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Individualizing Telehealth in the Home

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Today's Presentation

At the end of this presentation, attendees will be able to:

- Telehealth is here to stay but should not merely be a substitute....always improving the delivery of healthcare
- Discuss the importance of using a framework to guide telehealth practice based on the *Novice to Expert* framework
- Apply Comprehensive Patient Assessment for using Telehealth in the Home (CPATH) domains to a behavioral telehealth visit.
- US Fulbright to Chile to apply the CPATH

Telehealth is here to stay

- Public Health Emergency
- More than 55% of providers find telehealth frustrating
 - Quality of Care and video/audio technology
 - 82% physicians surveyed said soft skills like empathy will suffer
- Three categories of telehealth delivery
 - Synchronous (real-time)
 - Asynchronous (store and forward)
 - RPM (remote patient monitoring)
 - **Combinations**



Benefits of Telehealth Home compared to Clinic In-Person Visits

Telehealth

- Rapid access to physical or psychological assessment of patient
- Traverse time and distances
- Patients comfortable at home
 - Less stress and fatigue
- Insight into home environment
 - Risk-related concerns
- More frequent visits without exposure to risks
 - Fall
 - Infection
 - Exhaustion
- Provider has more time for preparing for the visit

In-Person



But.....

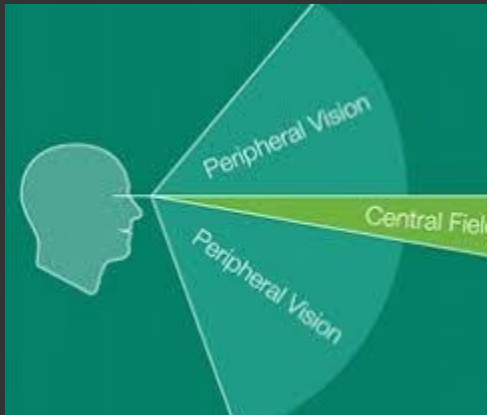
Telehealth limits the use of senses

- **Telehealth assessment requires different practice skills than what is learned**
 - **No touch or smell**
 - **Only sight, and auditory**
- **Compensate with 4 Cs**
 - **Communication**
 - **Cues**
 - **Creativity**
 - **Collaboration**

Visualization

Human Eyes

- Wide focal area with peripheral vision



Camera lens

- Narrow focal area with no peripheral vision



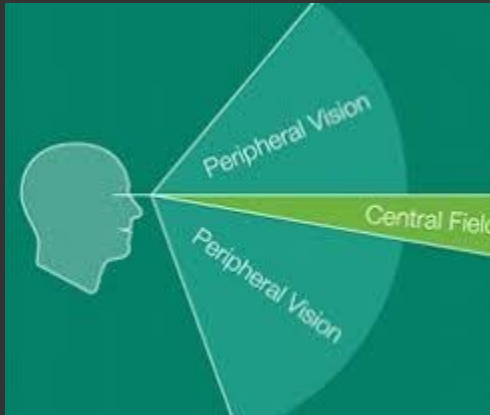
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Before video visit

Ergonomics

- ❑ Simplify patient Access
 - ❑ One click
 - ❑ Familiar with software
- ❑ Prepare **your** Technology
 - ❑ Audio
 - ❑ Video
 - ❑ Microphone
 - ❑ Signal
- ❑ Prepare **your** space
 - ❑ Minimize distractions
 - ❑ Lighting
 - ❑ Camera positioning
 - ❑ Eye contact
 - ❑ Distance
 - ❑ Background

Efficiency

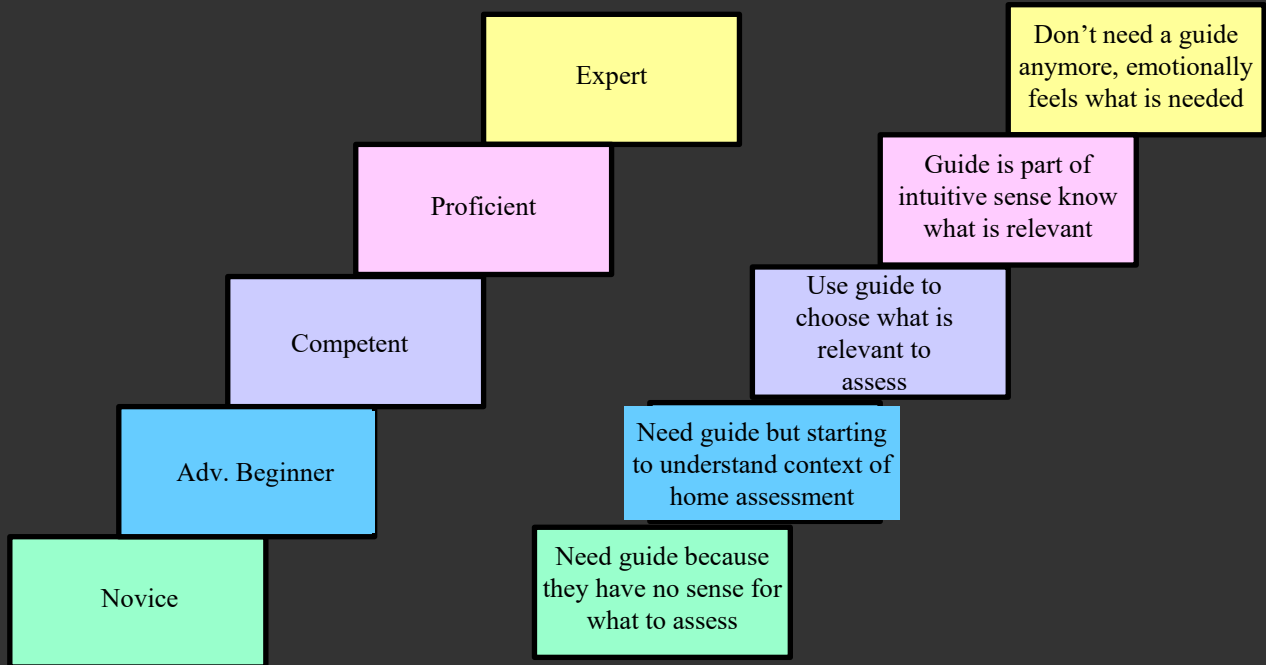
- ❑ Risk review
 - ❑ Diagnosis
 - ❑ Comorbidity
 - ❑ Lack of care
 - ❑ Safety
- ❑ Prepare for the Flow
 - ❑ Items to discuss
 - ❑ Test results
 - ❑ Items to share
 - ❑ educational
- ❑ Review CPATH Domains
 - ❑ Critical items in Domains
 - ❑ Questions

Intentional Steps for Telehealth Visit

1. Small talk
 - Comfort
 - Relationship
2. Shared Understanding
 - Why the visit
 - Why looking around
 - What will do with information
3. **Consent** to use a camera along the way
4. Inform that you will be looking at four areas
 - a) Domains
 - Environment
 - Equipment
 - Medications
 - Patient Characteristics
 - Caregiver Characteristics













Using a Guide to move from Novice to Expert



Guides for Telehealth

- TELEHEALTH TEN - general physical assessment
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7368154/>
- Comprehensive Patient Assessment using Telehealth in the Home (CPATH) – diagnosis driven
 - <https://pubmed.ncbi.nlm.nih.gov/35720747/>
- 4 Ms – age-friendly
 - <https://www.ihl.org/Engage/Initiatives/Age-Friendly-Health-Systems/Pages/default.aspx>

Telehealth Ten

	Step 1: Vital Signs -Weight, blood pressure, pulse, oxygen saturation, temperature
	Step 2: Skin assessment -New bruises, rash, swelling
	Step 3: Head, Eyes, Ears, Nose, and Throat -Assess vision, hearing, sense of smell; observe throat, swallowing
	Step 4: Neck -Assess pain with rotation, jugular venous distension, Corrigan's pulse
	Step 5: Lungs -Deeply inhale and hold; observe wheezing and tachypnea
	Step 6: Heart -Assess pulse; incorporate data from wearables
	Step 7: Abdomen -Assess if abdomen is firm, tender, or distended
	Step 8: Extremities -Press thumb into pre-tibial area and assess edema; perceived temperature
	Step 9: Neurological -Speech, gait, Romberg, stand from seated position
	Step 10: Social Determinants of Health -Diet, physical activity, sleep, stress, housing, transportation, safety, mood

Figure

Ten-step checklist for a patient-assisted physical examination.

Guide for Telehealth Visits

Diagnosis- congestive heart disease

Comprehensive Patient Assessment for using Telehealth at Home

Environment <ul style="list-style-type: none">• fans, airflow• safety• bedding Equipment/treatments (as appropriate) <ul style="list-style-type: none">• urinary collection• oxygen delivery• feeding• non-medical therapies	Medication <ul style="list-style-type: none">• types• dosages• administration guidance Patient characteristics <ul style="list-style-type: none">• breathing• Skin- color, edema, integrity• Non verbal gestures• positioning in bed Caregiver/family Characteristics
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1. Shea K, Silva G, Evans BA. A Best Practice Assessment Protocol for Mobile Technology Home Visits. Western Institute of Nursing's Annual Communicating Nursing Research Conference. Portland, OR 2017.

2. Shea, K. D., Towers, V., Koon, M., & Silva, G. (2021). Development of an Intentional Telehealth Viewing Guide for Home-Based Patient Assessment. *Telemedicine Reports*, 2(1), 32-38. doi:10.1089/tmr.2020.0017

Age-Friendly Health Systems

(Initiative of John A. Hartford Foundation, Institute for Healthcare Improvement, American Hospital Association, and Catholic Health Association of the United States)

The diagram illustrates the 4Ms Framework, a central concept surrounded by four key areas: What Matters (yellow circle with a person and caregiver icon), Medication (green circle with a pill and glass icon), Mentation (blue circle with a person reading icon), and Mobility (orange circle with a person walking icon). The text '4Ms Framework' is centered in a grey circle. The logo for 'Age-Friendly Health Systems' is at the bottom left, and a small disclaimer is at the bottom center.

What Matters

Know and align care with each older adult's specific health outcome goals and care preferences including, but not limited to, end-of-life care, and across settings of care.

Medication

If medication is necessary, use Age-Friendly medication that does not interfere with What Matters to the older adult, Mobility, or Mentation across settings of care.

Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.

Mobility

Ensure that older adults move safely every day in order to maintain function and do What Matters.

Age-Friendly Health Systems

An initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI) in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA).

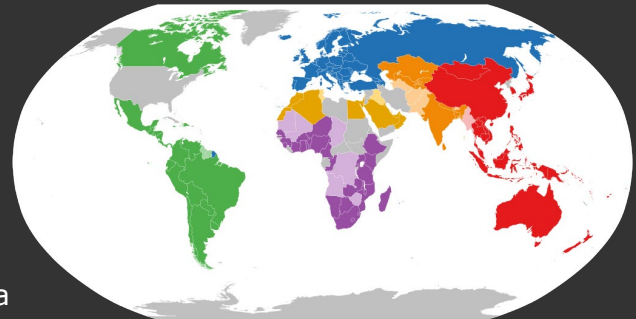
For related work, this graphic may be used in its entirety without requesting permission. Graphic files and guidance at ihi.org/AgeFriendly

(<https://www.ihf.org/>)

Fulbright Program

History

- Senator J. William Fulbright (1945)
- Congress created Fulbright Program (1946)
- U.S. Cultural Exchange Program
 - Students and faculty



Mission

- “to bring a little more knowledge, a little more reason, and a little more compassion into world affairs and thereby increase the chance that nations will learn at last to live in peace and friendship”

Fulbright U.S. Scholars Awards



Overview

- Teach
- Carry out Research
- Carry Out Professional Projects
- 130 Countries
- College/University Faculty
- Wide range of fields

Scholars Programs

- Scholar
 - Opportunities for professionals of all types at midlevel careers
 - Teaching/Research
- Distinguished Scholar
 - Scholars with more than 7 years
 - Mutual sharing of knowledge
- Postdoctoral
 - Within 5 years of graduation with doctoral degree
- International Education Administration
 - 2 week intensive to learn about host country's education
 - Establish network between US and host country

Assessment of Need



Geographical

- Country shape
- Population distribution
- Healthcare structure
- Healthcare access
 - **dual health care system**



Academic

- Private/Public University
 - Universidad Mayor
- Health Professions
 - 5 years
- Postgraduate Certificates
 - Informatics Certificate (UM)
 - Telehealth Certificate (UC)
 - Not applied...very high level
 - Online for working professionals

Award Activities

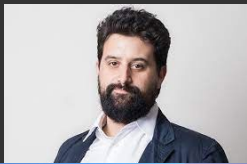


Teaching

- Telehealth use for health sciences
- Postgraduate certificates
- Use of telehealth equipment
- Current informatics certificate
 - theoretical
- Telehealth Certificate
 - Focus on application
 - Human factor interaction
 - Asynchronous



Award Activities



Research

- Original- Evaluate use of smartphones for home telehealth in Chilean culture, and further validate a guide for comprehensive home viewing, *Comprehensive Palliative Assessment for using Telehealth at Home (CPATH)*.

- Pilot CPATH for genetic counseling with patients diagnosed with Gastrointestinal Stromal Tumors (GIST)

- Clinical Trials Group - Centro de oncología de precisión (COP)

- 150 participants

- Procedure for setting up Telehealth encounters for genetic consultations and palliative care patients.

Conclusions

- Telehealth enables access to healthcare and limits risks to patients
- Telehealth is here to stay, but we need to change our practice to fit the delivery system
- Move the camera lens to mimic what your eye can see
- Preparing before the video visit provides a more seamless and complete visit.
- Using a guide aims for standardization
- Globally the world is interested in telehealth as indicated by a Fulbright Scholarship to teach medical and nursing students best practices for use of telehealth in rural areas.

THANK You for Attending

Questions?

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