



Alberta College of
Speech-Language Pathologists
and Audiologists

Advisory Statement:

Virtual Audiology Practice

September 2021



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Advisory Statement: *Provides direction to ensure regulated members have information to comply with legislation, standards, and other minimum requirements.*

The Alberta College of Speech-Language Pathologists and Audiologists (ACSLPA) serves the public interest through the regulation of professional speech-language pathologists and audiologists as per the *Health Professions Act (HPA)*. ACSLPA's regulatory work includes setting admission standards, considering applications for regulated membership and issuing practice permits, creating and enforcing a Code of Ethics and Standards of Practice, investigating complaints of unprofessional conduct, creating guidelines and practice documents, and enforcing continuing competence requirements.

ACSLPA has prepared the following advisory statement to inform audiology regulated members regarding requirements related to the virtual delivery of audiology services to clients.

Responsibilities of Members

Regardless of their practice setting, audiologists are regulated health professionals under the *HPA* and, as such, they have an obligation to meet professional requirements stated within the *HPA*, the *Speech-Language Pathologists and Audiologists Professional Regulation*, ACSLPA's *Code of Ethics* and ACSLPA's *Standards of Practice*.

Background

Virtual care refers to “the provision of speech-language pathology and audiology services at a distance, using synchronous and asynchronous information and digital communications technologies and processes. Virtual care is often referred to as telepractice or telehealth services, and may include interactions between SLPs, audiologists and their clients, as well as interactions between health care providers. Virtual care may be used alone or in combination with face-to-face services for the purposes of diagnosis, assessment, treatment, consultation, and education” (ACSLPA, 2019, *Standard of Practice 1.7 Virtual Care*).

The delivery of audiology services through virtual practice is continuing to emerge. At present, the use of virtual practice is offered as a supplemental or alternative service, secondary to primary onsite support, when a face-to-face appointment is not required, or when individuals cannot readily access traditional services due to limited mobility, issues related to a pandemic, or geographic location (ACSLPA, 2021, *Virtual Care Guideline*, Table 2: Determining Virtual Care Fit). Just as with face-to-face services, audiologists providing virtual care must ensure the provision of ethical, quality services (ACSLPA, 2019, *Standard of Practice 1.7 Virtual Care*).

There remain aspects of audiology services that do not translate to adequate and safe delivery without an audiologist working with intermediary support personnel who have access to appropriate equipment and can be with the client, face-to-face. The following rationale outlines possible contraindications to the delivery of hearing assessment and hearing aid fitting using a virtual care model wherein the audiologist is working directly with the client without the assistance of trained support personnel.

Requirements for Treatment of Hearing Loss with Amplification

Audiological services requiring the determination of candidacy for fitting of amplification depend upon a thorough and accurate diagnostic hearing assessment. Real ear verification is necessary to complete a valid hearing aid fitting. The required components are described in the following paragraphs.

a) Otoscopy

Otoscopy is a restricted activity as per the *Government Organization Act* and must ONLY be performed by an authorized health professional or by someone under the supervision of an authorized health professional. It is possible that injury could be inflicted by an untrained individual performing otoscopy if the otoscope is inserted beyond the cartilaginous portion of the ear canal.

Otoscopy allows for a clear and accurate depiction of the ear canal and tympanic membrane in order to identify any issues that would preclude moving forward with testing and/or that would require medical attention.

Unless adequate and reliable care is taken to ensure that inserting the tip of an otoscope does not go beyond the cartilaginous portion of the ear canal, otoscopy cannot be performed virtually unless a qualified individual is available to perform this activity in person and relay the results back to the professional conducting the virtual appointment (ACSLPA, 2019, *Standards of Practice* 1.7 Virtual Care, 2.1 Professional Practice Obligations, 4.1 Safety and Risk Management; ACSLPA, 2017, *Code of Ethics* 2.2 Professionalism).

b) Diagnostic Hearing Testing

Diagnostic hearing testing consists of a full test battery that includes a comprehensive case history, air and bone conduction pure tone testing (with masking as necessary), standardized speech testing, and impedance audiometry. This battery of tests is required, especially for an initial hearing assessment, to identify site of lesion for hearing deficits and to determine if medical referral is necessary.

Use of a screening tool such as the Consumer Ear Disease Risk Assessment (CEDRA), or similar questionnaires, via virtual practice is acceptable but cannot be considered as a stand-alone diagnostic test or as a tool to assess hearing aid candidacy (ACSLPA, 2019, *Standard of Practice* 1.2 Evidence Informed Practice).

Diagnostic hearing testing requires a controlled environment to avoid contamination and inaccuracy due to ambient noise levels. Hearing testing requires equipment that is carefully calibrated on a regular basis. Diagnostic hearing testing can be performed virtually if the audiologist conducting the virtual appointment is working with a trained support person or other trained professional who has access to an adequate environment and equipment OR if the equipment and software used in conducting a virtual hearing assessment adequately provides for diagnostic hearing threshold measures and standardized speech tests. Impedance audiometry remains unviable for virtual assessment without the assistance of trained personnel working with the client. If it is determined that impedance audiometry is required, the client should be referred for this procedure.

Performing in-situ audiometry through hearing aids that have been shipped to a client's home is not a valid method for conducting diagnostic testing. Hearing testing completed through hearing aids is a form of hearing screening. There is no opportunity to perform diagnostic pure tone, speech testing, or immittance audiometry in-situ through a hearing aid. When using hearing aids to perform in-situ audiometry, one can achieve an idea of what a client's hearing levels are but cannot determine where the problem lies within the auditory system and whether a medical referral is indicated. (ACSLPA, 2019, *Standards of Practice* 1.2 Evidence Informed Practice, 1.3 Client Assessment and Intervention, 2.1 Professional Practice Obligation; ACSLPA, 2017, *Code of Ethics* Competence 3.3).

In-situ audiometry through hearing aids can be useful in a virtual, direct to client, audiology service to gain an estimation of any change in hearing as part of performing minor troubleshooting and/or adjustments to hearing aids. Minor adjustments made to hearing aids is also acceptable via virtual practice.

c) Determining Hearing Aid Candidacy

It is not acceptable to choose hearing aids for a client based upon results of a screening tool such as the Consumer Ear Disease Risk Assessment (CEDRA), or similar questionnaires. Pre-fitting amplification tests such as loudness discomfort levels are required to avoid inadequate hearing aid fitting wherein the client's dynamic range is exceeded or reduced. Performing speech testing prior to fitting hearing aids avoids misjudging hearing aid candidacy and informs realistic client expectations

d) Initial Hearing Aid Fitting

The delivery of hearing aid fittings involves programming the hearing devices using accurate hearing threshold information to ensure that the quality of the fitting is not compromised. Inadequately fitted hearing aids do not provide the client with sufficient audibility of speech.

Verification of hearing aid output is required during hearing aid fittings to ensure optimal amplification.

Lack of hearing aid output verification during a fitting can result in under-amplification or over-amplification. Under-amplification results in inadequate speech audibility. Over-amplification results in loudness discomfort and, in some cases, noise induced hearing loss.

Verification of hearing aid output using Simulated Real Ear Measures (S-REMs) is an alternative method is acceptable when face to face measures cannot be performed. Documentation regarding why S-REMs are used is required. It is recommended that Real Ear to Coupler Difference values are used for S-REMs whenever possible and that follow up verification with Real Ear Measures be undertaken whenever possible.

Summary

As technology advances, providing diagnostic audiological assessment, determining candidacy for amplification, and fitting of amplification may be services that can be delivered safely and accurately through virtual practice working with a client directly. Audiologists must use their professional judgement to ensure that each service element can be delivered in a reliable and accurate manner using a virtual service delivery model (ACSLPA, 2019, *Standards of Practice* 1.1 Client Centered Service, 1.2 Evidence Informed Practice, 1.3 Client Assessment and Intervention, 2.1 Professional Practice Obligations; ACSLPA, 2017, *Code of Ethics* Competence 3.3).