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Connecting to Communicate: Designing Telepractice Services

K. Todd Houston, PhD, CCC-SLP, LSLS Cert AVT

Moderated by:
Amy Hansen, MA, CCC-SLP, Managing Editor, SpeechPathology.com

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Connecting to Communicate:
Designing Telepractice Services

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Disclaimers

Dr. Houston is currently the author or co-author/editor of three books published by Plural Publishing:

*Telepractice In Speech-Language Pathology* (2014)

*Assessing Listening and Spoken Language In Children with Hearing Loss* (2015) – with co-author/editor Tamala S. Bradham, PhD, CCC-A

*Telepractice In Audiology* (2016) – with co-author/editor Emma Rushbrooke, MA, AuD

Dr. Houston does not receive any monetary compensation from any of the manufacturers/companies of the technology discussed during this presentation.

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Learning Objectives

At the conclusion of this session, participants will be able to:

- Identify the key practice elements that are required prior to launching telepractice services.
- List a range of technologies and other peripherals that can be employed during telepractice.
- Describe how to formulate a preliminary plan for establishing telepractice services.
Defining Telepractice

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.

The use of telepractice does not remove any existing responsibilities in delivering services, including adherence to the Code of Ethics, Scope of Practice in Audiology, and Scope of Practice in Speech-Language Pathology, state and federal laws (e.g., licensure, HIPAA), and ASHA policy.

“If you fail to plan, you’re planning to fail!”

Benjamin Franklin
Statesman, Inventor, Founding Father of the United States
Areas to Assess

- Purpose & scope of the telepractice program
  - Number of patients/clients served
  - Type of patient/client served (clinical population)
  - Type of service: diagnostics, therapy, supervision, mentoring
  - Delivery model: direct (synchronous), store/forward, hybrid

- Current state of services
  - How will this telepractice program meet unmet needs or support better outcomes?

- Organizational readiness for telepractice program
  - Who will deliver these services?
  - Training needs of the telepractitioners
  - Management support & “buy-in”
  - Patient/client support & "buy-in"

Areas to Assess

- Facility: physical space & privacy
- Barriers to services
  - Reimbursement
  - Costs (initial)
  - Licensure
  - Bandwidth
  - Competition – other providers?

- Availability of technological support
- Budget for equipment, software, training
  - Therapy specific materials
- A plan for data collection/evaluation
Summarize needs, barriers & potential strategies to support the telepractice program

**Getting Started**

- Recruit professionals who are excited about the application of technology to service delivery
  - Don’t let age influence your decision
- Select patients who also like technology & are not intimidated by a different service delivery model
  - Plan some practice sessions to let them build confidence with the process or platform

Boisvert, M., Chacias, J., & Andrianopoulous, M.V. (2013)
Getting Started

- Define the type of service delivery model you are using & how it will be executed
- Start small & know how you are going to measure success; slowly expand the program when resources are available
- Collect outcome data
  - Success of patients; communication outcomes
  - Number of patients seen – increased?
  - Cost savings
  - Reductions in cancelations, more consistent services

Potential

More patients served; improved outcomes

Well-Designed Telepractice Services
Transmission Methods

- ISDN (Integrated Services Digital Network)
  - T1-T4 lines
- Broadband/IP (Internet Protocol)
  - Mobile/Cellular
  - DSL (Digital Subscriber Line)
  - Cable
  - Satellite

Bandwidth: KEY Technological Issue

- All technology systems, regardless of cost, are effected by bandwidth
- Bandwidth is an issue in all geographical locations (urban & rural)
- Bandwidth is traffic dependent
- Traffic is dependent on time of day, weather, location
- Bandwidth is increasing dramatically nation-wide, but so is traffic (thanks, Netflix and YouTube!)
No Traffic

Some Traffic
A Nightmare!

Dedicated Systems

Pros

- High quality audio and video
- Professional can control remote camera
- IT support can be provided to family remotely
- Provides more secure connection

Cons

- Need compatible equipment at both ends
- Can be expensive
- Usually remains in one location
**Web-based Systems**

<table>
<thead>
<tr>
<th>Basic Equipment</th>
<th>Looks like….</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Hardware/software</td>
<td>- Skype, facetime, etc.</td>
</tr>
<tr>
<td>- Camera</td>
<td>- Internal or external webcam</td>
</tr>
<tr>
<td>- Monitor</td>
<td>- Computer screen/tablet</td>
</tr>
<tr>
<td>- Microphone</td>
<td>- Headset or built-in</td>
</tr>
<tr>
<td>- Speakers</td>
<td>- Headset, built-in or external</td>
</tr>
</tbody>
</table>

**Pros**
- Quick & easy to set up
- Can be accessed from any computer with internet
- Inexpensive
- May have screen sharing
- Could be portable

**Cons**
- Limited camera angle
- Can’t control the camera remotely
- Relies on patient’s/client’s internet connection
- Client/patient must provide own IT support
Types of equipment

- Hardware/software
- Camera, webcam
- Monitor
- Microphone
- Speakers
- Direct Internet Connection
- Printer/Scanner
- Email, telephone

Additional Peripheral Equipment

- Document Reader
- Industry specific tools
- Recording devices/cameras
  - Additional storage
Web-Based Telepractice Platforms

- SKYPE (Free...No!)
- SKYPE for Business
- Infinite Conferencing
- Adobe Connect
- Megameeting
- GoToMeeting
- Microsoft Office 365
- Cisco WebEx
- iLinc
- Blackboard Collaborate
- Zoom

Technology Considerations

- Up-front Costs
- Ongoing Service Fees
- Bandwidth & Reliability
- Quality of Equipment (video, image size, camera pan, & zoom)
- Recording telepractice session
- Security, Firewalls
- Ease of Use
Key Components to Client Selection

- ASHA identifies four main areas for consideration:
  - Physical/Sensory
  - Cognitive/Behavioral
  - Communication
  - Support Services

- What would you consider indicators of a good candidate for therapy in general, and what indicators would you consider specific to telepractice?

<table>
<thead>
<tr>
<th>Physical/Sensory</th>
</tr>
</thead>
<tbody>
<tr>
<td>What if the client requires hand-over-hand assistance to utilize tools?</td>
</tr>
<tr>
<td>What if the client has a visual impairment that prevents the ability to see computer graphics and text?</td>
</tr>
<tr>
<td>May require on-site manipulatives, other adaptations</td>
</tr>
<tr>
<td>What if the client has hearing loss and either has a limited ability to hear the clinician?</td>
</tr>
<tr>
<td>Consider on-site supports already in place for client</td>
</tr>
<tr>
<td>What if the client has sensory issues that don’t allow use of headsets, or that are aggravated by the light/color/sound of the computer?</td>
</tr>
</tbody>
</table>
### Cognitive/Behavioral

| What if the client has difficulty maintaining sustained attention? | You may need to consider additional diagnoses or referrals.  
You may need to adjust service delivery to use a hybrid model. |
|---|---|
| What if client exhibits frequent and/or disruptive behavior issues? | Consider role of Primary Support Person.  
If with parent, you may need to develop positive behavior strategies with the family.  
May benefit from individual therapy sessions |
| What if client with a cognitive impairment is not able to follow basic oral directions? | Consider role of on-site supports |

### Communication

| What if the client can’t read or recognize letters? | Consider activities available to you during your sessions  
What would your requirement be for on-site services? |
|---|---|
| What if the client has a severe phonological disorder or apraxia? | You may have to get the family or support person to assist in relaying what was said  
Ensure superior audio/video; a boom mic may be needed |
| What if the client has difficulty following directions? | Consider the role of the Primary Support Person  
Provide visual supports |
| What if the client needs bilingual therapy? | Same as in-person; refer is appropriate  
Remote interpreters could be used |
Support Services

<table>
<thead>
<tr>
<th>What if the client doesn’t have internet access or the speeds are very slow?</th>
<th>Must have internet access for synchronous therapy; relatives or neighbors may be an option.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local health centers, public schools</td>
</tr>
<tr>
<td></td>
<td>Slow speeds can be an issue; need to consider audio/video quality</td>
</tr>
<tr>
<td></td>
<td>Consider access to tech support. What if there is a problem?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What if the client needs assistance due to physical or cognitive limitations?</th>
<th>Consider the role of the Primary Support Person, aka Helper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student may already have access to a 1:1 aide, if connecting to a public school</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What if the environment for therapy is not ideal for the client?</th>
<th>Our responsibility as clinicians is to support a therapeutic environment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consider lighting, extraneous noise, seating, etc.</td>
</tr>
</tbody>
</table>

Primary Support Services

- Need additional training on diagnostic & treatment role; often are NOT SLP aids, assistants
- Becomes a collaborator with the telepractitioner to help facilitate the session
- When connecting with the client/patient in their home, most likely will be a family member. Your focuses shifts to coaching role
- Parents & family members are there to facilitate communication with their children, love ones
Future Directions

- Launching a telepractice program requires careful planning, involving a range of stakeholders.
- Technologies continue to evolve, and opportunities for telepractice will continue to expand.
- Selecting patients for telepractice must be carefully planned, considering the setting & the potential supports needed.
- Technology WILL NOT replace speech-language pathologists, but speech-language pathologists who master telepractice & other digital technologies will replace those SLPs who don’t!

Telepractice Resources: ASHA State Liaisons

Northeastern Region
Susan Adams, Director, State Legislative & Regulatory Advocacy
sadams@asha.org
301-296-5665

Southern Region
Cheris Frailey, Director, State Education and Legislative Advocacy
cfrailey@asha.org
301-296-5666

Central Region
Janet Deppe, Director, State Advocacy
jdeppe@asha.org
301-296-5668

Western Region
Eileen Crowe, Director, State Association Relations
ecrowe@asha.org
301-296-5667
Telepractice Resources

- State-by-State pages - licensure requirements and contacts
  - http://www.asha.org/advocacy/state/
- States - Telepractice regulations
  - http://www.asha.org/Advocacy/state/State-Telepractice-Requirements/

Telepractice Resources: Telepractice Portal

- Asha’s code of Ethics
- Scope of Practice
- State Telepractice Requirements
- International Considerations
- FAQs on Reimbursement and Licensure
- Barriers
- Trends
- Client/Patient Selection
- Practice Areas
- Videoconferencing Equipment
- Connectivity Suggestions

http://www.asha.org/Practice-Portal/Professional-Issues/Telepractice/
Telepractice Resources: ASHA

- SLP Practice Issues: 301-296-5679
- Medicaid Reimbursement: Laurie Alban-Havens, lahanhavens@asha.org 301-296-5677
- Federal Bills on Telepractice: Sam Hewitt, shewitt@asha.org 202-624-5961

Telepractice Resources

- Sig 18
  - [http://www.asha.org/SIG/18/default/](http://www.asha.org/SIG/18/default/)
- ASHA Community
  - [http://community.asha.org/Home/](http://community.asha.org/Home/)
- State Associations
- International Audiology and Speech-Language Pathology Associations
  - [http://www.asha.org/members/international/intl_assoc/](http://www.asha.org/members/international/intl_assoc/)
Telepractice Resources

- ATA – American Telemedicine Association
  - http://www.americantelemed.org/
- Regional Telehealth Resource Center
  - www.Telehealthresourcecenters.org
- Center for Connected Health Policy- Federally Designated National Telehealth Policy Resource Center
  - www.cchpca.org
- The National Telehealth Technology Assessment Resource Center
  - www.TelehealthTechnology.org

Thank you for listening!

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