Disclosures:

I have nothing to disclose.
I have no conflicts of interest regarding this presentation.
### Missouri Telehealth Network

**University of Missouri - School of Medicine**

- Started in 1994
- We educate and train people interested in starting their own telehealth program.
- We hold training conferences and meetings.
- We have technical, clinical, operational, legal & regulatory and evaluation telehealth expertise.
- We have state, federal, grant, membership, and institutional funding.
- Show-Me ECHO

---

**Objectives:**

- Learn about current trends in telehealth related to the frail and elderly population and
- Understand new CMS rules regarding telehealth in this area.
Missouri Telehealth Network exists to develop, study, and use telehealth solutions that improve access by providing high-value, patient-centered health care and medical education in Missouri and beyond.
MTN team has expertise in the 5 domains of a telehealth program

- **Technical**
  - equipment, connectivity, data storage and transfer, room set-up
- **Clinical**
  - guidelines, training, support
- **Legal/Regulatory**
  - state vs. federal, licensing, credentialing, reimbursement
  - contracts, baa’s, consents
- **Operations**
  - staff, job descriptions, protocols, training, testing
- **Program evaluation**
  - how can you tell if you’re winning or not
What is Telehealth / Telemedicine?

The delivery of health care services by means of information and communication technologies which facilitate the assessment, diagnosis, consultation, treatment, education, care management, and self-management of a patient’s health care while such patient is at the originating site and the health care provider is at the distant site. Also includes asynchronous store-and-forward technology.

Definition from the State of Missouri- SB579

Definitions

Live-interactive
Synchronous communication
Audio and video
Resembles in-person visit

Store-and-Forward
Asynchronous communication
E-mail, pictures, notes
Very efficient
A best-use scenario is specialty to PCP consultation
Why do we do telehealth?

Because clinical shortages & clinician maldistribution.
To increase access to high quality healthcare.
To decrease travel, cost, & hardship.
Because early dx prevents suffering, saves lives & $.
To provide clinical education & training.
To provide economic development- keeping health dollars local.

Examples of specialties that use telehealth

- Psych/Mental Health
- Dermatology
- Cardiology
- Radiology
- Neurology
- Rehabilitation
- Autism
- Surgical Follow-up
- Internal Medicine
- Genetics
- Gastroenterology
- Rheumatology
- Genetics Follow-Up
- Pediatric Dermatology
- Sign Language Interpretation
- Orthopedic Consults
Telehealth Across the Continuum of Care

Well
- Preventative Care
- Health Education
- Coaching

Acute Care/Ambulatory
- Primary Care
- eVisits
- High-Risk OB
- Store-&-Forward

Chronic Disease
- Specialty Consults (Behavioral health, endocrinology)
- Remote Home monitoring (CHF)

Critical Care Care
- TeleICU
- in-Patient Consultations

Emergency
- Trauma
- Stroke
- Burn

ECHO & TELEMED PROGRAMS

Telehealth types
- Robots
- DTC
- eICU
- Remote monitoring
- Inpatient
- eVisits
- ED-telestroke
- ED-telestroke

Show-Me ECHO
How can telehealth help specifically to the frail and elderly population?

- Chronic Disease Management, therapy, check-ins
- Acute care
- Information flow for care management
- Improve access to care and access to information
- Educational outreach to rural providers
- Facilitate communication between providers, among care givers (out of town adult children)
- Assistive devices

What would the benefits be?

Longer independence
Fewer emergency room visits
Less travel to providers
More coordination among providers
Types of telehealth project for the Frail & Elderly

- Traditional - live-interactive video
- Store-and-Forward - asynchronous
- Remote patient monitoring
- Apps and gadgets

Where might the patient be?

- At home
- Skilled Nursing facility
- Independent living facility
- Assisted living facility
- Long-term care services: adult day care, home health
- Anywhere else?
Telehealth devices for older adults with chronic illnesses

Multi-user telehealth kiosk system in Independent retirement system
- Blood pressure
- Heart rate
- Weight
- Pulse oximetry
- Blood glucose
- Personal ID card

Health buddy

Health Buddy device
- Programmed to present questions related to symptoms and information
- Patient responds by pressing one of four buttons
- Device attached to home telephone line
Home telemonitoring

- Patient weight- modified bathroom scale with bluetooth
- Electrocardiogram
- Vitals
- Videoconferencing
- Photographic foot imaging device (PFID)
- Autotitrating positive airway pressure machine (PAP)

Facilitators and Barriers to the Adoption of Telehealth in Older Adults: An Integrative Review
FOSTER, MARVA V. MSN, RN-BC, SETHARES, KRISTEN A. PhD, RN, CNE

What device attributes are terrible for this population?

- Tiny Font size
- Hard to read fonts
- Bland graphics, poor color contrast
- Using devices with attachments/gadgets
- Use of computer mouse
- Smartphones that are hard to use
- Multiple screens
- Too many clicks to get there
- Smart phones that are too big or too small
Facilitators and Barriers to the Adoption of Telehealth in Older Adults: An Integrative Review

FOSTER, MARVA V. MSN, RN-BC, SETHARES, KRISTEN A. PhD, RN, CNE

What types of devices would improve telehealth for this population?

- Devices with fewer buttons
- Automatic transmission of information
- Low-tech platforms
- Devices that generate reminders or alerts
- Audio and visual
- User-friendly images

Chronic care remote physiologic monitoring

If finalized, will go into effect January 1, 2019, now open for public comment

Already have 99091- which is the collection and interpretation of physiologic data went live Jan, 2018

What Are the New RPM Codes?

- **CPT code 990X0**: “Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; set-up and patient education on use of equipment.”
- **CPT code 990X1**: “Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial; device(s) supply with daily recording(s) or programmed alert(s) transmission, each 30 days.”
- **CPT code 994X9**: “Remote physiologic monitoring treatment management services, 20 minutes or more of clinical staff/physician/other qualified healthcare professional time in a calendar month requiring interactive communication with the patient/caregiver during the month.”

Facilitators and Barriers to the Adoption of Telehealth in Older Adults: An Integrative Review by Foster, Marva V. MSN, RN-BC, Sethares, Kristen A. PhD, RN, CNE.


---

UH, how is that different from what we already have?

- 33% less time required, at least 30 minutes per 30 day period, easier to track b/c calendar month
- Separate payment for initial set-up and patient education
- Clinical staff allowed, not just physicians and qualified health care professionals
- **Does not require rural, place of service, or other requirements that CMS has on telemedicine services.**

Facilitators and Barriers to the Adoption of Telehealth in Older Adults: An Integrative Review by Foster, Marva V. MSN, RN-BC, Sethares, Kristen A. PhD, RN, CNE.

Provider **buy-in** and provider **dependence**!
Additional personnel **resources** and **training** are required at both hub and spoke sites

**Costs** - equipment & broadband

Documentation and paper work flow disruption

**Reimbursement**

**Credentialing**/ Licensure

Quickly changing environment

Education - **awareness**

---

**Telehealth Barriers**

---

**Lessons Learned**

Telemedicine is simply a tool used to deliver health care at a distance.

People are more important than technology.

Telemedicine must be integrated into the everyday way physician’s practice.

It works best in augmenting established referral relationships.
Questions
Or Comments?

Contact:
E. Rachel Mutrux
Sr. Program Director, Missouri Telehealth Network
2800 Maguire Blvd.
Columbia, MO 65212
573-884-7958
mutruxe@health.missouri.edu