonal aspects of treatment. Technical quality includes concordance with treatment guidelines, fidelity to evidence based protocols, and system performance measures (e.g., HEDIS). Interpersonal quality includes patient rapport, therapeutic alliance, and cultural competence.	Performance measures (e.g., timely outpatient visit follow hospital discharge) can sometimes be measured from administrative data. Concordance with treatment guidelines and fidelity to evidence based protocols can be measured from chart review. Interpersonal quality should be measured from patient self-report (e.g., therapeutic alliance can be measured using the working alliance inventory).	Quality is defined as the process rather than the outcome of care, because clinical outcomes are measured using other metrics and because high quality care does not necessarily lead to good outcomes. Quality of TMH services should be measured against benchmarks rather than the quality of in-person services which is often sub-optimal. When TMH services are compared to in-person services, it will be critical to choose a similar clinical setting and patient population.
2.2.6	Treatment Utilization	Use of TMH services compared with all other health services related to specific disease processes.	Measurements on number of TMH and non-TMH visits within a health care system to include data on visit duration, frequency, and problem addressed. Measurements on system resources (labs, medications, system funded travel, devices, consultation, number of referrals made and utilized) of TMH vs. non-TMH. Utilization should be correlated with symptom reduction of specific disease processes.	Comparison of digital contacts (mobile phone, e-mail, Web) and its impact on service utilization in non-telemental healthcare. Recommend healthcare systems systematize data on digital contacts. Collect data on both internal utilizations within a system but as possible external service utilizations from outside agencies and providers. As possible during implementation of TMH services collect compare data on pre and post implementation service utilization data.
2.3.1	Number of Services	Degree of access to additional services which are derived from enrollment in telehealth.	The number of clinical care options and auxiliary services offered (e.g., medication management, social services, labs, cardiac care, group therapy); frequency in the use of clinical care options and auxiliary services.	Used for program evaluation, ROI for program expansion, quality, patient/provider satisfaction.
2.3.2	Numbers Served (also referred to as	The workload credit given for the TMH encounter that is	Types of services; complexity of services; time spent with patients; number of	Coding accuracy. Coding training and follow up to ensure coding is being done correctly, i.e., no under or over coding.

	RVUs, relative value units)	related to the complexity of services provided and the time spent with patients which equates to the level of financial reimbursement.	patients seen.	
2.3.3	Wait Times	Wait time is a temporal dimension of access that represents the delay between when the patient wants to receive services and when they can actually receive services.	Operationally, time to next available appointment, when scheduling, and when the patient actually presents for care. For TMH requiring a referral, wait time could be measured as the difference in the referral date and the date the patient was seen. May want to measure wait time separately to see the preferred provider versus any provider.	It is important to realize that improving other dimensions of access (e.g., lowering costs or de-stigmatizing TMH services) could result in increasing wait times due to increased demand. Health systems should measure wait times to all clinics (not just TMH clinics) to determine how resources could best be reallocated to minimize variability in wait times across clinics. Other important measures of temporal access include wait time in clinic and convenience of office hours.
2.3.4	Length of session	How much time the patient spends receiving care. This could include time spent with the provider.	Average/total clinical encounter time, average/total administrative time (set-up time, out-of session contact such as email, text, phone, letters).	Needs to be clinician, patient, staff, and system viewpoint. Needs to accommodate emerging platforms such as mobile health. Length of sessions may interact with frequency of appointments. Efficiencies with telehealth solution create opportunities for novel session duration (e.g., 10-minute check-in)
2.3.5	Distance to Service	Geographic separation or functional barriers between patients and providers.	Distance, time zones, time to appointment.	This includes structural barriers, weather.
2.3.6	Likelihood to access vs. traditional care	Likelihood to use TMH.	Measurement should include the following concepts: familiarity (past use), acceptability (cultural and technical), associations with stigma, willingness, and perceived benefit. Measurement should not focus on satisfaction but rather broad willingness to use.	When possible this should include baseline comparisons against both available and unavailable treatment as usual (e.g., in-person) Most likely this is assessed through self-report questionnaires.
2.3.8	Cultural access	Access to healthcare services that align with cultural expectations.	The degree to which an individual perceives the mode of delivery and related processes to align with cultural beliefs and expectations.	This should include cultural understanding of technology and expectations of interpersonal communication. It should also consider how technology may better connect cultural expectations, e.g., providing access to same culture providers or allowing for communication with a provider outside of one's in-group.
2.4.1	Economic evaluation that incorporates standard economic models			In general, clear definitions do not exist for many of the cost structures. This may be appropriate as costs are derived and perceived differently. There are several costs factors that were identified as important to measure objectively. Until final definitions are set, each cost factor should be operationalized and reported. Consideration should also be given to what is sunk or similar cost of care as usual (provider time).

				Baseline assessments help to identify cost outcomes.
2.4.2	Value proposition	Comparison of clinical and other health service outcomes by overall resources allocated.	Standardized and reported taxonomy of resources allocated and outcomes measured.	There is no consensus yet on the best determinations for economic evaluations in TMH.
2.4.3	Travel direct	Direct cost associated with provider and/or patient travel to care site	All direct costs should be identified, operationalized, and reported for comparison.	Should be included within the broad category of costs. Precise definition may not be possible given differing perspectives but all components should be identified, operationalized, and reported.
2.4.4	Travel indirect	Indirect costs associated with provider and/or patient travel to care site	All indirect costs should be identified, operationalized, and reported for comparison.	Should be conceptualized as comparison to normal care, e.g., loss of work productivity is comparable given 1 hr away regardless of mode of delivery. Indirect costs are both inputs to a cost model as well as potential positive outcomes of telehealth (reduction). Evaluators should determine and report up-front whether indirect costs are inputs to a cost model or expected outcomes.
2.4.5	Technology direct	Direct patient and provider costs associated with the technology utilized to deliver telehealth services.	All direct costs should be identified, operationalized, and reported for comparison.	Need to determine upfront whether costs are as a whole or divided between provider- and patient-associated. Inputs to consider include: hardware and depreciation, software and licensing, infrastructure, network, and maintenance costs.
2.4.6	Technology indirect	Indirect patient and provider costs associated with the technology utilized to deliver telehealth services.	Indirect costs include expenses incurred as a result of technology downtimes, specialized licenses, and administration.	There is cross-over between direct and indirect technology costs. Direct costs should focus on tangible assets while indirect costs are often intangible resources allocated based on the need for tangible assets.
2.4.7	Public vs. private	Payer Perspective.	Whether a project, program, or system utilizes public or private funding.	This is not an outcome measure but rather a perspective. Outcomes measures should be evaluated based upon the financial perspective under which a program operates.
2.4.8	Cost avoidance	Current or future direct costs avoided due to a specific intervention or program.	There are currently no industry standards for cost avoidance measures.	Consideration should be given to measuring items such as hospitalizations, visits, and other costs. These should be operationalized and reported as possible.
2.4.9	Missed obligations	Indirect Cost: Missed obligations	Should be measured as part of overall indirect costs.	Where possible a baseline assessment should be conducted against care as usual. As an outcome measure the assumption is that TMH impacts indirect costs/burden, thus requiring a comparison.
2.4.10	Burden on social network	Societal resources associated with either the provision of or inadequate access to TMH services.		Burden on social network should include direct burden to support resources and broad burden to societal infrastructure. When conducting research a positive or negative directional association should be identified *a priori*.
2.4.11	Personnel (administrative, provider, provider extender, presenter)	Personnel costs associated with the provision of TMH services.		
2.4.12	Supplies	Direct cost of auxiliary supplies required for TMH ser-		

		vices.		
2.4.1 3	Training	Process by which an individu- al attains the knowledge and skills required to demonstrate predetermined competencies.	A TMH competency set is required.	May be included as an indirect provider cost. Training is not truly an outcome unless the program is development of a training program
2.4.1 4	Facilities and maintenance	Direct costs associated with the facilities and maintenance necessary to support tele- health technologies.	Measurement includes cost of physical facilities, facilities maintenance, and systems such as HVAC. Should also include cost to maintain equipment in- cluding servers and individual pa- tient/provider technologies.	Should be included with technology direct costs.
2.4.1 5	Broad resource utilization	Resource utilization is the total allotment of resources necessary to provide tele- health services.	Resource utilization is driven by the numbers of encounters. It encompasses personnel and infrastructure resources necessary to provide each health care service.	Baseline comparisons need to be considered to differentiate resources from treatment as usual and TMH.
Pa- tient safe- ty	Patient safety	Safety of patients and others during the course of treatment (i.e. during sessions and af- ter).	Times had to use safety procedures. Number of times needing to contact col- lateral/ 911 calls/emergency services calls. Number of psychiatric hospitaliza- tions related to clinic services. Number of times unable to invoke safety plan (tried but could not), hand off to higher level of care from clinic due to safety issues. Problems causing patient transfer to an- other provider.	Consider Targsoff, other measures of adverse events (or po- tential ones e.g. increased suicide indication, etc.); response times of all events, etc. including emergency services.

Telehealth Resource Centers
We Are Here For You!

http://www.telehealthresourcecenter.org/

For a decade the Telehealth Resource Centers (TRCs) have provided the nation with *comprehensive, unbiased telehealth information & education*. The non-profit TRCs facilitate the expansion of telehealth & the *availability of health care to rural & underserved populations*.

Full Report can be found at
http://southwesttrc.org/

TRC Webinars

- **Monthly since 2011**
  - **3rd Thursday every month**
- **Calendar http://www.telehealthresourcecenter.org/calendar**
- **All TRCs participate**
- **Variety regional & national topics**
- **Archived http://www.telehealthresourcecenter.org/past-webinars**

SWTRC Services Offered

- **1 Day Training Program – 2 tracks**
  - **Developing a TM Program**
  - **TM Applications**
- **On-line Learning Modules**
- **Help Desk**
- **Technical Assistance**
- **Tools & Templates**
- **Program Development & Operation**
- **Business Models**
- **Evaluation**
- **Best Practices & Clinical Operations**
- **Sustainability**
- **Equipment Recommendations**

Didactic UAMS & UofA

Simulated Patient

Simulated Counselor

Observers

Virtual Healthcare

Quality, cost-effective care and education delivered via smartphones, tablets, desktop computers, kiosks, portals, remote monitoring devices and other new and emerging technologies.

What Should I Know?

May include instant access to a health care provider, personal health information, lab results, prescription refills, appointment scheduling, care reminders and other resources to help you manage your health.

3 Reasons For its Growing Popularity

Care when and where you need it, offered through your employer, health system, health plan, primary care provider and others...

1. More Convenient
2. Better Patient Experience
3. Lower Cost

Why It Is Awesome:
1. No waiting rooms
2. No long lines
3. No travel costs and hassles
4. No need to re-arrange my schedule

Who Pays for Virtual Visits?

- Many insurance companies and employer sponsored health plans will pay
- Patients often choose to pay out-of-pocket
- In some situations, Medicaid and Medicare may pay

You will find that more and more payors are deciding that it is worth their while to pay for virtual visits because it lowers the cost of care! Don't be surprised if your health plan or employer has a contract with a virtual visit provider!

What Technology Is Needed?

- Desktop/laptop computer, tablet, or smartphone
- Internet connection with at least 384 Kpbs down and up
  - A Wired Connection is Preferred to WiFi
- Good quality camera and microphone
  - To Improve Image Quality, Reduce Lighting from Windows and From Behind You

You are responsible for establishing a private space, controlling the lighting, letting the provider know if others are in the room with you, checking your image on the camera to ensure clarity and making sure you have updated anti-virus software..

Should I Use a Virtual Care Provider?

Virtual Care may not be the best option for everyone. Here are some things to consider when deciding whether Virtual Care is the right fit for you.

Potential Challenges/Risks

Your virtual care provider may not know you, your medical history or have access to your medical record. If there is something important for your provider to know, it becomes your responsibility to share it. However, you may not know what is/isn't important for your virtual care provider to know.

You may experience connectivity and/or other technology challenges. If the quality of the video/audio is insufficient, your virtual care provider may miss some subtle cues. You and/or your provider may choose to discontinue the visit if there are video and/or audio quality issues.

Your virtual visit is often disconnected from your medical record. Therefore, you are responsible for reporting your virtual care visit to your primary care provider (PCP) to make sure there is coordination of care.

Other Considerations

Virtual care providers may not be able to order lab tests to confirm your diagnosis/condition.

Virtual care providers may choose not to file insurance claims through your insurance company, so you will need to pay for the services up front and submit the claim yourself.

In some states, virtual care providers may note be able to prescribe medications. If they do prescribe, it is your responsibility to notify your PCP.

You may or may not get the same virtual care provider each time you request a virtual visit.

If the alternative to virtual care is getting no care at all, then by all means, get care virtually!

How Can I Be Prepared for a Virtual Visit?

If you've decided that Virtual Care might be a good option for you, here are some things to help you be prepared for your first visit!

Consider asking your provider:

- What city and state are you located in? (you may need this information if you will be submitting for reimbursement)
- What is your name and what are your credentials (type of license, area of specialty/subspecialty, state of license)
- Will there be any kind of follow-up visit, and if so, what is the process for that? How and how often may I contact you if it is needed?
- What should I do if there is an emergency?
- Will you be communicating with my PCP? If not, what would be most important for me to tell my PCP about this visit?

Be ready for your provider to tell/ask you:

- How to comply with privacy and confidentiality laws, including computer security arrangements and limitations
- If/how personal healthcare information will be used, stored and shared
- If the encounter will be recorded, whether you consent to being recorded, and if those recordings would be available to you upon request
- To verify your name, contact information, location and show a government issued photo ID
- To provide the name and contact information for someone in case of emergency

Have Questions or Need More Information?

Telehealth Resource Centers

http://www.TelehealthResourceCenter.org/

Telehealth Resource Centers

HIPAA & Telehealth

A Stepwise Guide to Compliance

Should I Be Concerned?

STEP 1 — DOES HIPAA APPLY TO ME AND MY TELEHEALTH PRACTICE? HIPAA applies to you if you are a healthcare provider that transmits personal health information (PHI) in electronic form. If you do, you ARE a covered entity (CE).

STEP 2 — IS THE INFORMATION I AM TRANSMITTING CONSIDERED PHI? Anything that can be used to identify an individual is potentially PHI. There are 18 types of identifiers considered PHI. Examples related to telehealth include names, phone numbers, birthdates, IP addresses, email addresses, device identifiers, and photos/images.

STEP 3 — DO I HAVE BUSINESS ASSOCIATES? A business associate is anyone who creates, receives, maintains or transmits PHI on your behalf; or has the ability to come in contact with PHI in your practice. See PHI examples above.

OK, NOW I'M WORRIED! Keep Reading To Find Out What You Can Do!

Did You Know?

#1 If you are sharing any type of PHI with Business Associates, any mistakes they make in protecting the security and privacy of your data are yours too. YOU are still responsible.

#2 Your compliance is now dependent on their practices.

#3 You can protect yourself by having formal Business Associates Agreements (BAAs) documenting how they are protecting your PHI and by performing reasonable due diligence to verify their security practices.

⚠ Do not disclose PHI to any Business Associate unwilling to sign a BAA.

Complying With HIPAA

HIPAA compliance is a combination of physical, administrative and technical safeguards. Technology alone cannot be HIPAA compliant or make you HIPAA compliant. Here are the things you and your Business Associate(s) should do and document:

RISK ASSESSMENT: Conduct a comprehensive review of where you store or access PHI and how secure it is in each case. Take appropriate steps to secure it in a way that fits for your organization. Establish and document your security policies and procedures. Train your employees regularly and consistently.

INFORMATION SYSTEMS ACTIVITY REVIEW: Conduct and document periodic reviews of access logs or other records for unauthorized activity. It might be bad news if you find some, but YOU want to be the first one to find it. Report the breach and implement a fix immediately. Confer with counsel about what to do next.

You might also want to consider ways to configure your system so that PHI is not stored or shared.

4 Questions to Ask a Potential Business Associate

...but they all say they are HIPAA compliant...

Question 1: Which of the 18 identifiers of PHI would your company be CAPABLE of accessing?

Question 2: May I view the results of your last HIPAA compliance audit?

Question 3: What administrative, physical and technical safeguards do you have in place?

Question 4: Would you be willing to sign OUR BAA?

Extra Credit Compare these measures among vendors!

Note to Self... Encryption alone is not compliance, and processes that are compliant in a clinic-to-clinic encounter may not be compliant in a clinic-to-consumer encounter. Context matters.

Things to Keep In Mind WHEN (not IF) You Have a Breach...

What Is At Stake?

UNKNOWING VIOLATIONS "But I Didn't Know"

$50,000 maximum per violation

$100 minimum per violation

STAY CALM — First time infringement corrected within 30 days may avoid penalties

Financial Penalties

WILLFUL NEGLECT VIOLATIONS "But You Did Know*"

Corrected in required time period < Uncorrected

$10,000+ per violation — $50,000+ per violation

*Requires only knowledge of the actions that constitute an offense. Specific knowledge that a particular action violates the HIPAA statute is not required.

Fines + Criminal + Civil Penalties

The Maximum Penalty is $1.5 Million Per Year Per Violation

Learn More About HIPAA

* HHS Office for Civil Rights
* Center for Connected Health Policy
* Electronic Code of Federal Regulations
* HIPAA.com
* UMTRC HIPAA Clarifications
* NIST HIPAA Security Rule Toolkit
* American Medical Association and HIPAA

Have questions? Contact a Telehealth Resource Center!

Disclaimer: This document contains general information solely for the purpose of education. The information herein is not intended to and does not constitute legal advice, nor is it complete, and should not be treated as such. If you have specific questions about any legal matter, you should seek legal counsel. Additional privacy and security requirements may also exist based on jurisdiction (e.g., state law) and type of practice (e.g., behavioral health, school health).

TelehealthResourceCenter.org

Version 1.0 4.24.15

A Concise Guide for Telemedicine Practitioners: Human Factors Quick Guide
Eye Contact

An American Telemedicine Association Human Factors SIG publication in collaboration with the Home Telehealth and Remote Monitoring SIG

This guide is a quick reference to the importance of eye contact--and the lack of it--in providing healthcare services. Some pointers relate specifically to the provision of remote services, but all are applicable to most healthcare encounters. For more information and details we refer you to the references at the end of the guide.

Why Is Eye Contact Important?

- One of the most important aspects of human (provider-patient) interaction[1,2]
- One of many non-verbal cues that take time to process remotely
- Fundamental to the REDE (Relationship, Establishment, Development, Engagement) model of patient provider interaction for optimizing provider-patient relationships[3]
- Important to clinical encounters and used as part of medical skill set checklists[3]
- Impacts patient's sense of dignity[4,5]
- Helps establish rapport; trust[6] (keeps participants focused on each other; encourages interaction; facilitates memory; influences likeability & attractiveness; affects perceived emotion; creates sense of inclusion when present & sense of isolation when not[7])
- Allows for the use of non-verbal cues in communication[8]

Eye Contact Etiquette

- "Rules" of direct versus indirect eye contact can differ by culture[9,10].
- It is important to be aware of possible cultural heuristics:
  - Arabs, Latin Americans & Southern Europeans make more eye contact during conversation than Asians & Northern Europeans
  - Japanese may consider eye contact rude & people are taught to look at a person's Adam's apple instead of the eyes; eye contact with superiors is avoided
  - Women generally make more eye contact than men
- Eye contact changes with age
  - Increases from age 4-9
  - Decreases from 10-12
  - Increases again into adulthood.
- Certain mental health medical, and vision conditions impact the ability or willingness of some patients to make and/or maintain eye contact[11,12,13]

Tips for Telemedicine Camera Positions & Viewing Screens[14,15]

- Locate camera above the face for accurate estimation of gaze[6,16]
  - Preferably 7 degrees (of viewing angle) or less above from transmitter's position

On-line Education

English
Spanish
Navajo*
Mandarin*
French*

***4 most requested topics**

Telemedicine and Telehealth Overview
The history, progression and current uses of telemedicine and telehealth.

Clinical Applications Overview
Clinical services (real-time and store-forward) that have been amenable to telemedicine consultation and how these services can help underserved areas.

Telecardiology
Definition of telecardiology services, requirements to provide this service, and current applications.

Teledermatology
Definition of teledermatology services, requirements to provide this service, and current applications.

Telenursing
How telenursing can help close the nursing shortage gap. Case studies are presented and outcome results are discussed.

Telepathology
Definition of telepathology services, requirements to provide this service, and current applications.

Telepsychiatry
Definition of telepsychiatry services, requirements to provide this service, and current applications.

Teleradiology
Definition of teleradiology services, requirements to provide this service, and current applications.

Teletrauma
Definition of teletrauma services, requirements to provide this service, and current applications.

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

Training Tips
How to set up a telemedicine/telehealth conference training program. Organizing a conference over distance is different than on-site conference management. Includes tips for success.

Training Telepresenters
How to develop good distance communication skills and conduct a telemedicine/telehealth session (how to look and speak, what to wear, etc.).

Distance Education
The role of tele-education in continuing medical education for various healthcare professionals and the necessary components to set up such a program.

Evaluation
The importance of evaluation in telemedicine/telehealth and how it relates to acquiring and organizing data about the program that can be used to obtain funding for increased sustainability.

Business
Sources of funding for telemedicine/telehealth programs, the business model developed and used by the Arizona Telemedicine Program, and paths towards sustainability and business planning.

Facility Design
Go through the steps required to set up a telemedicine/telehealth facility, including placement of the equipment, lighting, wall color, etc.

Video and Data Communication
Basic introduction to networking and data communications. Description of the Internet, local area networks, Ethernet, wireless communications and communication modes (e.g., Internet, satellite, wireless), including the advantages and disadvantages of each as they relate to telemedicine/telehealth.

Telemedicine/Telehealth Network
Basics of how a telemedicine/telehealth network is set up and the roles of various pieces of equipment: CODECs, MCUs, computer applications (e.g., videoconferencing, Skype), video bridges, gatekeepers, and communication protocols (e.g., H.239).

Culture, Etiquette & Technology
The impact of technology on social interaction and the universal rules of good manners and technology.

Information Services
The best Internet-based information resources available to healthcare professionals and consumers, as identified by university-based librarians.

Challenges & Barriers
The challenges and barriers to implementing a successful telemedicine/telehealth program and lessons learned from successful programs.

Navajo On-line Education

Béésh łichíí'ii biyi'doo azee' ąąh ál'į dóó béésh łichíi'ii biyi'doo ats'íís bee aa' áhayą bił haz'ą Nél'į. Díí baa ya'áti'ígíí éí níléí nát'ąą' baa náhane', dóó hoshdęę' dóó diiji béésh łichíi'ii biyi'doo bee azee' ąąh ál'į dóó béésh łichíi'ii biyi'doo ats'íís bee aa' áhayą bił haz'ą choo'ínígíí.

Clinical Applications Overview

Na'alkid Dóó Naaltsoos Bee Alch'į' Ya'áti'. Díí baa ya'áti'ígíí éí binahji' éé hózindoo diné bił na'anish biniiyé dóó naaltsoos bee ałch'į' ya'áti' bá. Béésh łichíi'ii bee na'anishígíí éí kódoo binahji' hane'ígíí t'áá ákǫ́ǫ́ béésh łichíi'ii bił oonish bił haz'ánígíí óolyé, béésh łichíi'ii t'áá bí nitsékeesígíí dóó béésh bee hane'í bita' ninit'i'ígíí, béésh łichíi'ii doo bida'diit'i'góó biyi'jį' dahane'ígíí, dóó naaná ła'. Binahji' ał'ąą át'éego dahane'ígíí éí kódaat'é (e.g., internet, satellite, wireless) dóó bee yá'á'daat'éhígíí áádóó doo béé yá'ádaat'éhígíí éí kwe'é ił iishjání ádaalye' koji béésh łichíi'ii biyi'doo bee azee' ąąh ál'í/béésh łichíi'ii biyi'doo ats'íís bee aa' áhayą bił haz'ą bidadeet'i'ígíí.

Video and Data Communication

Na'alkid Dóó Naaltsoos Bee Alch'į' Ya'áti'. Díí baa ya'áti'ígíí éí binahji' éé hózindoo diné bił na'anish biniiyé dóó naaltsoos bee ałch'į' ya'áti' bá. Béésh łichíi'ii bee na'anishígíí éí kódoo binahji' hane'ígíí t'áá ákǫ́ǫ́ béésh łichíi'ii bił oonish bił haz'ánígíí óolyé, béésh łichíi'ii t'áá bí nitsékeesígíí dóó béésh bee hane'í bita' ninit'i'ígíí, béésh łichíi'ii doo bida'diit'i'góó biyi'jį' dahane'ígíí, dóó naaná ła'. Binahji' ał'ąą át'éego dahane'ígíí éí kódaat'é (e.g., internet, satellite, wireless) dóó bee yá'á'daat'éhígíí áádóó doo béé yá'ádaat'éhígíí éí kwe'é ił iishjání ádaalye' koji béésh łichíi'ii biyi'doo bee azee' ąąh ál'į/béésh łichíi'ii biyi'doo ats'íís bee aa' áhayą bił haz'ą bidadeet'i'ígíí.

Business

Na'anish. Díí baa ya'áti'ígíí béeso bee áká'a'áyeedígíí nél'į koji béésh łichíi'ii biyi'doo bee azee' ąąh ál'į/ béésh łichíi'ii biyi'doo ats'íís bee aa' áhayą bił haz'ą bida'íníishjí bá, na'anish bik'chgo áda'ał'ínígíí hadadiilyaa dóó ATP chodayooł'í, dóó náásgóó t'áá bí deiyiłyéédgo bee oonish dóó naanish bináhat'á bika'áhat'į.

Service Provider Showcase

- **October 8-9 Renaissance Glendale Hotel & Spa in Glendale, AZ**
- **Registration: $495 early & SWTRC states; $595 regular, $395 group (5+), $250 student**
- **National conference** focus on linking TM/TH service provider companies with hospitals, healthcare systems, clinics & others who need their services
- **Expo hall** offers range medical specialty services, ancillary patient services & supporting technology, latest trends clinical TH
- **Bringing better healthcare** to patients, communities, populations; improving outcomes; reducing costs; helping hospitals & healthcare systems thrive through partnerships with TM providers

Service Provider Directory

- http://telemedicine.arizona.edu/servicedirectory

Thank you!

- **For more information**
- **swtrc@telemedicine.arizona.edu**
- **Call toll free 1-877-535-6166**
- **ekrupin@emory.edu**