Teaching about Telepractice: History and Current Trends

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These contents do not represent the views of the Department of Veterans Affairs or the United States Government
Disclosure

No financial interests in any products or services mentioned in this presentation

Department of Education Grant with the University of Kentucky

Appointment with the Department of Veterans Affairs (WOC)

SIG 18 Affiliation
What is Telepractice?
ASHA Definition

- The application of telecommunications technology to the delivery of speech language pathology and audiology professional services at a distance by linking client/patient or clinician to clinician for assessment, intervention, and/or consultation
- Synchronous and asynchronous
What’s in a Name?

- Telemedicine
- Telehealth
- Telespeech
- Telerehabilitation
- Telepractice-ASHA
- Teleaudiology
- Tele.........whatever
History of Telepractice

- 1973-1985 Dr. Gwenyth Vaughn wrote grants involving the provision of clinician-assisted and computer-assisted treatment over the telephone and an efficacy study of Tel-C/REMate treatment versus face-to-face treatment.
1987

Telephonic and television technology was employed in a simulation study to determine its potential for providing appraisal and diagnosis of patients who suffer neurogenic communication disorders and reside in remote settings.

Traditional, face-to-face appraisal and diagnosis was compared with appraisal and diagnosis by closed circuit television and computer-controlled video laserdisc over the telephone.
Significant agreement in diagnosis among the three appraisal conditions and essentially the same performance on appraisal measures in all conditions suggests either closed circuit television or computer-controlled video laserdisc over the telephone could be substituted for traditional, face-to-face appraisal and diagnosis to reach patients who reside where traditional services do not exit.

Wertz and colleagues replicated the study in 1992.
• 1997 Sullivan, R. video-otoscopy in audiology practice
• 1999 Nakamura et al., used videophones in a comparison study
• 2001 Lemaire et al., used low-band width Internet-based videoconferencing to complete consultations
• 2002 Scheideman-Miller et al., used ISDN, high-band width T1 and T3 lines to treat children with articulation disorders
• 2006 Theodoros et al., Used videoconferencing via 128 kbit/s Internet link using store and forward
American Telemedicine Association (ATA)

- Telerehabilitation Special Interest Group

- 2010 published *A Blueprint for Telerehabilitation Guidelines*
  - Continues to be a standard guide for telerehabilitation
  - Cited by 53 related articles
ASHA

- ASHA became involved in considering the impact of telehealth in the 1990s
- 1998 ASHA issued an internal Telehealth Issues Brief outlining issues to consider (ASHA, 1998)
  - Practice
  - Credentialing and licensing
  - Ethics and legal implications
  - Reimbursement
2001-2003 ASHA Focused Initiative

2002 Telephone survey

- 1667 respondents
- 11% reported using technology
  - 93% telephone
  - 74% email
  - 40% web-based resources
  - 13% web-based conferencing
  - 8% video-teleconferencing
  - 15% reported reimbursement
2003 ASHA appointed a Telepractice Working Group
2005 Developed a position statement, technical report, knowledge and skills documents
Establish the term *telepractice*
  - Inclusive of services rendered in educational settings as well as health-care settings
2008 ASHA appointed an Ad Hoc Committee on Telepractice in Speech-Language Pathology that produced “Professional Issues in Telepractice for Speech-Language Pathologists”
Special Interest Group 18

- Formed in 2010 through a member petition and approval of ASHA’s Board of Directors
### SIG 18 Surveys

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<tr>
<th>Age Group</th>
<th>2014 Audiology</th>
<th>2016 Audiology</th>
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<tr>
<td>&lt;6 Months</td>
<td>23%</td>
<td>11.5%</td>
</tr>
<tr>
<td>7 mos-2 yrs</td>
<td>19%</td>
<td>11.5%</td>
</tr>
<tr>
<td>3-5 yrs</td>
<td>19%</td>
<td>15.4%</td>
</tr>
<tr>
<td>6-11 yrs</td>
<td>23%</td>
<td>19.2%</td>
</tr>
<tr>
<td>12-17 yrs</td>
<td>19%</td>
<td>23.1%</td>
</tr>
<tr>
<td>18-64 yrs</td>
<td>69%</td>
<td>80.0%</td>
</tr>
<tr>
<td>&gt;75 yrs</td>
<td>69%</td>
<td>61.5%</td>
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<tr>
<td>2014 SLP</td>
<td>2016 SLP</td>
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<tr>
<td>-------------------</td>
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<td></td>
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<tr>
<td>&lt; 6 months</td>
<td>1.7%</td>
<td></td>
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<tr>
<td>7 mos-2 yrs</td>
<td>7.6%</td>
<td></td>
</tr>
<tr>
<td>3-5 yrs</td>
<td>39.1%</td>
<td></td>
</tr>
<tr>
<td>6-11 yrs</td>
<td>71.5%</td>
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</tr>
<tr>
<td>12-17 yrs</td>
<td>64.2%</td>
<td></td>
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<tr>
<td>18-64 yrs</td>
<td>37.1%</td>
<td></td>
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<tr>
<td>64-74 yrs</td>
<td>13.9%</td>
<td></td>
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<tr>
<td>75 yrs</td>
<td>9.6%</td>
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Where did you receive initial training?

<table>
<thead>
<tr>
<th>Audiology</th>
<th>SLP</th>
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<tbody>
<tr>
<td>ASHA website</td>
<td>35.5%</td>
</tr>
<tr>
<td>Conference/workshop</td>
<td>25.9%</td>
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<tr>
<td>Webinar</td>
<td>34.5%</td>
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<td>Employerr</td>
<td>58.4%</td>
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<tr>
<td>Graduate course</td>
<td>2.7%</td>
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<tr>
<td>Part of grad course</td>
<td>3.1%</td>
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<tr>
<td>Grad practicum</td>
<td>39.6%</td>
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<tr>
<td>Networking</td>
<td>22.5%</td>
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<td>Prof journals</td>
<td>16%</td>
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<tr>
<td>Vendors</td>
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TELEPRACTICE, circa 2017

Ellen R. Cohn PhD, CCC-SLP
ecohn@pitt.edu

School of Health and Rehabilitation Sciences
Department of Communication Science and Disorders
COI disclosure:

Financial

• Telerehabilitation, Springer, UK (book royalties)

Non-Financial

• *International Journal of Telerehabilitation*, Editor
• ASHA: SIG 18- Telepractice
• American Telemedicine Association, member and past member, BOD
Telepractice in 2017: It’s complicated!

- Telepractice operates within a complex and dynamic environment that is shaped by many influencers:
  - New technologies
  - Regulatory and professional bodies
  - Privacy and security concerns
  - Reimbursement
  - Standards and guidelines
  - **Powerful financial forces**

*Tele-ethics is relevant to each of these areas.*
The Environment

(Why a systems approach is useful.)
Massive growth is projected

• The market is expected to reach USD 9.35 Billion by 2021 from USD 2.78 Billion in 2016, growing at a CAGR of 27.5%.

• 45% of hospitals use telehealth (department level)

• 89% of healthcare leaders expect telehealth to transform U.S. healthcare in the coming decade.

• 74% of surveyed patients would use telemedicine services.
Telepractice influencers in 2017

• Professional Associations: AMA, ASHA, AOTA, APTA ...
• Professional-Trade Associations: ATA, HIMSS
• State Professional Licensure Boards (& national bodies of state licensure boards)
• Federal Government: US Congress, CMS, FCC, FDA, OMB, and other regulatory agencies
• State governors and state legislative bodies
• K Street (Alliance for Connected Care):
  – Anthem, CVS Health, Walgreens, TelaDoc, Specialists on Call, Verizon, WellPoint, HealthSpot, Doctor on Demand, Welch Allyn, and MDLIVE, Care Innovations and Cardinal Health.
Ex-senator Thomas A. Daschle (D-S.D.), far left, attends a meeting of Alliance for Connected Care, a group seeking changes to rules controlling telehealth. “We unfortunately don’t have a regulatory environment . . . that accommodates the new technology,” Daschle says. Washington Post.

Three former senators discussed health care on Monday. The three, from left, Trent Lott, John B. Breaux and Tom Daschle, together are supporting more use of remote digital technology. Credit Stephen Crowley/The New York Times, May 20, 2014
More telepractice influencers...

- Big Business: Pharmacy chains, Walmart, Nike, multi-national publishing/media companies, auto manufacturers, etc.
- Health Plans/Insurers
- Hospital Systems
- EHR/Practice Management Companies
- Publishers of SLP assessment/therapy tools
- Telecommunications service carriers: cable, satellite
- SLP for-profits
- Consumers
Predictions

• The coming decade will see growth in the numbers and types of financially driven partnerships

• Some may not be immediately obvious
  – Telehealth Companies + Insurers
  – Industry + Legislatures (re: Schools)
  – Associations + Industry
Expect shifting employment patterns

• Independent contractors
  – Part-time? Full-time?
  – Benefits? Is seniority rewarded?
  – Support for multiple state licensure fees?

• Highly capitalized corporations
  – Both school-based AND healthcare
  – Influence state legislative bodies
  – Some market via buying consortiums
Predictions from American Well’s Roy Schoenberg, MD, MPH

• “Specialty care, occupational health (therapy, psychiatry) will take center stage....as more providers and patients recognize the benefits of making telehealth part of an integrated treatment plan.”

• “Provider-to provider telehealth will emerge as a key value driver for capitated health systems” (e.g., hospitals to SNIFS)

• “Telehealth will be reimbursed.”

• “Provider workflows and EMR integration will become essential to physician adoption ... (and) the use of telehealth for follow-up care.”
Technology related “game changers”

- Mobile technologies
- Robotics
- Smart rooms (emerging)
- Team based inter-professional tele
- Privacy and security incursions
- Earlier acculturation to technology
Nomenclature

(Why names matter)
Why is nomenclature important?

- Affects regulations, payment, even malpractice.
- "Telepractice is the application of telecommunications technology to the delivery of speech language pathology and audiology professional services at a distance by linking clinician to client/patient or clinician to clinician for assessment, intervention, and/or consultation."
  - ASHA Telepractice Portal: [http://www.asha.org/Practice-Portal/Professional-Issues/Telepractice/](http://www.asha.org/Practice-Portal/Professional-Issues/Telepractice/)
More tele-terms:

- Telemedicine (numerous tele-specialties), telehealth, e-health, tele-speech, tele-audiology, m-health, telerehabilitation, etc.
  - Which of these terms do payers tend to use?
- In-person (Out-dated term: face-to-face or f2f)
- Hybrid: Combination of telepractice and in-person
Tele-terms used clinically

**Synchronous**
- Real-time videoconferencing
- Phone (debated)

**Asynchronous (e.g., Store and Forward)**
- E-mail, text messages, fax, are variably accepted.

**Telepresence**
Emerging trend: *Reframing services to avoid securing another state license*

- Literacy (not language therapy)
- Communication improvement for transsexuals (not therapy, because it is not an ASHA recognized disorder)
- Vocal effectiveness (not voice therapy)
- AAC technical advice (not AAC diagnostics)
- Aphasia: communication groups (not tx)
- Consultations to professionals (no direct advice to patients)
- Technical advice for prosthetics evaluation (not OT service)
Potential downsides of reframing *

- Use of the CCC-SLP designation without state licensure, can result in loss of the primary state license
- Dilutes value of the CCC’s and profession
- ASHA COE: requires members to abide by state & federal laws
- Unfair: to colleagues who obtain additional state licensure
- Risky: Malpractice insurance coverage requires state licensure and practice within SoP
- Reputational vulnerabilities for the profession: Out-of-synch with medicine, nursing, etc.

* Personal opinion
Resources

(Intra- and inter-professional)
Training for Telepractice

- CE presentations
- ASHA Store Products
- Employers and VA System
- Intensive, interactive programs with follow-up mentorship
  - Some are accredited
- Universities and outplacements
  - Increasing
Telepractice is the application of telecommunications technology to the delivery of speech language pathology and audiology professional services at a distance by linking clinician to client/patient or clinician to clinician for assessment, intervention, and/or consultation.

Supervision, mentoring, and pre-service and continuing education are other activities that may be conducted through the use of technology. However, these activities are not included in ASHA’s definition of telepractice and are best referred to as tele-neurorehabilitation, tele-counseling and distance education (See...
### SIG 18

<table>
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<th>Thread Subject</th>
<th>Replies</th>
<th>Last Post</th>
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<td>2 hours ago by Lyn Covert</td>
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<td>Question For Gotomeeting Users</td>
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<td>2 days ago by Rina Goode</td>
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<td>Tensioness</td>
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<td>3 days ago by Aviit Ben-Aharon</td>
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<td>3 days ago by Terry Lee Clark</td>
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<td>6 days ago by Deborah Anderson</td>
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<td>6 days ago by Heather Jedrus</td>
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<td>looking into telepractice</td>
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<td>6 days ago by Rachel Stansberry</td>
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SIG 18 Perspectives on Telepractice

In This Issue
September 2014, Volume 4, Issue 2

Coordinator's Column
Lyn Timball Cawley

The Evaluation of Children with an Autism Spectrum Disorder: Adaptations to Accommodate a Telepractice Model of Clinical Care
Aimee A. Allan and Howard C. Shama

Parents' Perspectives on Tele-AAC: Support for Families with a New Speech Generating Device: Results from an Australian Pilot Study
Kate Anderson, Susan Eldridge, Roger J. Stoddart, and Clare Layfield

Language Intervention via Text-Based Tele-AAC: A Case Study Comparing On-line and Telepractice Services
Narissa Hall, Michelle Betteny, Hillary Jackson, and Mary Andenasopoulos

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SIG 2 Perspectives on Neuropsychology and Neurogenic Speech and Language Disorders
SIG 3 Perspectives on Voice and Voice Disorders
SIG 4 Perspectives on Fluency and Fluency Disorders
SIG 5 Perspectives on Speech Science and Orofacial Disorders
SIG 6 Perspectives on Hearing and Hearing Disorders: Research and Diagnostics
SIG 7 Perspectives on Aural Rehabilitation and Its Instrumentation
SIG 8 Perspectives on Public Health Issues Related to Hearing and Balance
SIG 9 Perspectives on Hearing and Hearing Disorders in Childhood
SIG 10 Perspectives on Issues in Adult Education

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See available CEU opportunities

Most Read
Telepractice in Speech-Language Pathology: The Evidence, the Challenges, and the Future
Deborah Theodoros

Providing School-Based Speech-Language Therapy Services by Telepractice: A Brief Tutorial
Sue Morgan-Johnson

The Evaluation of Children with an Autism Spectrum Disorder: Adaptations to Accommodate a Telepractice Model of Clinical Care
Aimee A. Allan and Howard C. Shama

Featured Topics
International & Global Practice Management Professional Issues & Training
American Telemedicine Association
Exemplars: ATA Accredited Training

UC Davis Health System
Center for Health and Technology Telemedicine Education Program
Sacramento, CA

The Center for Health and Technology (CHT) has developed a curriculum that embraces a multidisciplinary approach while incorporating discussion, lecture and hands-on training. The CHT's uniquely designed facility offers a customized classroom and fully equipped telemedicine training laboratories. More than 1,750 people from over 800 organizations have attended our training courses — traveling from California, out of state and other countries — since 1999.

CHT offers both one-day executive overviews, as well as two-day telemedicine courses on a regular basis.

Waldo County General Hospital
Center for Speech Pathology Telepractice Training Course
Belfast, ME

CSPI’s Speech Telepractice Training Program is a two-day training, combining classroom instruction with hands-on experiences. Ten telepractice labs with thirty-seven competencies are taught, practiced, and assessed.

At the completion of training, each participant will be fully skilled and equipped to begin speech telepractice. A combination of direct instruction and hands-on practice in individualized telepractice training labs will be provided. The training labs provide competency based skills training in every aspect speech therapy telepractice. Each participant will also have a "real time" online coaching session with one of our instructors following training.
ATA Guidelines: Telerehabilitation

A Blueprint for Telerehabilitation Guidelines
Published October 2010

The key administrative, clinical, technical, and ethical principles that should be considered in the course of providing telerehabilitation services. They are based primarily on the American Telemedicine Association’s Core Standards for Telemedicine Operations, and describe additional considerations that are present across applications within telerehabilitation and its related fields.

Details | Download
Completed ATA Practice Guidelines

The following Guidelines have been released by ATA. All documents are available to download, at no cost.

Practice Guidelines for Live, On Demand Primary and Urgent Care
Published December 2014
These guidelines cover the provision of direct-to-patient, primary and urgent care services delivered by licensed healthcare providers using online, real-time videoconferencing and audio technologies. Technologies include mobile devices such as smart phones, laptops, or tablets where regulatory conditions permit.

Details | Download

Clinical Guidelines for Telepathology
Published August 2014
This document is an update to the original ATA telepathology guideline and provides new and updated guidance on specific applications, practice, benefits, limitations, and regulatory issues that may arise in practice of telepathology. This guideline covers clinical applications of telepathology to include primary diagnosis, intraoperative consultations, secondary consultations, and quality assurance that may result in amended cases.

Details | Download

Guidelines for TeleICU Operations
Published May 2014
The TeleICU Guidelines were developed to assist practitioners in providing assessment, medical intervention, continuous monitoring and/or consultation to the critical care population using telecommunication technologies.

Details | Download

Core Operational Guidelines for Telehealth Services Involving Provider-Patient Interactions
Published May 2014
These guidelines provide an update to the previously published Core Standards for Telemedicine Operations (Nov. 2007) and cover fundamental requirements to be followed when providing healthcare services using telecommunications technologies, and other electronic communications between patient practitioners and other healthcare providers.

Details | Download

A Lexicon of Assessment and Outcome Measures for Telemental Health
Published Nov. 2013
This lexicon is organized and organized by the Joint Commission and the National Quality Forum.
### Telemedicine in Ohio

<table>
<thead>
<tr>
<th>PARITY:</th>
<th>GAPS:</th>
</tr>
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<tbody>
<tr>
<td>Private Insurance</td>
<td>Private Insurance</td>
</tr>
<tr>
<td>Medicaid</td>
<td>No telemedicine parity law. SB 32 introduced in 2015 to establish telehealth parity under private insurance and Medicaid.</td>
</tr>
<tr>
<td>State Employee Health Plan</td>
<td>Medicaid</td>
</tr>
<tr>
<td>Medicaid</td>
<td>New Medicaid regulations expand telemedicine coverage to include consultations by physicians and a limited selection of practitioners. The new rules also require that the distant and originating site be at least 5 miles away.</td>
</tr>
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**MEDICAID SERVICE COVERAGE & CONDITIONS OF PAYMENT:**

- Patient Setting: C
- Eligible Technologies: F
- Distance or Geography Restrictions: B
- Eligible Providers: C
- Physician-provided Services: B
- Mental/Behavioral Health Services: B
- Rehabilitation: B
- Home Health: F
- Informed Consent: F
- Telesession: A

**INNOVATIVE PAYMENT OR SERVICE DELIVERY MODELS:**

- Statewide Network: 
- Medicaid Managed Care: ✔
- Medicare-Medicaid Dual Eligibles: ☐
- Health Home: ✔
- HCBS Waiver: ✔
- Corrections: ✔
- Other: ☐

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American Telemedicine Association 2020 | Page: 64
Telepractice in Speech-Language Pathology

K Todd Houston

Details: 392 pages, Illustrated (B/W), Softcover, 6 x 9"

Release date: 10/25/2013

$79.95
Telepractice Journals – Open Source

International Journal of Telerehabilitation

Vol. 6, No. 2, Fall 2014

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Instructions for Authors

Editors’ Note

Research

Combining Teletherapy and Online Language Exercises in the Treatment of Chronic Aphasia: An Outcomes Study

Richard G. Steele, Allison Baid, Denise McCall, Lisa Haynes

Journal of the International Society for Telemedicine and eHealth

Vol 2, No 1 (2014) JISTeH

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Editorial

Invited Commentary

Original Research

Keesmaat MM, Hsu YS, Corbin J, Tolley E, Schatschneider S. Mental Health 
Outcomes of an eHealth Platform for Adolescents With Autism

Keesmaat MM, Hsu YS, Corbin J, Tolley E, Schatschneider S. Mental Health 
Outcomes of an eHealth Platform for Adolescents With Autism

Keesmaat MM, Hsu YS, Corbin J, Tolley E, Schatschneider S. Mental Health 
Outcomes of an eHealth Platform for Adolescents With Autism

Maurice Mars, MD
Telehealth Journals By Subscription
Aspirational Reference: Accreditation Program for Online Consultations

ATA’s Accreditation Program for Online Patient Consultations

Accrediting Safe Online Healthcare Services

ATA’s Accreditation Program for Online Patient Consultations recognizes organizations providing online, real-time patient health services that comply with operational, clinical and consumer-related standards. The program promotes patient safety, transparency of operations and adherence to all relevant laws and regulations. Approved organizations proudly display the ATA Seal of Accreditation, a benchmark to assure patients, payers and consumers that the organization’s online patient consultative services meet the standards and guidance established for the program.

The program has been developed over the past two years in consultation with providers, medical societies, consumer groups, payers and regulators. The program is designed to guide organizations toward quality, safety and excellence. Accreditation provides validation and increased confidence to private payers, employers, government regulators and consumers. Organizations earning the ATA Seal of Accreditation will be publicly acknowledged and widely promoted.
PARITY AND EQUIVALENCE

Are telepractice services and reimbursement equivalent to in-person delivery models?
Evidence for telepractice is growing.

• Comparable or better outcomes:
  – Equivalence and efficacy
  – Cost savings
  – Travel time
  – Consumer and provider satisfaction

• Reaches the under-served; increased accessibility to services.

• More research is needed; not all clients are candidates.
Potential Cost Savings for School Districts *not an endorsement*

- Cyber Schools: no buses, buildings maintenance staff, insurance, energy costs, security, etc.
- Traditional Schools: FTE workforce
Reimbursement sources (outside of the VA/DOD) are not yet robust.

- Private Health Insurance
- Medicare
- Medicaid
- Self-pay
- Grants
- University clinic subsidized

Source: American Telemedicine Association
Is telepractice more expensive than in-person treatment?

- Charge similar fees; if higher, explain why to clients, upfront.

- US anti-trust law [FCC and DOJ]
  - Competitors, should not discuss/agree upon fees.
  - Do not conspire to reduce competition.
  - Why not? Competition benefits consumers.
What technologies are tele-practitioners using?

Mobile Telepractice Model

• Smart Phones
• Tablets
TECHNOLOGIES

For better or for worse...
Desktop Telepractice Model

- Personal computers, web-cams, microphone and software*
  - (e.g., Adobe Connect, Apple FaceTime, Blackboard Collaborate, Cisco Jabber, ConnectUs Communications, Elluminate, Google Talk, GoToMeeting, ooVoo, Skype, WebEx, Yahoo Messenger, Vidyo, Zoom).

*Disclaimer: not an endorsement, nor a comprehensive list.
Portable (Dedicated) Telepractice Model

- High end, dedicated systems (e.g., Cisco, Polycom)

Immersive Virtual Telepractice Model

- Virtual meeting environment
New/upcoming technologies

- Games and Simulation Learning Experiences
- Gesture Based Computing
- Socially Interactive Robots
Privacy

- **Privacy of Information**: HIPAA, and other regulations
- **Privacy or Person/Place**: The privacy of others in the home, clinic, hospital or classroom is maintained; user exercises control of recording/monitoring systems. Greater electronic usage, provides increased opportunities for privacy violations (e.g., computers, servers, Wi-Fi, e-mail, fax, recorded phone messages, e-mail, websites, etc.).
- *How about the clinician’s privacy?*
- *Therapy sessions with minors?*
Potential VoIP Privacy Vulnerabilities*

- **Personal Information (PI):** Who is listening? Will the company share it?
- **Retention:** How long is PI retained?
- **Voicemail/Video:** Archived? Transferred to 3rd party? Other countries?
- **Encryption:** Sufficient? Wiretap vulnerability? (Can an intruder act like a legitimate user?) [ATA: S&G for Primary/Urgicare: FIPS 140-2: Federal Information Processing Standard for encryption]
- **Anti-spyware and anti-virus protection?**
- **Audit system activity?** What is the breach notification protocol?
- **Personnel trained in confidentiality?**
- **Equipment:** Stand alone workstations? Servers protected at rest?

*See Appendix B, Watzlaf et. al.; ATA Accreditation document/Standards & Guidelines. Note: Privacy policies are not always actualized.
Expected connectivity*

- “Connectivity **shall** have adequate bandwidth, resolution, and speed for clinical consultations. Bandwidth **shall** be set at a minimum bandwidth of 384 Kbps in both the downlink and uplink directions. Resolution **shall** be set at a minimum of 640X360 and speed of 30 frames per second.”

- Professional **shall** have a back-up plan in place if connectivity is interrupted. (e.g., telephone contact)

* ATA Practice Guidelines for Live, On Demand Primary and Urgent Care*
TELE-ETHICS
(and, best practices)
Provider Competence

• “Practitioners should have knowledge and application of telepractice research and competent use of telepractice techniques and technologies.” [evidence based practice; establishing and maintaining eye contact and engagement; creating a distraction free immersive environment; use of equipment; safety; privacy; generalization and practice in the online environment; etc.]

• Should there be minimal standards of training?
Equivalence of services

- Telepractice services should be equivalent or superior to in-person services.
  - What can/should be different about telepractice? [e.g., visual backgrounds; equipment; bandwidth availability; assessment instruments; visualization; use of therapy materials; ability to establish relationships in schools, etc.]
  - What are acceptable modalities?
  - When are hybrid approaches preferable?
Safety

• Sterilization of telepractice equipment (e.g., in a community based health center, etc.)

• When does a session (and your responsibility for safety) end?

• Does the SLP possess information on local emergency numbers?
  – Does the SLP know where the client actually is – each session?

• Should the client know where a home-based clinician lives?
Informed consent

• The client understands and agrees to the options and limitations of telepractice, the limits of privacy and security, and qualifications of clinicians and assistants.
Non-discrimination/Patient selection

- Telepractice can reduce inequities in service.

- Telepractice does not enable a clinician’s refusal to engage in in-person therapy on the basis of “race or ethnicity, gender, gender identity/gender expression, age, religion, national origin, sexual orientation, or disability.”

- How about “patient selection’ for telepractice: rule-outs due to disability/behavior?
  - Should a private practice post required Technical Standards?
Obligation to Refer

• Telepractice use must be appropriate to the client and situation. The client is trained to properly participate in telepractice.

• What if a client appears to be an appropriate candidate for telepractice, but does not make the expected progress using this therapy mode?
Ethical representation and marketing of telepractice services

- How can a client be certain of a clinician’s identity?
  - How can a clinician be certain of a client’s identity?
- Do clients have access to a complaint mechanism?
- Are fees and charges known to the client before a session?
- Is the transmission of funds secure?
• Is knowledge of ownership of the clinical practice transparent?
• Is there a mechanism in place to inform clients of breached data?
• Should an insurer be informed that telepractice is occurring?
• Does the clinician’s malpractice insurance cover telepractice?
Tele-supervision

• Telepractice support personnel, students, and caretaker assistants should be properly trained. Client is informed of role of students and support personnel.

• *What training in telepractice is required of “e-helpers” or “care-taker helpers?”*

• *Do the same requirements hold for clients located outside of the US?*

• *What is the obligation of university training programs to offer instruction in telepractice, and to avail students of a variety of telepractice experiences?*

• *Does the state (or both states) allow tele-supervision?*
Telepractice business practices – difficult issues

• Vendor relationships and purchasing
  – Includes: recommending equipment to clients

• Is it ethical to offer telepractice services to a school or health system (i.e., seeking potential contracts) at a lower rate than current in-person services?
Conclusions

• Telemedicine, telehealth, and telepractice are poised for rapid growth.

• The environment (and influencers) are complicated and dynamic.

• Policy, ethics, reimbursement, and training lag behind technology development.

• Consumer awareness of telehealth is nascent. Consumer advocacy is similarly weak.

Thank you!!
Linking Kids to Speech-language pathologists

DISCLOSURE

Financial
• Full-time employee at University of Kentucky
• Grant funding from LinKS

Non-Financial
ASHA: SIG 18- Telepractice
In Kentucky, ESE services are delivered to:
- 13.5% of K-12 students
- 47% of children attending KY preschool programs
Schools in rural communities are particularly vulnerable to shortages in speech-language pathologists (ASHA Schools Survey Report, 1995 – 2014)

- 62.3% of children in KY attend rural or town schools (Ballotpedia, 2015)
- 25% of KY’s children live in poverty (Talk Poverty, 2015)
Telepractice is a solution.

Lack of CSD pre-service training nationally

- 1 CSD program offers an elective course
- 1% - 25% of students in programs using telepractice gain experience

(Grogan-Johnson, Meehan, McCormick, & Miller, 2015)
Linking Kids to Speech-language pathologists

PROGRAM OVERVIEW

- Train 40 CSD students over 5 years
- Complete two 3-credit didactic courses
- Gain 30 hours of experience via 2 tele-experiences
- Complete a 14-week externship in a rural school
- 2 years of mentorship upon graduation
Curriculum

Competencies

• Domain 1: CSD Specific
• Domain 2: Ethical, Legal, & Reimbursement
• Domain 3: Technology
• Domain 4: Practice
• Domain 5: Sustainability

<table>
<thead>
<tr>
<th>Knowledge/Skill</th>
<th>CSD 788(1)</th>
<th>CSD 788(2)</th>
<th>Telepractice Experience 1</th>
<th>Telepractice Experience 2</th>
<th>Method of Assessment</th>
<th>Date Mastered</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.17 Adjustment of image video quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Simulation; observation</td>
<td></td>
</tr>
<tr>
<td>3.18 Management of desktop to provide optimum video</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Simulation; observation</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.19 Demonstrate ability to password protect the meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Simulation; observation</td>
<td></td>
</tr>
<tr>
<td>3.20 Demonstrate ability to manage accounts, personal settings, and privacy controls in online telepractice application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Simulation; observation</td>
<td></td>
</tr>
</tbody>
</table>

ASHA, 2015; Brienza & McCue, 2013; Brennan et al., 2010
Course Sequence

- **Year 1**
  - CSD specific course work

- **Summer Year 2**
  - Introduction to Telepractice (hybrid)
  - Telepractice Experience 1

- **Fall Year 2**
  - Telepractice with School-Age Populations (on-line)

- **Spring Year 2**
  - School Rotation (school and on-line)
  - Telepractice Experience 2
By May 5, 2017

• Graduated 6 master-level SLPs with specialized training in telepractice
• Have logged a minimum of 180 hours of tele-experience
Tele-experiences will have included children ages 3 - grade 5

- Articulation disorders
- Language impairments
- Autism spectrum disorder
- Users of AAC
- Co-treatment with OT
Outcomes

Telepractice used with children

• In one-to-one setting and small-group setting
• In home and school setting
• Located in six different counties in KY
Outcomes

Created

“Pocket Guide”

<table>
<thead>
<tr>
<th>Abbreviated Article Title, Authors &amp; Year or Clinician</th>
<th>Similarities and Diff in TP and in-person Ped speech assessment results, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>8 children (3-6-8.10 years old) w/ speech sound disorders. 6 Speech language pathologist (one in person, one telepractice)</td>
</tr>
<tr>
<td>Test/Subtest</td>
<td>The Clinical Assessment of Articulation and Phonology (CAAP): a speech sound assessment which assessed: single word, phonological patterns, conversational sample (elicited via pictures) to determine pervasiveness of speech errors and phonological patterns in conversation by telepractice SLP. In-person SLP took notes. Telepractice SLP also conducted informal stimuliability test-in-person SLP took notes, did not administer.</td>
</tr>
<tr>
<td>Hardware/software used</td>
<td>WebEx Online Meeting Software “high definition built in camera and microphone”</td>
</tr>
<tr>
<td>Administer per published protocol</td>
<td>X- may be helpful to record assessment so you can review. Inter-rater reliability between in-person SLP and tele-SLP was acceptable for identifying sound and sound types, accurate determination of phonological patterns. However, although similar results in SLP ability to identify error, there was often a disagreement regarding the sound that was substituted for the error production - differences frequently attributed to manner</td>
</tr>
<tr>
<td>Administer with following modifications</td>
<td></td>
</tr>
<tr>
<td>Do not administer</td>
<td></td>
</tr>
<tr>
<td>Additional Comments</td>
<td>“used phonological theory” to determine what was similar and different about sound and sound types identified, phonological patterns identified and descriptions of pervasiveness made by each SLP. Most comments are made in above questions.</td>
</tr>
</tbody>
</table>
Outcomes

Anecdotal Feedback

• Requires higher level of preparation than in-person TX
• Laser-focus as to the purpose of therapy activities
• Reinforced and expanded on CSD curriculum – “luckier than peers”
• Using technology wasn’t so scary
• Training is crucial

• High-rate of interruptions during therapy
• Cool!
Lessons Learned

- Requires unique up front planning

- Engagement
  - Scholar level
  - Supervisor level
  - Community level

- Access to updated technology
Conclusion

• LinKS is positioned to address the shortage of trained personnel in the use of telepractice.

• LinKS can serve as a model for other training programs in the rehabilitation sciences.

• Engagement with scholars and the community is critical to success
Joneen Lowman, PhD, CCC-SLP

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College of Health Sciences