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### Telepractice in the Field of Speech-Language Pathology

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# Telepractice in Speech-Language Pathology

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## Methods

The purpose of this mixed methods experiment was to examine the satisfaction and quality of service people experience when they use telepractice as a model of service delivery for speech-language pathology. Five participants with communication disorders were enrolled in this study during the fall 2013 semester.

Participant	Age	Gender	City/State of Residence	Communication Disorder Treated
C001	39	Male	Sydney, MT	Aphasia – Stroke
C002	10	Male	Florence, MT	Childhood Articulation - Developmental
C003	51	Female	Cut Bank, MT	Aphasia - Stroke
C004	48	Female	Westlake, CA	Aphasia – Stroke
C005	59	Female	Helena, MT	Memory – Multiple Sclerosis

The participants were asked semi-structured interview questions before and after receiving their course of teletherapy through the University of Montana RiteCare Speech, Language, and Hearing Clinic. The pre- and post-treatment interviews were video-recorded. The participants' responses were transcribed and analyzed for emerging themes.

### Pre-Treatment Questions

- What are some of the obstacles that prevent you from receiving in-person services?
- What are some of the expectations for receiving services through telecommunication?
- What are your goals for teletherapy?
- What concerns do you have about receiving services through telecommunication?
- What is your current comfort level with use of technology? (1=Not at all comfortable 4=Very comfortable)
- What technological equipment do you expect to use during teletherapy?
- Are there any logistical obstacles that may arise that would prevent you from receiving the highest quality of care?

### Post-Treatment Questions

- What is your overall satisfaction with the teletherapy service delivery model?
- What are some of the positive aspects of your experience with teletherapy?
- What are some of the negative aspects of your experience with teletherapy?
- How could the teletherapy experience be improved?
- What obstacles if any, prevented you from receiving the highest quality of care?
- What is your current comfort level of technology? (1=Not at all comfortable 4=Very comfortable)
- Do you feel the client-clinician interactions were comparable to a traditional in-person service delivery model?
- How likely would you be to recommend teletherapy to another individual?

## Results

### Pre-Teletherapy Themes

- **Obstacles:** the distance to travel to an SLP
- **Expectations and goals:** to receive more therapy and maintain abilities
- **Concerns:** how sound will come across through microphone/speakers; how to access therapy when out of state
- **Comfort levels of technology use:** ranged between fairly comfortable and very comfortable; participants expected to use cameras, laptops, and headsets

### Post-Teletherapy Themes

- **Positive Outcomes:** overall high satisfaction; enjoyed not having to commute; no obstacles in place that would prevent client from receiving the highest quality care; high level of comfort for using technology following one semester of service; client-clinician relationships were comparable to in-person services; participants were likely to recommend teletherapy to other clients
- **Negative Outcomes/Concerns:** participants feel they need improved computer/Internet access

## Discussion and Conclusions

Clients who participated in our pilot telepractice program for speech-language pathology were satisfied with this model of service delivery. Minor technological issues emerged from time to time, however, clients felt that the benefits outweighed the negative aspects.

Telepractice has the potential to benefit many communities across Montana. Several large-scale issues must be addressed as this service delivery model moved forward:

- Funding for hardware and software
- Establishing satellite centers for clients who do not have access to computer/Internet in their homes
- Increasing insurance coverage for telemedicine

## Literature Cited

Edwards, M., Stredler-Brown, A., & Houston, T. K. (2012). Expanding use of telepractice in Speech-Language Pathology and Audiology. *The Volta Review*, 112(3), 227-242.

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## Background and Significance

Telepractice uses telecommunication platforms, such as video-conferencing, to provide therapy services (Houston, 2014).

Researchers have demonstrated that the use of telepractice for diagnostic assessment and treatment of communication disorders is effective (Edwards, Stredler-Brown, Houston, 2012).

Montana is a rural state with a shortage of speech-language pathology services, especially in specialty areas. Part of this shortage stems from the lack of a university-based graduate program in speech-language pathology from 1989-2009.

Currently, 420 speech-language pathologists (SLPs) are licensed by the Montana Board of SLPs and Audiologists. Only 32.6 American Speech-Language and Hearing Association (ASHA)-certified SLPs are available per every 100,000 residents, ranking Montana's availability of SLPs 46<sup>th</sup> in the nation (ASHA, 2014).

In addition to the current shortage of SLPs in Montana, other barriers prevent individuals with communication disorders from receiving the services they need. These barriers include:

- Geographic location/distance
- Financial limitations
- Physical and mobility limitations
- General health

To conduct optimal telepractice service delivery, the client and the provider each need a headset, a webcam, and a computer with high speed Internet access.

To ensure client privacy and confidentiality, an encrypted telecommunication platform must be used. The University of Montana RiteCare Clinic uses Omnijoin as the software. Omnijoin is HIPAA compliant and allows clinicians to easily share desktop applications and documents for therapeutic purposes.

Figure 1. What a typical session of telepractice looks like

