

The background features a dark blue gradient with faint, overlapping circular patterns and numerical scales. Some of the visible numbers include 40, 150, 160, 180, 200, 210, 220, 230, 240, 250, and 260. The text is centered and rendered in a clean, white, sans-serif font.

# TELEPRACTICE IN 2021: THE ARIZONA CLINICAL EXPERIENCE & BEST PRACTICE

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# DISCLOSURE INFORMATION

## Financial:

- Employed by Northern Arizona University
- Honorarium

Nonfinancial: Nothing to disclose

# AZ LICENSURE REQUIREMENTS FOR TELEPRACTICE

- COVID–19 Public Health Emergency declared 3/11/2020
- 3/25/2020 Governor Ducey signed an Executive Order for Expansion of Telemedicine
- Protect healthcare workers and the populations served
- Insurers establish reasonable requirements & parameters for telehealth services

# AZ LICENSURE REQUIREMENTS FOR TELEPRACTICE

- Insurers must reimburse healthcare professionals at same level of payment for telemedicine as in person services
- All licensed and credentialed professionals of rehabilitation team
  - Co-presenters and colleagues

(Retrieved at AZ licensure: [eo\\_2020-15\\_expansion\\_of\\_telemedicine.pdf](#))

# ASHA WEBSITE FOR TELEPRACTICE REQUIREMENTS PER STATE

AZ has:

- No licensure laws or regulations for telepractice
- No rules or regulations for telesupervision
- No laws or regulations for telepractice reimbursement (audiology & speech)

(Retrieved at <https://www.asha.org/Advocacy/state/info/AZ/Arizona-Telepractice-Requirements/>)

# ASHA WEBSITE FOR TELEPRACTICE REQUIREMENTS PER STATE

- AZ Licensure and credentialing regulations
  - Check for updates
- ASHA Practice Portal: Telepractice



# **EVIDENCE FOR SLP TELEREHABILITATION**

# THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI-AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) — SLP TELEPRACTICE SYSTEMATIC REVIEWS

- Theodoros (2011) – Thorough systematic review of articles published up through 2010
  - Adult and pediatric telepractice studies published through 2010
- Coleman et al. (2015) – Systematic review for ABI in adults that included group or case studies



# THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI-AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) — SLP TELEPRACTICE SYSTEMATIC REVIEWS

- Molini-Avejonas et al. (2015) – Systematic review summarized number of studies per disorder and overall findings
  - Reviewed articles in speech-language pathology and audiology
- Weidner & Lowman (2020) Thorough systematic review of articles published up through 2014-2019

# THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI-AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) — SLP TELEPRACTICE SYSTEMATIC REVIEWS

- **Adult Diagnostics**

- Videofluoroscopic, OME, and clinical swallow studies (Burns et al., 2016; Morrell et al., 2017; Ward et al. 2014)
- Screening or assessment of aphasia (Choi et al., 2015; Guo et al., 2017; Theodoros et al., 2008)
  - E.g., BDAE; Frenchay Aphasia Screening Test; Assessment for living with Aphasia

THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI-  
AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) —  
SLP TELEPRACTICE SYSTEMATIC REVIEWS SYSTEMATIC  
REVIEWS

- **Speech & Voice Diagnostics**

- Apraxia Battery for Adults (Hill et al., 2009b)
- Perceptual and acoustic measures, speech intelligibility, articulatory precision (Constantinescu et al., 2010b)
- LSVTLOUD (on-line program) (Covert et al., 2018; Griffin et al., 2018; Quinn et al., 2018)

THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI-  
AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) —  
SLP TELEPRACTICE SYSTEMATIC REVIEWS

## **Treatment:**

- **Dysphagia**
  - Case studies for postural & compensatory strategies (Cassel et al., 2016)

# THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI- AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) – SLP TELEPRACTICE SYSTEMATIC REVIEWS

- **Speech**

- AoS and dysarthrias
- Stuttering in children & adolescents (Carey et al., 2010; Sicotte et al., 2003)

- **Voice**

Synchronous (Mashima et al., 2003) & asynchronous

# THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI-AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) — SLP TELEPRACTICE SYSTEMATIC REVIEWS

- **Aphasia and Cognitive-Communication Therapy**
  - Chronic aphasia, PPA, or TBI
  - Synchronous vs asynchronous
  - Word retrieval, group therapy, script training, PACE, pragmatics (Cherney et al., 2008; Kurland et al., 2018; Macoir et al., 2017)

# THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI-AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) — SLP TELEPRACTICE SYSTEMATIC REVIEWS

- **Strengths**

- Face-to-Face vs. telepractice = no significant differences
- Good intra and inter-rater reliability
- High client, clinician, and family/caregiver satisfaction

# THEODOROS (2011); COLEMAN ET AL. (2015); MOLINI- AVEJONAS ET AL. (2015); & WEIDNER & LOWMAN (2020) — SLP TELEPRACTICE SYSTEMATIC REVIEWS

- **Limitations**

- Severity of deficits matter
- Heterogeneity of disorders (e.g., aphasia)
- Case studies, single-subject design, larger sample
- Lack of control groups & randomization
- Mix of telepractice platforms used, devices, & environments



# PRACTICAL SUGGESTIONS FOR TELEPRACTICE

## GRILLO (2017) & TOWEY (2012)

- **Hybrid or telepractice?**
- **Software programs for synchronous services & HIPAA compliant**
- **Cost (equipment - audio and video capabilities, training, marketing, & multiple licensures)**
- **Skilled telepractice clinicians have mastered competencies for “technical, procedural, interactive, & virtual preparation” (Towey, 2012, p. 75).**

# PRACTICAL SUGGESTIONS FOR TELEPRACTICE GRILLO (2017) & TOWEY (2012)

- **Client & clinician co-create “authentic” materials = personal digital photos or videos, and curriculum for school-aged clients (Towey, 2012, p. 74)**
- **Record, edit, and save therapy sessions for later use with client, family, and other professionals**
- **Consider use of asynchronous practice in client’s functional environment**

# PRACTICAL SUGGESTIONS FOR TELEPRACTICE

## GRILLO (2017) & TOWEY (2012)

- **Make use client's environment and caregiver/family as e-helper for activities at home**
- **“Adaptation of communication style and timing, motivation, therapy targets, cues, reinforcement, etc.”  
(Grillo, 2017, p. 29)**

# NAU SPEECH, LANGUAGE, & HEARING CLINIC

- Rural community
- Hybrid approach for teaching
  - Clinic?
- Case-by-case basis
- Vulnerable populations considered high risk

# **Ethical Considerations for AZ Telerehabilitation**



# ASHA CODE OF ETHICS (2016)

- Principle of Ethics I Rule H – Obtaining informed consent from the person served about the nature and possible risks and effects of services provided, technology employed....
- Principle of Ethics I Rule K – SLPs with CCCs shall evaluate the effectiveness of services provided, technology employed.....they shall provide services ...only when benefit can reasonably be expected.

# ASHA CODE OF ETHICS (2016)

- Principle of Ethics I Rule N – Individuals with CCCs..... may provide services via telepractice consistent with professional standards, and state and federal laws.
- Principle of Ethics I Rule O & P – HIPAA (confidentiality, privacy, & security)

# ASHA CODE OF ETHICS (2016)

- Principle of Ethics Rule H – Individuals shall ensure that all technology and instrumentation used to provide services.....are in proper working order....
- Principle of Ethics IV Rule R – Individuals shall comply with local, state, and federal laws and regulations applicable to professional practice.....and responsible code of conduct





# TELEREHABILITATION: IMPLICATIONS FOR INTERPROFESSIONAL PRACTICE

# INSTITUTE OF MEDICINE (IOM, 2001 & 2003)

Core Competencies that all healthcare clinicians should possess -

- Provide patient-centered care
  - Professional competency
  - Cultural competency
- Work in interdisciplinary teams
  - Collaboration, education, & training
  - Coordination, cooperation, & communication

# INSTITUTE OF MEDICINE (IOM, 2001 & 2003B)

- Employ evidence-based practice
- Apply quality improvement
- Information technology
  - Technology
  - Virtual environment
  - Mobile Health & Apps
  - HIPAA

LIM & NOBLE-JONES (2018); MAHEU ET AL. (2017); REEVES ET AL. (2016)

### **IPP showed improved**

- Attitudes, perceptions, and clarity in roles of other disciplines
- Collaborative knowledge and skills
- Communication & teamwork

LIM & NOBLE-JONES (2018); MAHEU ET AL.  
(2017); REEVES ET AL. (2016)

### **IPE impact unknown for**

- actual practice behavior
- organizational behavior
- client/patient outcomes

# TELEPRACTICE IPP CONSIDERATIONS

- **Telepractice Considerations**
  - IPP Meetings – which team members are essential
  - Lead clinician/therapist
    - Microphones
    - Video cameras
    - Number of participants
    - Patient's equipment

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