

Delivering Speech Pathology Services via Telepractice: Evidence & Considerations for Implementing Services

Lyn R. Covert, Ph.D., CCC-SLP
Research Speech-Language Pathologist
Department of Veterans Affairs Medical Center
Lexington, KY
Adjunct Instructor
University of Kentucky
Lexington, KY

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Honorarium for this presentation

Introduction

- Traditional systems of delivery of speech pathology services may be difficult to access for many individuals
- Alternative ways to provide services may include use of telecommunication technology
- Enhance and expand delivery of speech pathology services by increasing available options
- Enabling persons with disabilities to have equitable access to services

What is Telepractice?

What's in a Name?

- Telemedicine
- Telehealth
- Telespeech
- Telerehabilitation
- Teleaudiology
- Tele.....whatever

What is Telepractice?

- Telepractice refers to the use of telecommunication technology to provide speech pathology services from a remote site.
- Includes “store and forward” and “real time”
- Includes several platforms
- Includes several settings
- Includes many different types of clients
- <https://www.youtube.com/watch?v=R4s20-faVl8>

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Who is Using Telepractice? 600 Responses to a survey

- Audiologists
 - 6 Months or younger- 23%
 - 7 Months to 2 years- 19%
 - 3-5 years 19%
 - 6-11 years 23%
 - 12-17 years 19%
 - 18-64 years 81%
 - 65-74 years 69%
 - 75 years or older 69%

- Speech-Language Pathologists
 - 6 months or younger 4%
 - 7 months to 2 years 8%
 - 3-5 years 31%
 - 6-11 years 68%
 - 12-17 years 63%
 - 18-64 years 41%
 - 65-74 years 22%
 - 75 years or older 15%

Reimbursement for Services

About a third of audiologists and 50% of SLPs indicated that they or their employers receive reimbursement for telepractice services.

Self pay and education department or school districts were the most common sources of reimbursement.

ASHA Practice Portal- Telepractice

- Telepractice: the application of telecommunications technology to the delivery of speech-language and audiology professional services at a distance by linking clinician to client/patient or clinician to clinician for assessment, intervention, and/or consultation.
- Telepractice: an appropriate model of service delivery for the professions of audiology and speech-language pathology

The quality of services delivered via telepractice must be consistent with the quality of services delivered in-person

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Roles and Responsibilities

- Abide by ASHA Code of Ethics "Individuals shall engage in only those aspects of the profession that are within their competence, considering their level of education, training, and experience." (ASHA, 2016)
- understanding and applying appropriate models of technology used to deliver services
- understanding the appropriate specifications and operations of technology used in delivery of services
- calibrating and maintaining clinical instruments and telehealth equipment
- selecting clients who are appropriate for assessment and interventions via telepractice
- selecting and using assessments and interventions that are appropriate to the technology being used
- being sensitive to cultural and linguistic variables that affect the identification, assessment, treatment, and management of communication disorders via telepractice

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- training and using support personnel appropriately
- being familiar with the available tools and methods and applying them to evaluate the effectiveness of services provided and to measure outcomes
- maintaining appropriate documentation, including informed consent for use of telepractice and documentation of the telepractice encounter
- being knowledgeable and compliant with existing rules and regulations regarding telepractice including security and privacy protections, reimbursement for services and licensure, liability and malpractice concerns
- collaborating with physicians for timely referral and follow up services (Hofstetter et al., 2010)

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ASHA Support

Ellen Cohn

- 2016 ASHA Code of Ethics states "Individuals may practice by telecommunication where not prohibited by law.
- The entire ASHA Code of Ethics applies to telepractice
- Practitioners should have knowledge and application of telepractice research and competent use of techniques and technologies

ASHA Code of Ethics

- Competence/Duty of Care
- Equivalence of Services
- Privacy of Information
- Privacy of Person/Place
- Informed Consent
- Equity of Access/Non-discriminatory
- Inter-state license

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- Knowledge and competent use of telepractice technology
- Appropriate tele-supervision
- Appropriate patient selection
- Ethical representation and marketing of telepractice services
- Tele-research
- Malpractice insurance
- Vendor relationships and conflict of interest

Licensure

- Currently clinicians must be licensed in their own state and in the state where the patient/client is located
- Although growing in number, many states do not have telepractice guidelines in their state laws
- Department of Defense and Department of Veterans Affairs are not bound by the same licensing requirements
- ASHA is working with a coalition of other provider organizations to address the issue of licensure portability for use in telepractice
- <http://www.asha.org/Advocacy/state/State-Telepractice-Requirements/>

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Why doesn't ASHA do Something?

- States have the charge of protecting consumers
- ASHA cannot overrule states on licensure laws
- The American Telemedicine Association (ATA) is working on licensure portability
 - Mutual Recognition Compacts
 - Expedited License
 - Limited License
 - National License
 - Federal Pre-emption

Ethical Quandries



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Reimbursement

- Be prepared to educate payers about how telepractice services are delivered and the benefits of such service delivery
- Private health insurance- Many states mandate coverage of telepractice. They are covered the same as in-person visits. You must first check with insurers to determine if telepractice is covered
- Medicare- reimburses some telemedicine providers such as physicians, but audiologists and speech-language pathologists are not included. ASHA and other organizations are actively lobbying for legislation to include rehab practitioners
- Medicaid- Each state administers its own programs, establishes eligibility standards, chooses type, amount, duration, and scope of services, and sets the rate of payment
- Self-pay- Services not covered by private insurance or public payors may be paid out of pocket by patient/client

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Please email reimbursement@asha.org with questions.

Client Selection

- Telepractice may not be appropriate for all clients in all circumstances
- Assess candidacy prior to initiating telepractice
- Consider the following factors:
 - Physical and sensory characteristic
 - Cognitive, behavioral,
 - or motivational characteristics
 - Communication characteristics
 - Client's/patient's
 - support resources
- Make clients aware of risks

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Privacy & Security

(Cohn & Watzlaf, 2011)

- Our responsibility to protect client privacy
- Prevention of improper disclosures
- ✓ Discussions of clients and clinical records
- The physical environment such as leaving a door ajar or an unexpected person entering the room- this has to be controlled on each side of a telepractice session
- Clinicians treating in their own homes must be aware of possible family members violating privacy of clients

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- HIPAA compliance (Health Insurance Portability and Accountability Act)
- HITECH Act (Health Information Technology for Economic and Clinical Health)
- Consistent protection is not always guaranteed
- Many companies are based in countries outside the United States and data is not protected under federal privacy laws
- Informed consent
- HIPAA Compliance Checklist (Watzlaf, Moeini, & Firouzan, 2010)(JT 2(2), 3-14)

Privacy and Internet-Based Telepractice

- VoIP Videoconferencing Technologies and Safety Concerns
- Protection of Client Privacy
- Telepractice and Privacy
- Legal Protections to Privacy
- Risk Assessment

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- Enact safeguards
 - ✓ Strong passwords
 - ✓ Appropriate access
 - ✓ Dedicated use
 - ✓ Virus protection
 - ✓ Audit controls
 - ✓ Encryption protocols

Planning and Start Up In a Clinical Setting

- Identify and analyze client care issues and develop realistic goals
- Complete a needs assessment
- Include costs
- Select a team of individuals to guide the process

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Team Members

- Clinical lead
- Support person from executive leadership
- IT representative
- Others depending
 - ▣ on the setting

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Barriers

- Monetary barriers
- Licensure
- Credentialing and privileging
- Training of clinicians
- Scheduling difficulties
- Technology problems with equipment
- Connectivity

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Technology

- Technology is ever-changing
- Technology must be flexible beyond the initial funding stage
- Decisions on specific equipment, types of services, client needs
- Decisions on peripheral accessories
- Purchase from a single vendor or separately

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Choosing Platforms

1. White board
2. Screen sharing
3. Shared control
4. Instant messaging
5. Enlargeable video screens
6. Advanced scheduling
7. Recording capability
8. Ease of use

Telepractice and Adults with Communication Disorders

- Aphasia
- Motor Speech
- Voice
- Dysphagia
- Fluency
- Cognitive Communication Disorders
- TBI
- Head and Neck Cancer

Potential Benefits

- Able to visualize facial expression and gestures to enhance communication and build therapeutic rapport
- ▣ • Useful for observation of home environ for distractions and to optimize or modify the environment if needed
- ▣ • May increase opportunities to provide training for family and caregivers unable to come to sessions, physically
- ▣ • It might be "green" as some consider carbon footprint

- The technology may already be in place if a patient is seen as part of interdisciplinary team, or we may already be using telepractice for other treatment purposes
- ▣ • May be conducted from off-site location to patient's home to free up treatment space at facility and providers may be more inclined to offer more flexible hours for clinics
- ▣ • Evidence that telepractice may be used to train metacognitive strategies and behavior patterns

Adult Disorders

Clare Burns

Elizabeth Ward &

Choose Place of Service Delivery

- Client homes
- Within a clinic
- At distant or mobile sites

Environment

- Consider both client's and clinician's space
- Maximize client comfort and ease of accessing services
- Private and secure
- Quiet room
- Accessible for clients in wheelchairs
- Room to accommodate equipment and additional staff
- Keep clients in mind when choosing furniture
- Tables and chairs at comfortable levels for adults and children
- Include a telephone, fax machine, computer, and a light or sign outside the room to indicate room is in use

Lighting and Decor

- Lighting on face of client and clinician should minimize shadows
- Cover exterior windows
- Mirrors, artwork,
 - ▣ plants, fans,
 - ▣ and wallpaper should
 - ▣ be eliminated
- Best wall color is neutral
 - ▣ non-white,
 - ▣ such as light grey,
 - ▣ blue, or beige

Audio Quality

- Eliminate room reverberation and echo
- Consult an IT or audio-visual person on optimal placement of microphones

Camera Placement

- Crucial for best video image
- Display head and shoulders of client and clinician
- Capability to zoom in and out so others in the room can be identified or to zoom in on therapy materials

The Client Encounter

- Identify the person charged with greeting, checking in the client, and escorting him or her to the room
- Use a light or "Do not Disturb" sign outside of the treatment room
- A split screen view will allow the clinician to see what the client sees
- Everyone in the room must be identified

Post Session

- Assess satisfaction of both client and clinician
- Identify outcome measures to determine progress, compare to in-person outcomes, and for quality improvement
- If technical problems arose during the session, trouble shoot with technical support personnel

Client Safety

- Safety issues
 - Location of client-physical address
 - Emergency contacts
 - Local emergency numbers

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Planning and Start Up for School-Based Telepractice

- Review rules and regulations pertinent to your state
- Contact your state licensure board to learn about requirements in your state
- Observe a telepractice program in progress
- Complete a needs assessment

Sue Grogan-Johnson & Robin Alvares

- Evaluate the potential for telepractice as a service delivery model
- Identify a champion
- Identify students
- Identify physical resources
- Identify personnel

- Individual vs. Groups
- Push-In
- Collaboration
- Co-teaching

- Identification of student needs
- Identification of Physical Resources
 - Technology
 - Fiscal
 - Furniture
- Identification of Personnel
 - Special Education Coordinator
 - IT Staff
 - In the SIG 18 Library there is a 33 page document of web-based resources

Telepresenter or eHelper

- Appropriately trained individuals may be present at the remote site to assist the client
- The telepresenter may be a teacher's aide, nursing assistant, audiology assistant, speech-language pathology assistant, interpreter, family member, or caregiver
- Dependent on type of service provided
- Be aware of applicable state policies and regulations on using telepresenters

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Telepresenter in a School-based Setting Robin Alvares

- Could be the face of your telepractice program
- Escort students to and from sessions
- Establish and trouble-shoot the telepractice connection
- Set up materials
- Manage materials during the session
- Position student as directed by SLP

Telepresenter in a School-based Setting Robin Alvares

- Remain with student throughout the session
- Assist with behavior management
- Communicate with on-site staff or teachers
- May serve as an interpreter
- Schedule meetings
- Manage paperwork
- Attendance and billing record keeping

Interactive websites that offer engaging graphics and manipulatives

www.abcteach.com
<http://www.education.com/>
<http://www.familylearning.o...>
www.americangirl.com
www.abc.net.au/children/ban...
www.berenstainbears.com
www.disney.go.com/index

International Telepractice

- ASHA-certified audiologists and speech-language pathologists who deliver telepractice services to individuals in other countries are bound by the ASHA Code of Ethics and other official ASHA policy documents that guide ethical and appropriate practice.
- Confirm requirements, if they exist, in the specific country
- Consult additional resources on providing services with cultural and linguistic sensitivity/differences
- Be aware of time differences

eSupervision and Mentoring

- Barriers associated with access to supervisors and mentors
- Telepractice can provide access to high-quality supervisors and mentors
- Can occur synchronously, asynchronously, or a hybrid
-

Apps

- Therapy apps
 - Voice o Meter
 - SPL Meter
 - Pitch pipe
 - Speech & language
- Informative apps
 - Concussion Coach

- ▣ Learn
- ▣ concussions, symptoms, PTSD
- ▣ Self Assessment
- ▣ evaluate own symptoms
- ▣ Manage this Moment
- ▣ select coping tools
- ▣ Build Resilience
- ▣ set goals
- ▣ wellness journal
- ▣ Resources and Support
- ▣ connects with public and private resources

Efficacy/Evidence

- Adults
- Pediatrics
- Fluency
- Articulation and language
- Family-Centered Early Intervention
- Voice
- Acquired brain injury
- Dysarthria
- Dysphagia
- Hearing impairment

The Evidence

- Mashima & Doan, 2008
- **Neurogenic Communication Disorders**
 1. Vaughn, 1976- Tel-Communicology, VA in Birmingham
 2. Duffy, Werven & Aronson, 1987- consultations for dysarthria, apraxia and cognitive communication disorders, Mayo Clinic,
 3. Wertz, et al., 1992- compared in-person to "remote conditions" in assessment of aphasia, apraxia, dysarthria and dementia 93-94% agreement, VA
 4. Brennan, et al., 2004, NRH
 5. Brennan, et al., 2002, NRH
 6. Georgeadis, et al., 2003, NRH
 7. Baron, et al., 2005, NRH
 8. Hill, et al., 2006, NRH

Fluency

1. Lewis, 2006, early stuttering intervention, Lidcombe
2. Wilson, et al., 2004, 5 case studies of early intervention, Lidcombe
3. O'Brian, et al., 2008, Camperdown Program for adults
4. Sicotte, et al., 2003, feasibility of evaluation of children and adults
5. Kully, 2000, treatment goals were met for adults
6. Kully, 2002, same as above

Voice

1. Theodoros, et al., 2006, LSVT online treatment was feasible and effective
2. Carpenedo, 2006, LSVT
3. Mashima, et al., 2003, comparable outcomes for voice therapy to adults
4. Mashima, et al., 2005, same as above
5. Rangarathnam, et al., 2015, utilized telepractice for muscle tension dysphonia- comparable to in-person delivery

Dysphagia

1. Burns, Ward, Hill., et al., 2016 conducted real time videofluoroscopy
2. Malandraki, Roth, & Sheppard, 2014, case study using telepractice for pediatric dysphagia

Childhood Speech and Language

1. Fissel, Mitchell, Alvares, 2015, Model for emergent literacy
2. Allen & Shane, 2015, Evaluation of children with autism spectrum disorder
3. Hall, Boisvert, Jellison, Andrianopoulos, 2014, case study comparing on-site and telepractice services to provide intervention via AAC
4. Hughes, Goehring, Miller & Robinson, 2016, cochlear implant mapping via telepractice

A Systematic Review Conducted by ASHA, May 2015

- ▣ Assessment and Treatment of Cognition and Communication Skills in Adults with Acquired Brain Injury via Telepractice, AJSLP
 - 10 group studies accepted
 - Limited findings
 - Lack of heterogeneity of assessments and interventions
 - Future research needed

Business of Telepractice

- Policies, procedures, and standards of practice
- Memorandum of Understanding with sister facilities
- Financial goals
- Quality indicators
- Marketing plan
- Contingency for technical difficulties

Lessons Learned

- Planning ahead and anticipation of all possible scenarios cannot be emphasized enough
- Telepractice should never be undertaken alone- use the experts
- Cultivate a good relationship with your technical person
- Know what your equipment is capable of doing and become an expert on how to use it

- Have a thorough understanding of your client's abilities and level of acceptance in using telepractice
- Accept that there will always be those individuals for whom telepractice is not well-suited.
- Always have a back-up plan

The Future of Telepractice

- Mobile technology (Smartphones, tablets)
- Medicare coverage of services
- Licensure
- Remote monitoring
- Fluency
- Dysphagia
- Social Networks
- Gamification
- Cloud Computing
- Develop online tests and therapy materials

▣

Where can I get More Information?

- ASHA Practice Portal for Telepractice

<https://www.youtube.com/watch?v=ZH92knkgvY>

- SIG 18 Community
- SIG 18 Library
- SIG 18 Perspectives
- ATA