



Speech-Language & Audiology Canada
Orthophonie et Audiologie Canada
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SAC Position Paper on
**The Use of Virtual Care in
Speech-Language Pathology
and Audiology Services**

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A position paper represents the direction SAC has taken on a particular topic or provides guidelines for particular areas of practice. These positions are time-bound, representing the thinking at a particular point in time.

Position

It is the position of Speech-Language & Audiology Canada (SAC) that virtual care is a means of supporting access to speech-language pathology and audiology services for clients with communication, swallowing, hearing and balance disorders. SAC members and associates who provide services via virtual care must adhere to the standards of practice, privacy legislation, and guidelines of the applicable regulator(s) and/or professional association(s).

Background

Virtual Care refers to the use of technology to deliver speech-language pathology and audiology services at a distance. *Virtual care* replaces the term *telepractice*, which was used in SAC's 2006 position paper on this topic.

Virtual care includes all services provided during in-person care that are amenable to delivery via the use of technology. These include, but are not limited to: screening, formal and informal assessment, intervention, management, counseling, consultation, advocacy, and education as well as training and support for caregivers, family members. For a complete list, please refer to SAC Scope of Practice Documents (SAC, 2016b, c).

Delivery of virtual care can be synchronous (interaction occurring in real-time) and/or asynchronous (interaction not occurring in real-time). Synchronous service includes telephone or videoconferencing. Asynchronous service includes recorded (audio or video recording) or written electronic communication (email, text message, fax).

Client refers to the individual receiving services. With the consent of the individual or their legal guardian/representative, the word client can also refer to caregivers, family members, support personnel, and significant others working in support of the client, such as educators and healthcare providers.

Speech-language pathology and audiology services are provided using the best available evidence, are delivered ethically, and are conducted according to established guidelines and procedures. Technological advances and evolving health care policy continue to shape speech-language pathology and audiology. Services commonly delivered in person have been expanded with the continued progressions of virtual care and technological innovations. Increased interest in virtual care is a natural progression of this evolution (Cason & Cohn, 2014). Virtual care may be offered in all settings where speech-language pathology and audiology services are provided which include, but are not limited to, hospitals, public health units, community health centres, schools, private practice, nursing homes and long-term care facilities, childcare centres, client homes, corporate settings, correctional facilities, professional associations, regulatory bodies, universities and colleges, and government ministries (SAC, 2016, b, c). The professions of speech-language pathology and audiology continue to evolve by integrating these new technologies to expand services offered to clients. When these practices are implemented in an appropriate and effective manner they can increase access and enrich speech-language pathology and audiology services (College of Audiologists and Speech-Language Pathologists of Ontario, 2020). While the term virtual care is currently being used, as technology evolves and support for virtual care increases, the term connected health may better describe the future of these services. The connected health model is "a conceptual model of health management where devices, services, or interventions are designed around the patient's needs, and health related data is shared, in such a way that the patient can receive care in the most proactive and efficient manner possible" (Caulfield & Donnelly, 2013, p. 704). The connected health model "utilizes technology to maximize healthcare resources, with the potential to provide increased, flexible opportunities for patients to engage with healthcare practitioners and to better manage their care process" (Glista et al., 2021a, p. 1).

A systematic review about the effectiveness of telehealth consultations reported “results vary by setting and condition, with telehealth consultations producing generally either better outcomes or no difference from comparators in settings” (Totten et al., 2019, p. ii). A growing body of research provides evidence to support virtual care as a reliable and valid assessment and treatment service delivery model for speech-language pathology and audiology. Hearing follow-up consultations provided through virtual care, when implemented for new or experienced hearing aid users, can deliver similar results and likely improve access and clinical outcomes (Tao et al. 2021). When technology is reliable, both clients and clinicians rate their satisfaction with a virtual support model of service delivery for hearing aid fitting follow-up to be equal to that of face-to-face service delivery (Tao et al., 2021). For speech-language pathology services, research has shown virtual care facilitates improved access, outcomes, and client-centred care for a wide range of communication and swallowing disorders (Cason & Cohn, 2014; & Harkey et al. 2020; Wales et al., 2017; Weidner & Lowan, 2020). Some studies reported use of a “hybrid” approach involving a combination of in-person service and virtual care, which allows clinicians to select the service delivery model that best addresses the needs of the client (Cason & Cohn, 2014).

Virtual care is a model of service delivery that speech-language pathologists (S-LPs) and audiologists are qualified to offer. It provides advantages when distance, health restrictions, or availability of skilled professionals compromise the delivery of care. It is well documented that virtual care offers unique opportunities for providing access to speech, language, and hearing health services to underserved populations (Davies-Venn & Glista, 2019; Dawood et al., 2021; Swanepoel & Hall, 2010;; World Health Organization [WHO], 2010, 2021; Wolfgang, 2019). This is relevant to Canada given its low population density and numerous rural and remote communities. Increasingly, virtual care is viewed as a service delivery option with wide applicability and benefit for S-LPs, audiologists, the communication health assistants who work under their supervision, and the clients they serve. A systematic review of the use of virtual care in speech, language, and hearing services found that improved access to care was the main benefit of virtual service delivery (Molini-Avejonas et al., 2015). However, the ability for a virtual care model to better reach populations in need of services is not limited to reaching rural or remote populations. Virtual care also provides those with constraints related to time, transportation and mobility, and/or those without qualified service providers in their region the opportunity to access services remotely (Carter et al., 2011).

S-LPs, audiologists, and communication health assistants who travel long distances can also experience fatigue and may have limited time available for management sessions in rural communities. Consequently, they may make infrequent or irregular visits, which can result in reduced treatment efficacy (Dew et al., 2013). Virtual care affords the opportunity to provide savings in travel time and expenses for both the client and practitioner (Tindall & Huebner, 2009; Towey, 2012).

Start-up costs, including equipment purchase and installation, as well as maintenance costs and internet connectivity charges can be prohibitive. However, with technological advances, these costs are decreasing (Mashima & Doarn, 2008). Virtual care provides the ability to serve clients and their families in authentic, naturalistic environments such as in school, at home, in the community, and in the workplace (Cason & Cohn, 2014). In addition, strong evidence exists to support the effectiveness of interventions delivered in the person’s natural environment over clinic-based interventions (McCue et al. 2010). Therefore, virtual care allows for community-based intervention consistent with the International Classification of Functioning, Disability and Health (WHO, 2002), which promotes a person’s functioning within the context of their environment.

Virtual care can address challenges with in-person service delivery such as a client’s limited mobility as well as the costs associated with travel, including time spent on travel. This can lead to more

equitable access to care. The shift to a virtual care model of service delivery can also reduce the need for travel to a clinic and for clinicians to travel to a client, thus contributing to less fossil fuels being used in transportation (Purohit et al., 2021). The increased use of virtual care in Canada holds promise for reducing carbon emissions and should be considered by both individuals and policy makers as a legitimate means of service delivery (Gheorghiu et al., 2020).

Clients with physical disabilities, as well as those with social anxiety or other mental health conditions, can benefit from having the option to access service using a virtual service delivery model (Young & Edwards, 2020). Furthermore, some clients prefer virtual interactions to in-person. For example, Carr (2017) noted that virtual support can help engage adolescents and provide a means of re-engaging teens with hearing loss by using a more familiar technology and mode of communication. Lastly, virtual care offers an opportunity for clients to access services that are uniquely suited to their specific needs. For example, clients can seek out practitioners with skill sets in a specific area of practice (Tucker, 2012), or clinicians who speak their preferred language, without the added barrier of geographical limitations (Edwards-Gaither, 2018).

Virtual care is an area of service delivery in speech-language pathology and audiology that is emerging as an integral component of practice that needs to continue with support from higher-level professional and government support. The World Report on Hearing (WHO, 2021) advocates for the implementation of virtual care and states that “when developing telemedicine, it is important that the services should have a clear, accountable governing structure, and ensure political commitment” (p. 178). Engaging stakeholders in the planning of virtual care (including federal, provincial, territorial, and municipal governments) encourages the adoption and implementation of policies that will support the use of virtual care for the delivery of speech-language pathology and audiology services. While virtual care continues to allow for increased opportunities for service provision, offers the potential to facilitate client-centred care, and enhance current practice, there is further need for professional development, educational, and research opportunities to integrate, advocate, and establish guidelines for virtual care across Canada.

Rationale

This position paper updates and replaces the 2006 SAC Position Paper on *The Use of Telepractice for SAC S-LPs and Audiologists* by addressing recent advances in virtual care. A review of published research and professional literature, as well as feedback from SAC members and associates, informed the development process.

Virtual care allows the professions of speech-language pathology and audiology to leverage and embrace technological innovations to improve client-centred services for the populations they serve. Virtual care, delivered through a supported healthcare system, has the potential to increase delivery of speech-language pathology and audiology services to vulnerable and underserved communities (e.g., Indigenous peoples, those living in remote communities, or clients located in areas with limited access to in-person services).

While virtual care for the delivery of speech-language pathology and audiology services has been well documented in literature, its use has been accelerated by the emergence of the COVID-19 global pandemic. It is likely that the impact of this pandemic will continue to positively influence the rapid adoption of, and improvements in, the delivery of virtual care in the future.

Recommendations

The recommendations that follow are supported by the highest level of evidence available and are intended to inform the decision-making of S-LPs, audiologists, policy makers, administrators, university programs, researchers, and the general public.

Informed Consent and Right to Privacy

SAC members and associates are held to the SAC [Code of Ethics](#) as it pertains to informed consent and the right to privacy. Right to privacy and informed consent assures that clients are aware of how their personal health information, assessment results, treatment plans, and outcomes are stored and shared across different agencies, virtual platforms, and storage formats (Canadian Medical Association, 2019; Dermer, 2020; SAC, 2016a).

S-LPs and audiologists who provide virtual care services in regulated provinces must adhere to their regulatory body's standards of practice, including specific professional requirements for the protection of client privacy and confidentiality of personal health information, as well as processes for obtaining informed consent. Any technology used to facilitate and provide virtual care must meet basic standards for the protection of client privacy. It is the responsibility of the member to assure that this minimal level of obligation is met in the jurisdiction in which they provide and deliver services (SAC, 2016a).

To ensure informed consent, members must obtain and document clear verbal and/or written permission from clients in order to proceed with assessment, management and rehabilitation, and storage of information using virtual care (SAC, 2016a).

S-LPs and audiologists must respect the right of clients to direct the course of all treatment delivered using virtual care and to return to an in-person service delivery model should they wish to do so.

Clinical Considerations

SAC recommends that S-LPs and audiologists utilize the best available and suitable evidence to select the most appropriate screening, assessment, intervention, management, (re)habilitation, strategies, materials, and protocols for a particular client and that members then determine individual client needs and appropriateness for virtual care. Candidacy and selection for virtual care should take into consideration: client safety, physical, sensory (vision/hearing) and communicative status, cognitive functioning including attention and concentration, and cultural and linguistic diversity. S-LPs and audiologists should also consider: access to the internet, availability of appropriate software and hardware, the capacity to use technology effectively, the physical environment in which to conduct the service, and the availability of trained staff/caregiver to support the virtual sessions. S-LPs and audiologists should have knowledge of the impact of virtual service delivery on assessments, diagnostic procedures and management before proceeding and determine if such procedures can appropriately be conducted virtually. Standardized tools and technology and/or informal measures can be used to virtually assess clients.

When using standardized assessment methods, it is recommended that S-LPs and audiologists:

- Consider whether it is necessary to adapt administration techniques to be more suitable for virtual use, so long as test reliability and validity is maintained, and any modifications are documented.
- Determine whether test-makers have permitted for materials to be used virtually and whether test results obtained through virtual means are valid.

- Confirm with test-makers whether materials can be displayed through public-facing screen sharing and if not, use screen mirroring and document cameras to remotely share testing visuals with clients.
- Document that the service delivery model was virtual care.

Diversity Considerations

SAC members and associates should provide virtual care services with consideration to diversity, equity, inclusion, and respect. The same guidelines for providing linguistically and culturally diverse and inclusive services apply to virtual care as for in-person services. Outcome of services provided through virtual care can be influenced by cultural beliefs and values and traditions of the client and member. Comfort levels of participants will vary depending on previous experience.

Supervision and Collaboration

S-LPs and audiologists can provide virtual service consultation, education, and supervision to communication health assistants and students as well as other professionals and support personnel who directly interact with the client.

Labour Mobility and Service Provision Across Jurisdictions

S-LPs and audiologists providing virtual care in communities across their province/territory of residence and across provincial, territorial and international borders must refer to and follow the regulatory requirements and standards of the jurisdiction in which their client is located. S-LPs and audiologists who provide virtual care services in a province or territory, or jurisdiction where the professions are not regulated must comply with applicable privacy and health care consent legislation.

It is the responsibility of S-LPs and audiologists to follow guidance issued by their provincial regulatory body when providing virtual care in other jurisdictions.

The use of virtual care as a service delivery model is increasing, and there is a need to facilitate care across jurisdictions. SAC acknowledges the need for regulatory bodies and professional associations to develop consistent guidelines and standards for virtual care service provision.

Education, Research and Decision-Making Opportunities

SAC calls on policy makers, professional organizations, educational institutions, and stakeholders to support and promote the following recommendations to improve the quality and reach of virtual care:

- Integrate virtual care in the initial training curriculum for S-LPs, audiologists, and communication health assistants. This includes theoretical and practical learning activities, and opportunities for continuing education.
- Establish guidelines for speech-language pathologists and audiologists providing supervision to students and support personnel regarding the delivery of virtual care services
- Raise awareness of virtual care and its applications to meet the unique needs of the populations it can serve by advocating to healthcare planners, legislators and administrators who are in positions to develop and support virtual care.

- Conduct additional research to identify barriers to virtual care. This includes an analysis of government supported policy and funding for virtual speech-language pathology and audiology services, consumer choice and organizational attitudes towards virtual care, support personal training needs, and equipment and network limitations.

With recent technological advancements support for virtual care is increasing and offers promising new ways of providing equitable, and often improved client-centred care. Virtual care allows for observation of and delivery of services to the client in their home environment and removes barriers to care such as geographic location and lack of access to specialized speech-language pathology and audiology services. S-LPs and audiologists should consider the use of virtual care for clients with communication, swallowing, hearing, and balance disorders.

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