# Telehealth in Occupational Therapy

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# What is Telehealth?

- Utilization of a variety of technology (audio, video, apps) to deliver virtual medical, health, and education services
- Goal: improve patient's health status, increase access to health care, reduce health disparities, and improve health care delivery
- Broader scope of health services than telemedicine, such as case management, OT, PT, home health
- Modalities:
  - Live video: 2-way interaction between patient, caregiver, or provider and provider
  - Store-and-forward: recorded health history transmitted to a practitioner through an electronic system
  - Remote patient monitoring (RPM): health and medical data collected in a facility via electronic comunication and transmitted to a provider in a different facility Mobile health (mHealth): usage of mobile communication devices (cell phones, tablets) with communication through text messages, wide spread alerts, and application

(Department of Health, 2018; Center for Connected Health Policy, 2018)

# How is Telehealth Used in Other Health Professions?

- Remote ICU monitoring
  - Primarily monitoring stroke patients in ICU
- Speciality consultations between hospitals with decreased staffing
- Consultations in rural hospitals
- Home Health; reduces costs for elderly community dwelling adults
- Remote patient monitoring

(A. Evatt, personal communication, March 26, 2018)

# AOTA Position on Telehealth

- OT's use of telehealth as a service delivery model:
    - Tele-intervention/Tele-rehabilitation
    - Tele-evaluation
    - Tele-consultation
    - Tele-monitoring
- Ethical considerations
- Supervision using telehealth technologies
- Funding and reimbursement considerations

(American Journal of Occupational Therapy, 2013)

# MOTA's Stance on Telehealth

- Maryland Occupational Therapy Association (MOTA) recognizes that the delivery of healthcare services is transitioning to use technology in order to expand accessibility while reducing the costs of care.
- MOTA supports the initiative to expand OT's role in providing OT services through telehealth.

(K. Eglseder, personal communication, March 26, 2018)

# OT's Role in Telehealth

- School
  - Provides consultative services to classroom such as environmental modifications as well as fine motor skills, visual motor skills, and handwriting skills
- Early Intervention
  - Provides parent with consultative services and facilitates interaction between the parent and the child remotely
  - Beneficial for families receiving limited amount of services in rural areas due to difficulties in occupational therapist's traveling

(Criss, 2013; Cason, 2009).

# OT's Role in Telehealth

- Hospitals and Rehabilitation Facilities
  - In hospitals and facilities that have more COTAs than OTs, OTs can provide the necessary supervision via telehealth services, allowing the hospital to function smoothly with a lack of OTs
- Home Health
  - Occupational therapists can provide therapy to clients within their homes via secured webchat programs
  - Telehealth increases productivity and reduces costs when used in the home
- Apps and Games
  - OTs can utilize games on the computer and tablet during therapy sessions in any setting
  - Clients can use smartphone apps to complete their home exercise programs

(A. Evatt, personal communication, March 26, 2018; S. Lawson, personal communication, March 27, 2018)

# Evidence-Based Use of Tele-Rehabilitation

- Group Tele-Exercise for Improving Balance in Elders
  - Sought to assess the participant satisfaction and efficacy of a group tele-exercise program (3x per week for 15 weeks) designed to improve the balance and fear of falling in elders
  - Significant improvements were noted in post-tests: fear of falling score, single leg stance, and timed up-and-go
  - The elders were satisfied with tele-exercise program
- Outpatient Telerehabilitation for Patients Following a Total Knee Arthroplasty: A randomized control trial
  - Compared physical therapy conventional outpatient rehabilitation program to a physical therapy tele-rehabilitation program
  - The outcomes of the two 6-week programs were comparable when measuring pre-test and post-test scores
  - Participants involved in the tele-rehabilitation program were highly satisfied with using the new technology

(Wu & Keyes, 2006; Russel, Buttrum, Wootton, Jull, 2011).

# Evidence-Based Use of Tele-Rehabilitation in Occupational Therapy

- School-based Tele-rehabilitation in Occupational Therapy to Promote Improvements in Student Performance
  - Utilized virtual sessions within classroom to address deficits in fine motor and visual motor skills affecting handwriting performance
  - 5 out of 8 students demonstrated at least a 5% increase in handwriting performance from pre to post-test with 3 students improving by 11% after 6 intervention session lasting approximately 40 minutes
  - Students and teacher were satisfied with the use of this new technology
- Pilot Telerehabilitation program: Delivering Services to Rural Families
  - Increased amount of services families received from 1x per month to 3x per month
  - Qualitative data demonstrates parents were satisfied with the delivery of services and that their child benefited from participating in tele-rehabilitation with an increased amount of sessions
  - Savings in reimbursement rates

(Criss, 2013; Cason, 2009).

# Benefits of Telehealth

- **Increased accessibility:** targeted towards provider shortages in rural and urban areas, correctional facilities
  - "At home hospital" model to monitor patient's condition
  - Reduce patient wait time for speciality care
- **Improved affordability:** increased preventative care, increased management of chronic diseases and reduced travel costs
  - Veteran Health Administration reported 25% reduction in hospital overnight stays & 19% decrease in hospital admissions, including over 40% reduction for mental health patients
- **Increased communication** between health professionals and patients
  - Nurses reported increased interactions between tele-ICU patients and clinicians
- **Job satisfaction:** health professionals reported higher satisfaction
  - Increased opportunities to network with other professionals
  - More confident in treating chronic & complex patients
  - Lower turnover rates

(American Hospital Association, n.d.; American Telemedicine Association, 2018; Department of Health, 2018)

# Issues in using Telehealth

- Liability
  - Adequate liability and malpractice coverage
- Requires organizations to shift delivery of care
- Technical challenges
  - Cybersecurity threats can compromise personal health information per HIPAA
  - Security measures to prevent organizations from sharing information and accessing records can impede delivery of care
  - Lack of broadband access in certain regions can impact internet speed, image resolution, and quality of videos and/or images
  - Particular populations not having access to technology or not tech-savvy
- Reimbursement
- State licensure

(Agency for Healthcare Research and Quality National Resource Center for Health Information Technology, 2008)

# Reimbursement for Telehealth Services

- Private insurance companies
  - Expected to reimburse telehealth services equivalent to services provided in person
- Hospitals under global budgets
  - Often absorb the costs of specialty consultations
- Medicare
  - Strict guidelines and regulations for reimbursement
  - Reimburse services provided in rural areas and in medical deserts
  - Only provide reimbursement for specific codes and services

(A. Evatt, personal communication, March 26, 2018)

# State Licensure

- In order to provide occupational therapy services across states via telehealth, therapists must be licensed in all states involved
- To combat this issue, other professions have "licensure compacts"
  - Which allow clinicians to provide care in all states encompassed in the compacts
  - As of 2018, the PT compact has been adopted by 15 states and is pending in 8
  - As of 2018, the nursing compact has been adopted by 29 states and is pending in 8
  - AOTA has discussed the benefits of a multi-state licensure compact, however no action has been made toward obtaining one
- National Center for Interstate Compacts (NCIC)
  - NCIC is a policy program developed to assist states in developing interstate compacts
  - NCIC serves as an information clearinghouse, a provider of training and technical assistance, and a primary facilitator in assisting states in the review, revision and creation of new interstate compacts to solve multi-state problems
  - NCIC would be a great resource for the profession of OT to utilize

(American Physical Therapy Association, 2016; National Council of State Boards of Nursing, 2018; National Center for Interstate Compacts, 2011)

# Telehealth Across States

"The current laws and regulations, however, are not consistent among the states. While some states have established laws and regulations regarding telehealth, other states have yet to even think about whether occupational therapy practitioners can provide services via telehealth." (American Occupational Therapy Association, 2016)

# More Information….

**"Quick Links"**

Evidence-Based Research in Tele-Rehabilitation in Occupational Therapy:

https://www.presencelearning.com/resources/online-ot-research-summary/

AOTA Position Paper:

https://ajot.aota.org/article.aspx?articleid=1853066

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