Telepractice: An Overview and Best Practices

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Abstract

Telepractice is the use of telecommunications technology to deliver speech therapy and audiology services to a client who is in a different physical location than the practitioner. This article presents a general overview of telepractice, including terminology and definitions; ethical considerations; privacy and security; reimbursement policy and trends; considerations for client selection; and telepractice resources. It was written to provide foundational information about telepractice for practitioners who are engaged with alternative and augmentative communication (AAC).

Technological advances and evolving health care policy have significantly impacted speech-language pathology and audiology over the past decade. Increased interest in telepractice is a natural progression of this evolution. Defined broadly, telepractice is the use of telecommunications technology to deliver speech therapy and audiology services to a client who is in a different physical location than the practitioner (American Speech-Language-Hearing Association, 2013b). While telepractice has been used to deliver speech-language pathology and audiology services for decades, a significant increase in its use is the result of expansion of the Internet and the increases in computing capacity (Houston, Fleming, Brown, Weinberg, & Nafe, 2014).

This article presents an overview of telepractice, including key terminology and definitions; examines current telepractice evidence; outlines important regulatory and ethical guidelines; discusses reimbursement policy and trends; identifies practice considerations; and outlines key telepractice resources.

Definitions and Terminology

"Tele" terminology is nascent and evolving. Rehabilitation professions and organizations have adopted different terms to describe the same construct: remote service delivery. The American Speech-Language-Hearing Association (ASHA) defines telepractice as "the application of telecommunications technology to the delivery of speech language pathology and audiology professional services at a distance by linking clinician to client or clinician to clinician for assessment, intervention, and/or consultation" (ASHA, 2013b, para. 1). Additional terms used to describe this remote service delivery model and endorsed by ASHA include teleaudiology, telespeech, and speech teletherapy (ASHA, 2013b).

Other organizations have introduced telepractice terminology. The Tele-AAC Working Group of the 2012 ISAAC Research Symposium introduced the term "tele-AAC" to refer to "a unique cross-disciplinary clinical service delivery model that requires expertise in both telepractice and augmentative and alternative communication (AAC) systems" (Anderson et al., 2012, p. 80). The American Physical Therapy Association (APTA) and the American Occupational Therapy Association (AOTA) officially promote the term 'telehealth' within their respective professions (AOTA, 2013; APTA, 2012). The American Telemedicine Association (ATA), an organization comprised of many professional disciplines and institutional and industry partners, tends to employ 'telemedicine' and 'telehealth' as expansive, umbrella terms. The more specialized term *telerehabilitation* refers to habilitation and rehabilitation services (ATA, 2010a), including telepractice, telespeech, and teleaudiology. The variability of terminology between (and even within) professions requires practitioners to utilize multiple search terms to locate evidence and resources associated with telepractice.

Telepractice Evidence-base

A significant body of research to support the use of telepractice for the delivery of speech therapy, audiology, and AAC services is available when searching with the key terms mentioned above.

Telespeech

Telepractice research for speech-language pathology (i.e., telespeech) currently encompasses the assessment and treatment of articulation disorders (Crutchley, Dudley, & Campbell, 2010; Waite, Cahill, Theodoros, Busuttin, & Russell, 2006); language and cognitive disorders (Brennan, Georgeadis, Baron, & Barker, 2004; Waite, Theodoros, Russell, & Cahill, 2010); aphasia (Hall, Boisvert, & Steele, 2013); autism (Boisvert, Lang, Andrianopoulos, & Boscardin, 2010; Parmanto, Pulantara, Schutte, Saptono, & McCue, 2013); dysarthria (Hill et al., 2006); fluency disorders (Carey, O'Brian, Onslow, Packman, & Menzies, 2012; Lewis, Packman, Onslow, Simpson, & Jones, 2008); dysphagia (Coyle, 2012; Perlman & Witthawaskul, 2002); resonance disorders (Golding-Kushner, 2013); and voice disorders (Burgess et al., 1999; Halpern et al., 2012; Mashima et al., 2003; Theodoros et al., 2006; Tindall, Huebner, Stemple, & Kleinert, 2008; Towey, 2012b). A preponderance of the peer-reviewed articles published to date demonstrate that the clinical results gained via telespeech are comparable, and in some cases superior, to those of comparable treatment that is delivered in-person. It should be noted, however, that some authors selectively employ a "hybrid" approach to telepractice (i.e., a combination of in-person and telepractice sessions) when the clinician's judgment dictates such is required for a specific patient.

Teleaudiology

Proof of concept for teleaudiology now exists for pediatric hearing screenings (Krumm, Huffman, Dick, & Klich, 2007; Krumm, Ribera, & Schmiedge, 2005; Lancaster, Krumm, Ribera, & Klich, 2008); pure tone audiometry (Krumm, Ribera, & Klich, 2007); speech in noise testing (Ribera, 2005); hearing aid fitting (Campos & Ferrari, 2012); cochlear implant fitting (Wasowski et al., 2010); aural rehabilitation (Polovoy, 2009); and video-otoscopy (Burgess et al., 1999; Eikelboom, Atlas, Mbao, & Gallop, 2002; Heneghan, Sclafani, Stern, & Ginsburg, 1999; Sullivan, 1997). Vento and Krumm (2013) observed that while telehealth services can be delivered by either asynchronous (i.e., "store and forward") or synchronous (i.e., in "real time") methods, teleaudiology services are best administered via a hybrid model that incorporates both asynchronous and synchronous technologies. Most teleaudiology procedures can be deployed in a synchronous manner. An exception to this is tympanometry, since current tympanometers are not easily connected to computers to accomplish remote computing.

Tele-AAC

The interest in the use of telepractice to deliver clinical AAC services at a distance (Tele-AAC) is growing, with the opportunity to provide clinical AAC services to underserved

populations in the United States and worldwide. Going forward, the Tele-AAC Working Group of the 2012 ISAAC Research Symposium articulated numerous research needs and recommendations, many of which could apply to telespeech in general. The following are selected recommendations that are the most unique to Tele-AAC delivery:

- "As identified by the person who uses Augmentative and Alternative Communication (PWUACC), Tele-AAC should address the needs of the PWUACC's circle of communication partners" (Anderson et al., 2012, p. 80).
- "The Working Group recommends that it is important to identify and characterize the unique opportunities and constraints of Tele-AAC in all aspects of service delivery. These include, but are not limited to: needs assessments, implementation planning; device/system procurement; set-up and training; quality assurance; client progress monitoring; and follow-up service delivery" (Anderson et al., 2012, p. 81).
- "The Working Group recommends that institutions of higher education and professional organizations provide training in Tele-AAC service provision" (Anderson et al., 2012, p. 81).
- "The Working Group recommends that research and development in Tele-AAC involve and value the input of PWUACC. Research and development are needed to create valid measures across Tele-AAC practices (i.e., assessment, implementation and consultation); determine the communication competence levels achieved by Tele-AAC users; discern stakeholders' perceptions of Tele-AAC services (e.g., acceptability and viability); maximize Tele-AAC's capacity to engage multiple team members in AAC assessment and ongoing service; identify the limitations and barriers of Tele-AAC provision; and develop potential solutions" (Anderson et al., 2012, p. 81).

Environments

As stated on the ASHA Telepractice portal, "Telepractice venues include schools, medical centers, rehabilitation hospitals, community health centers, outpatient clinics, universities, clients'/patients' homes, residential health care facilities, childcare centers, and corporate settings" (ASHA, 2013a, para. 4). An initial impetus for interest in the telepractice delivery model was that it enabled healthcare providers to serve clients and their families in "exceptional settings." These may include remote and/or rural locations; difficult to access settings (e.g., correctional institutions); extreme environments (e.g., ships, spacecraft); and school districts that suffer from qualified staff shortages (Crutchley & Campbell, 2010). Most recently, Grogan-Johnson (2014) described an effective school-based telepractice service delivery model conducted in conjunction with Kent State University. This project development was guided by the results of a structured needs assessment (i.e., included in Appendix A of the cited reference).

Telepractice is increasingly viewed as a service delivery option with even wider applicability. Vento and Krumm (2013) wrote that "most audiologists believe that teleaudiology is useful for those individuals who live in rural communities where hearing health-care services are lacking or absent" (p. 126). Noting that Ciccia, Whitford, Krumm, and McNeal (2011) successfully deployed teleaudiology for individuals in inner city clinics, Vento and Krumm (2013) concluded: "…we need to expand our current notion and definition of teleaudiology" (p. 126).

It is a misconception that telepractice must be conducted at a distance; an example follows as to why telepractice might be deployed locally. In many Pittsburgh, Pennsylvania neighborhoods, decades old duplex homes were constructed with steep front steps leading to home entrances and precipitously sloped driveways with absent or unconnected garages. Residents of all ages and health status find themselves experiencing difficulty safely negotiating this architecture in ice and snow—a source of high appointment cancellation rates even for

those who live in very close proximity to their practitioner's office. Telepractice can seamlessly transcend such barriers.

Telepractice can also allow parents at work or at home to view their child's school therapy session and to communicate with members of their child's interdisciplinary team. For consumers of Tele-AAC, telepractice has the capacity to simultaneously link a provider of technical support to the client and clinician, avoiding multiple meetings and service delays.

Telepractice is also well suited to an increasingly mobile U.S. population. A client can continue to receive speech therapy while on vacation or on work-related travel—as long as the client's clinician holds the required out-of-state license. Telepractice can also accommodate clinician travel; when a private and secure Internet connection is available, a telepractitioner with the required out-of-state license can conduct therapy sessions while he or she is out of town.

If power sources and Internet connectivity prevail, telepractice can be used to avoid uninterrupted clinical service after natural disasters. Following Hurricane Sandy, travel in many parts of New Jersey was difficult, and gasoline was scarce. Telepractitioner Karen Golding-Kushner, whose own neighborhood experienced power losses for 2 weeks in October 2013, was able to temporarily relocate to a hotel with electrical power and largely maintain the continuity of her full-time telepractice-based private practice (K. Golding-Kushner, personal communication, December 23, 2013).

In addition to providing more convenient access to services, data are emerging that telepractice affords the opportunity to provide savings in travel time and expenses for both the client and practitioner (Tindall & Huebner, 2009; Towey, 2012b).

Telepractice also affords the opportunity to serve clients and their families in authentic, naturalistic environments (e.g., in school, at home, in the community, and in the workplace). Towey (2012a) described the use of high definition audio and video to engage clients in web-based interactive activities and called for "a speech therapy upgrade for the 21st century that harnesses the power of authentic, web-based content" (p. 73). He and his colleagues at Waldo County General Hospital, Belfast, ME, construct telespeech activities wherein "both therapists and clients manipulate the materials and interact online in real time. The web-based technology engenders highly personalized and engaging activities, such that clients' interactions with these high interest tasks often continue well beyond the therapy sessions" (Towey, 2012a, p. 73).

Current and future telepractice technologies will likely dramatically change features of the clinical practice environments for speech-language pathology. Williams (2013) described impactful "near emerging technologies" such as mobile and tablet computing; "serious games" (designed for an educational or clinical purpose, in contrast to "social games"); simulation learning experiences; and gesture-based computing (including digital puppets). She further identified "far developing technologies" such as augmented reality head mounted displays (e.g., Google's Project Glass); immersive virtual reality cave automatic environments (CAVEs) that possess features of the Star Trek Holodeck environments in which objects and people are simulated in an enclosed room via projected holographic images, perhaps with corresponding smells; and the therapeutic use of socially interactive robots. Williams (2013) anticipates dramatic changes in the future conduct of speech therapy, writing that "the new generation of educational technology provides both opportunities and challenges for the SLP [speech-language pathologist] profession. While learning these new skills may be daunting to some, the promise they offer patients with communication disorders makes it worth the effort" (Williams, 2013, p. 29).

Regulation

Licensure

The use of telepractice improves access to care, specialists, and subspecialists (Clawson et al., 2008); however, state licensure policy does not engender interstate licensure portability or reciprocity. Presently, with few exceptions (i.e., federally based practice settings), a practitioner is required to be licensed in both the state where he/she is physically located and in the state where the client is physically located when engaging in interstate practice (ASHA, 2013b; Cason & Brannon, 2011). When engaged in interstate practice, "location of service" is defined by the client's physical location; adherence to the scope of practice where services are rendered is required (Cason & Brannon, 2011).

The challenges associated with holding multiple state licenses are not new (e.g., practitioners working as traveling therapists or in multiple states due to proximity to state borders); however telepractice amplifies these challenges as technology is not bound by borders. Acquiring and maintaining multiple state licenses can be time consuming and costly; therefore a model to facilitate state licensure portability is needed (Brannon, Cohn, & Cason, 2012; Cohn, Brannon, & Cason, 2011).

Grassroots initiatives and national efforts reflect the interest and need for a licensure portability solution (ATA, 2012a, 2013a). In addition to providing a model regulation (ASHA 2012), which includes telepractice, ASHA has worked cooperatively with the American Telemedicine Association and other stakeholders to identify a licensure portability solution (ASHA, 2013b). Several models of licensure portability exist (e.g., compacts/mutual recognition, expedited license, limited license, national license, federal pre-emption; Cohn et al., 2011). ASHA endorses a limited license model (ASHA 2012). Currently, federal legislation for a national license model (ATA 2012a, 2013a) and a mutual recognition/compact model (Federation of State Boards of Physical Therapy, 2011; Federation of State Medical Boards, 2013) are garnering support among healthcare professions; however, the best mechanism to achieve full licensure portability for the rehabilitation professions remains undecided.

State Law

Due to the variability of state laws and regulations, licensure requirements, practice act language, and telepractice policy, it is incumbent upon practitioners to ascertain and abide by all state requirements when engaging in the use of telepractice (ASHA, 2013a, b; Cason & Brannon, 2011). Many states affirm ASHA's position and recognize telepractice as within a practitioner's existing scope of practice; however, some states have restrictive policies regarding the use of telepractice. For example, Delaware presently does not permit the use of telecommunications as the sole means of service delivery (ASHA, 2013a).

In addition to understanding state law, regulation, and/or policy for telepractice, practitioners must also determine if there are additional requirements per state law for the practice setting. For example, some states require practitioners working in school-based settings to obtain a teacher certification in addition to state licensure (ASHA, 2013b). It is the responsibility of the practitioner to ascertain and abide by all federal and state laws governing practice.

Federal Legislation

Federal laws governing in-person practice also apply to telepractice; these include the Health Insurance Portability and Accountability Act of 1996 (HIPAA), the Family Educational Rights and Privacy Act of 1974 (FERPA), and the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH; ASHA, 2013b). Both HIPAA and FERPA provide protection of personal information; FERPA aligns with educational settings/practice models. The HITECH Act expands upon the protections of HIPAA by addressing privacy and security concerns

specific to electronic transmission of health information and imposes civil penalties for violations (Cohn & Watzlaf, 2011).

Practitioners must ensure the privacy and security of clients' protected health information (PHI) at all times. Use of passwords, encryption, virtual private networks (VPN), firewalls, and software configured for healthcare purposes mitigates risks associated with electronic transmission of health information, including service delivery via telepractice. Consultation with an information technology expert; development of privacy and security protocols, including breach notification policy; and a comprehensive risk analysis is recommended (ASHA, 2013b; Cohn & Watzlaf, 2011; Watzlaf, Moeini, & Firouzan, 2010).

Full compliance with federal laws requires maintaining the privacy and security of clients' PHI through electronic means as well as implementation of environmental safeguards. All written/printed materials with client information should be maintained in a secure area. During therapeutic encounters, persons present at both locations must be identified and measures taken to avoid non-authorized persons from entering the physical space or overhearing the therapeutic encounter. All electronic and environmental safeguards used to assure privacy and security of PHI should be documented.

Tele-ethics

The ASHA Practice Portal on Telepractice (ASHA, 2013b) succinctly states the ethical obligations of practitioners who engage in telepractice:

> 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. . .(para. 3) There are no inherent limits to where telepractice can be implemented, as long as the services comply with national, state, institutional, and professional regulations and policies. (ASHA, 2013, para. 4)

The practitioner's paramount ethical responsibility is to uphold the welfare of the client. Cohn (2012) provided examples of best ethical practices for telepractice:

- **Competence/duty of care:** Practitioners should have knowledge of telepractice techniques, technologies, and research. Ensuring the safety of the client is paramount. The practicioner should ascertain the client's physical location and emergency phone numbers in advance of commencing the therapy session and have an emergency plan in place.
- **Equivalence of services:** The results of telepractice services should be equivalent or superior to in-person services.
- **Privacy of information:** Information transmitted during the therapy session (e.g., audio-visual), as well as communication with the client before or after a session (e.g., via phone, e-mail, or fax) must remain private, as per HIPAA. The security of the server within which clinical information is stored must also be protected "at rest," (i.e., when it is not being used).
- **Privacy of place:** The privacy of others in the home must be maintained. The practitioner should maintain control or supervision of the cameras.
- **Informed consent:** The client should agree to engage in telepractice; be informed of other service delivery options; be informed of and accepting of the limits of privacy and security using telepractice; and be informed of and accepting of the presence and qualifications of practitioners and assistants.

- **Equity of access:** Telepractice potentially reduces the inequities in access to service. In contrast, telepractice should not be used to enable a practitioner to discriminate (e.g., on the basis of gender/gender identity/sexual orientation, race or ethnicity, age, religion, country of origin or disability) by avoiding in-person therapy.
- **Licensure/Credentials:** The practitioner should not practice across state lines without holding the appropriate state licenses and credentials, or outside of the United States without the appropriate credentials.
- **Appropriate tele-supervision:** Students and support personnel who engage in telepractice must be appropriately trained and supervised. Their presence and identity should be revealed to the client before the session begins. (Consult the ASHA Telepractice Portal for additional details.)
- **Tele-research:** Clients should be informed of potential research conducted within telepractice and provide informed consent before the research begins.

Cohn (2012) also suggested that a client who receives speech-language pathology or audiology services via telepractice has the right to expect that the practitioner will minimize conflicts of interest in any relationships with equipment vendors; will not hold hidden any expected charges for telepractice; and will not charge fees that are higher than in-person services without providing prior notification.

The need to carry malpractice insurance that explicitly covers telepractice was initially addressed by Denton (2003). It is wise to carry appropriate levels of insurance from a solvent carrier and to secure written agreement that coverage will be supplied in a particular state or region. Such coverage is protective of the client as well as the practitioner, and is therefore responsive to the ethical obligation to hold the interests of the client paramount.

Reimbursement

Reimbursement for services provided via telepractice includes state mandated coverage by private insurance (21 states; ATA, 2013b); state Medicaid and Medicaid-funded programs, variable by state (Centers for Medicare and Medicaid Services [CMS], n.d.a); Department of Defense and Veterans Health Administration telehealth programs (U.S. Department of Veterans Affairs, 2013), and contractual/private pay with organizations and individuals. Currently, CMS does not recognize rehabilitation professionals, including SLPs and audiologists, as telehealth providers for Medicare reimbursement (CMS, 2012).

The Patient Protection and Affordable Care Act (2010) created opportunities for enhanced reimbursement of services provided by rehabilitation professionals via telepractice (ATA, 2010b; Cason, 2012). Bundled payment models and incentives for improving service delivery and care coordination have accelerated adoption of innovative service delivery models, including telepractice. The Center for Medicare and Medicaid Innovation (CMI), established by the Patient Protection and Affordable Care Act, may lead to expanded reimbursement of telepractice by funding initiatives that accelerate the development and testing of new payment and service delivery models, including telepractice; speed the adoption of best practices; and incentivize coordinated, high quality, efficient service delivery (CMS, n.d.b).

The American Telemedicine Association, with support and cooperation from ASHA, submitted proposals to the Center for Medicare and Medicaid Innovation to promote research that would demonstrate the value of telepractice as a means to serve students in school-based settings where SLP shortages exist (ATA, 2011). Seizing opportunities afforded by the Patient Protection and Affordable Care Act to integrate telepractice in the delivery of speech, language, audiology, and AAC services and becoming recognized on the CMS Medicare telehealth provider list (CMS, 2012) are critical next steps for the profession.

Preparing for Telepractice

While policy and reimbursement are progressing at the national and state levels, practitioners can take practical steps now to integrate telepractice into their existing speech, audiology, and AAC services. Key actions include conducting a needs assessment for organizational, environmental, and practitioner readiness; developing a business plan; selecting the appropriate technology, diagnostic, and therapy materials for the intended services; and developing policies and procedures to minimize risk and assure ethical practice using telepractice technologies.

Needs Assessment

After determining if the use of telepractice is permissible within the state where the client is located (i.e., "location of service") and reimbursable, a needs assessment is the next step to developing telepractice programming. A needs assessment enables an organization to systematically evaluate the programmatic and/or service needs of a population or community and identify gaps between available programs/services and client needs. Focus groups, surveys, interviews, and review of existing data (organizational records including financial reports and service utilization) are common approaches to conducting a needs assessment. Data including patient satisfaction; care coordination; service utilization, including no show rates; travel/distance to services; and available resources can be used to determine if telepractice would enhance current programming and improve access and quality of care.

Organizational/Environmental Assessment

Organizational buy-in cannot be underestimated and success of a telepractice program is contingent upon buy-in of both organizational stakeholders (i.e., administration, practitioners, information and technology (IT) support, and administrative and billing personnel) and external stakeholders (i.e., clients, community partners, referral sources, reimbursement entities). Identifying "telepractice champions" within the organization who understand telepractice and its potential benefits for the client is critical; a combination of administrative telepractice champions and practitioner telepractice champions is ideal. Assuring use of telepractice will be accepted by clients and referring entities is also vital.

To gain stakeholder buy-in, educational efforts explaining telepractice, existing evidence, proposed utilization of telepractice, and pilot programming may be needed. Additionally, outside consultants/telehealth experts may be valuable to provide advice and garner support.

Practitioner Readiness

Practitioners are the critical link between organizations and clients. It is vital for practitioners to be competent and comfortable implementing a telepractice service delivery model. Telepractice is not a good fit for all practitioners, just as it is not a good fit for all clients. Practitioners must possess knowledge and skills related to technology used to deliver services via telepractice, including measures to maintain privacy and security of PHI. Additionally, practitioners must be able to appropriately select clients who will benefit from a telepractice service delivery model and consider modifications and adaptations needed to accommodate the client's physical and/or cognitive limitations and cultural/linguistic needs. In some cases, support personnel are indicated, and it is the responsibility of the practitioner to train and utilize support personnel appropriately when delivering services via telepractice (ASHA, 2013b). An understanding of how the environment and therapeutic process, including communication style, impacts services and the ability to select appropriate diagnostic and therapeutic materials are also critical skills.

Technology Selection

Telepractice technology can be classified as synchronous (live, real-time interaction) or asynchronous (recorded/store-forward). The technology selected should reflect the telepractice application. Videoconferencing, a synchronous technology application, is most commonly utilized in the delivery of telepractice. While many practitioners and clients may utilize videoconferencing

in their daily lives, there are a number of important considerations when using videoconferencing for the delivery of speech therapy, audiology, and AAC services. Equipment selection should include consideration of hardware, software, peripheral devices, and connectivity needed to meet the therapeutic needs of the client. Hardware options for telepractice may include a desktop computer, mobile device (i.e., laptop, electronic tablet, smartphone), or specialized system (i.e., tele-audiology station; GlobalMed, 2013); web camera (internal or external); and high-speed connection. An array of camera options (e.g., pan-tilt-zoom, multipoint, high definition), microphone and audio accessories, and peripheral devices (i.e., video-otoscope, document camera, audiometer, sound level meter) are available.

Connection speed and Internet bandwidth affect videoconferencing quality; adequate bandwidth, a minimum of 384 Kbps (Kilobits per second), and technical support is recommended to ensure that technical issues do not impact the quality of services delivered via telepractice (ASHA, 2013b). There are many software options for videoconferencing; some are developed specifically for telehealth purposes. A risk analysis for HIPAA compliance is recommended when vetting videoconferencing software (Cohn & Watzlaf, 2011; Watzlaf et al., 2010).

Client Selection

Clinical reasoning guides appropriate selection of clients who will benefit from a telepractice service delivery model. Important considerations for client candidacy include the ability to participate in and benefit from services provided via telepractice. Physical, cognitive, sensory (e.g., auditory, visual), and/or communication impairments may negatively affect the client's ability to participate in services provided via telepractice (ASHA, 2013b). The client selection process should consider these limitations, potential modifications necessary to maximize participation, the nature of the interventions to be provided, and the support available to the client to determine if the use of telepractice is appropriate. Given the variability of clients and their contexts, therapeutic needs, and available supports (family members, facilitators), determination of candidacy for telepractice should be based on clinical reasoning and made on a case-by-case basis.

ASHA

For well over a decade, ASHA has recognized the value of remote service delivery and has dedicated resources and efforts to stimulate best practices in telepractice. The newly released Telepractice Practice Portal represents a comprehensive reference for ASHA members and the public (ASHA, 2013b). The Portal includes an educational video about telepractice; definitions; information about key issues for telepractice (i.e., roles and responsibilities, licensure and teacher certification, international considerations), reimbursement (i.e., private health insurance, Medicare, Medicaid, self-pay); client selection, environmental considerations, practice areas (i.e., audiology, speech-language pathology, modification of assessment and treatment techniques and materials, school setting considerations), telepractice technology (i.e., videoconferencing equipment, connectivity), facilitators in telepractice for audiology and speech-language pathology, state and federal laws and legislation (privacy and security), enlisting stakeholder support, and resources, organizations, and references.

In 2010, ASHA accepted a grassroots proposal to establish a Special Interest Division (now Special Interest Group [SIG]) on Telepractice (SIG 18). SIG 18 strives to enhance telepractice across professions and settings via ongoing continuing education and online dialogue among SIG 18 affiliates. SIG 18 also collaborates with other ASHA SIGs, as evidenced in the genesis of this article.

The American Telemedicine Association

The American Telemedicine Association (ATA) is the leading international resource and advocacy group for the adoption of telecommunications and information technology to improve health care services (ATA, 2012b). ATA actively educates and engages legislators, reimbursement entities, and the public to shape policy and perception around telehealth. ATA member benefits

include access to live and recorded telehealth information and training resources; networking and interprofessional discussion via special interest groups on the ATA's social networking site, The Hub; and conference registration discounts. ATA hosts two conferences each year, an international meeting recognized as the largest in the world dedicated to telemedicine and telehealth and a smaller conference each fall. ATA special interest groups (i.e., Telerehabilitation, Pediatrics, Business and Finance, Home Telehealth, Remote Monitoring, etc.) provide opportunities for professionals to connect around common interests. The Telerehabilitation Special Interest Group (TR SIG) of the ATA "is comprised of practitioners in health and education, and technology specialists who are engaged in applying educational services, and to support independent living" (ATA, 2010a, p. 4). In 2010, the ATA TR SIG produced the oft-cited telerehabilitation standard and guideline document, A Blueprint for Telerehabilitation Guidelines (ATA, 2010a). This document provides administrative, clinical, technical, and ethical principles to guide the delivery of services using telecommunication technologies. Telepractice providers can access this and other resources on ATA's website; most ATA resources are publicly accessible and support ATA's mission to educate stakeholders, develop policies and standards, and serve as a clearinghouse for information (ATA, 2012b).

Telehealth Resource Centers/Networks

The Office for the Advancement of Telehealth (OAT), funded by the U.S. Department of Health and Human Services' Health Resources and Services Administration (HRSA), promotes and supports the use of telehealth technologies for the delivery of health care services and health education/information. OAT funds two national telehealth resource centers focused on technology assessment and telehealth policy, and 12 regional telehealth resource centers (Telehealth Resource Centers, 2013). The Telehealth Resource Centers provide expertise and practical support for telehealth program development. Online resources include archived telehealth-related webinars, topical modules (program development and operations, reimbursement, legal and regulatory, marketing, and practitioner training), and links to the 12 regional and two national resource centers, which house additional resources on their respective websites.

Many states have designated telehealth networks; these networks may be leveraged to support telepractice programming by capitalizing on existing infrastructure. While affordable desktop and mobile technologies can support many telepractice applications, telehealth networks and facilities are equipped with high-end commercial telecommunication technologies. These technologies provide higher resolution and lower latency (period of delay between video/voice or live video transmission) and may be a better solution for some services performed by SLPs and audiologists. Additionally, peripheral devices (i.e., video-otoscope, document camera, audiometer, sound level meter) may also be indicated for some services. A search using popular search engines yields information and links to states' telehealth network websites. These websites also contain telehealth resources and information that may be beneficial to practitioners interested in integrating telepractice into their existing services.

Conclusion

Telepractice, the use of telecommunications technology to deliver speech therapy and audiology services to a client who is in a different physical location than the practitioner, is a rapidly expanding service delivery model that is poised to provide great value to the users of AAC. Telepractitioners should be cognizant of the ethical considerations; hold the appropriate state licenses; uphold privacy, security, and client safety; engage in appropriate client selection; and become competent users of the technology. Professionals who engage in telepractice should remain watchful for changes in technology, policy, and reimbursement as this service delivery model continues to develop.

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