Report of the TxABA Public Policy Group Telehealth ABA Task Force

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Introduction

A rapidly expanding component of medicine and other human services professions in the early Twenty-first Century is the provision of services remotely using modern electronic technology rather than exclusively in person (termed "telehealth"). Telehealth largely involves patient and provider being connected electronically via the internet using digital devices such as computers and smartphones. Telehealth stands to increase the ease of access to those medical and other human services to persons for whom access to in-person can be difficult (e.g., persons in remote locations, persons with limited access to travel to service providers, persons in areas with few service providers including well-populated areas).

Telehealth has been used in applied behavior analysis (ABA) to conduct assessments, implement interventions, and prepare interventionists, caregivers, and educators in ABA. For more information regarding the history, definitions, telehealth models, technology requirements, and session requirements, the reader is directed to an informative resource was developed by the California Association for Behavior Analysis. It is available at:

https://calaba.org/media/content/CalABA_TeleHealth_Practice_Brief_Final-2.pdf

The purpose of this document is to provide an overview of the Texas Legal Considerations, a review of the scientific research, and recommendations for providers. This report is intended to serve as a resource to providers of ABA services, consumers of ABA services, and to persons involved in public policy decisions regarding ABA services. Given that this report is provided for the TxABA Public Policy Group with specific reference to Texas, it addresses, also, legal and regulatory issues already articulated for medical and human service providers in various professions in Texas as well as for behavior analysts in other states that license behavior analysts. It then offers some summary comments and recommendations.

Efforts were made to use the following definitions in this report (taken from Tex. Occ. Code §111.001, Telemedicine and Telehealth):

1. "Telehealth service" means a health service, other than a telemedicine medical service, delivered by a health professional licensed, certified, or otherwise entitled to practice in this state and acting within the scope of the health professional's license, certification, or entitlement to a patient at a different physical location than the health professional using telecommunications or information technology.
2. "Telemedicine medical service" means a health care service delivered by a physician licensed in this state, or a health professional acting under the delegation and supervision of a physician licensed in this state, and acting within the scope of the physician's or health professional's license to a patient at a different physical location than the physician or health professional using telecommunications or information technology.

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Review of State of Texas Statutes and Rules- General

Review of Texas statues and regulations pertaining in general to provision of telehealth services indicated that professionals providing such services do so under regulation of the relevant state licensing entity, are required to meet the same standard of services as are in effect for in-person service provision. These requirements include provider qualifications and licensure, confidentiality requirements, and consent requirements. Additionally, insurance coverage requirements are the same for telehealth-based and in-person service provision.

The Texas Medicaid program provides a manual specifically addressing telemedicine, telehealth, and telemonitoring services. Regarding telehealth service funded through the Texas Medicaid program, the manual notes, in general, that provider qualifications and licensure, confidentiality requirements, and consent requirements. NOTE: At the time the most recent manual was produced (December, 2018), the Texas Medicaid program did not pay for behavior analysis services provided by Licensed Behavior Analysts, per se. If Texas Medicaid payment for ABA services for at least some patient populations is incorporated in legislation enacted as a result of the 2019 legislation session, provision of telehealth ABA services funded by Texas Medicaid will have be addressed by the Texas Medicaid program with language specifically authorizing such services.

In the review of the located statutes and rules for human service professions licensed and certified by the State of Texas, few explicit references to telehealth were found in either the statutes or rules for the specific professions. The primary exception to this finding was the Texas State Board of Examiners of Psychologists. In 1999 the Board promulgated a policy statement pertaining to provision of telehealth services by psychologists in Texas (the term "telepractice" was used rather than "telehealth"). The rules articulated in the policy statement delineated a number of issues that the Board considered of concern (see below). Among these are:

- Supervision of behavior interventions via telehealth to patients in Texas must be provided by a licensed psychologist in Texas.
- Telehealth service provision is required to be HIPPA compliant regarding confidentiality and protection of client information.
- Patient consent requirements are the same for telehealth and in-person service provision procedures.
- The standard of care for provision of psychological services via telehealth procedures is the same as for in-person provision of psychological services.
- Insurance is to cover telehealth psychological services the same as is required for in-person services.

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Review of State of Texas Statutes and Rules General Statutes and Regulations of Human Service Professions in Texas

Tex. Occ. Code §111.001, Telemedicine and Telehealth

Occupations Code

TITLE 3. HEALTH PROFESSIONS
SUBTITLE A. PROVISIONS APPLYING TO HEALTH PROFESSIONS GENERALLY
CHAPTER 111. TELEMEDICINE AND TELEHEALTH

Sec. 111.001. DEFINITIONS. In this chapter:

1. "Health professional" and "physician" have the meanings assigned by Section 1455.001, Insurance Code.
2. "Store and forward technology" means technology that stores and transmits or grants access to a person's clinical information for review by a health professional at a different physical location than the person.
3. "Telehealth service" means a health service, other than a telemedicine medical service, delivered by a health professional licensed, certified, or otherwise entitled to practice in this state and acting within the scope of the health professional's license, certification, or entitlement to a patient at a different physical location than the health professional using telecommunications or information technology.
4. "Telemedicine medical service" means a health care service delivered by a physician licensed in this state, or a health professional acting under the delegation and supervision of a physician licensed in this state, and acting within the scope of the physician's or health professional's license to a patient at a different physical location than the physician or health professional using telecommunications or information technology.

Added by Acts 2003, 78th Leg., ch. 1274, Sec. 22, eff. April 1, 2005.
Renumbered from Occupations Code, Section 107.001 by Acts 2005, 79th Leg., Ch. 728 (H.B. 2018), Sec. 23.001(69), eff. September 1, 2005.
Amended by: Acts 2017, 85th Leg., R.S., Ch. 205 (S.B. 1107), Sec. 1, eff. May 27, 2017.

Sec. 111.002. INFORMED CONSENT. A treating physician or health professional who provides or facilitates the use of telemedicine medical services or telehealth services shall ensure that the informed consent of the patient, or another appropriate individual authorized to make health care treatment decisions for the patient, is obtained before telemedicine medical services or telehealth services are provided.

Added by Acts 2003, 78th Leg., ch. 1274, Sec. 22, eff. April 1, 2005.
Renumbered from Occupations Code, Section 107.002 by Acts 2005, 79th Leg., Ch. 728 (H.B. 2018), Sec. 23.001(69), eff. September 1, 2005.

Sec. 111.003. CONFIDENTIALITY. A treating physician or health professional who provides or facilitates the use of telemedicine medical services or telehealth services shall ensure that the

confidentiality of the patient's medical information is maintained as required by Chapter 159 or other applicable law.

Added by Acts 2003, 78th Leg., ch. 1274, Sec. 22, eff. April 1, 2005.
Renumbered from Occupations Code, Section 107.003 by Acts 2005, 79th Leg., Ch. 728 (H.B. 2018), Sec. 23.001(69), eff. September 1, 2005.

Sec. 111.004. RULES. The Texas Medical Board, in consultation with the commissioner of insurance, as appropriate, may adopt rules necessary to:

1. ensure that patients using telemedicine medical services receive appropriate, quality care;
2. prevent abuse and fraud in the use of telemedicine medical services, including rules relating to the filing of claims and records required to be maintained in connection with telemedicine medical services;
3. ensure adequate supervision of health professionals who are not physicians and who provide telemedicine medical services; and
4. establish the maximum number of health professionals who are not physicians that a physician may supervise through a telemedicine medical service.

Added by Acts 2003, 78th Leg., ch. 1274, Sec. 22, eff. April 1, 2005.

Tex. Ins. Code §1455.004
Private payers must provide coverage for telehealth services, subject to contract terms & conditions.

Tex. Occ. Code §106.001
The fact that an activity occurs through the use of the Internet does not affect a licensing authority's power to regulate an activity or person that would otherwise be regulated under this title.

Tex. Gov't Code §531.001(7) (NOTE: Pertains to health and human services system)
Telehealth service" means a health service, delivered by a licensed or certified health professional acting within the scope of their license or certification and that requires the use of advanced telecommunications technology, other than phone or fax, including:
A. compressed digital interactive video, audio, or data transmission;
B. clinical data transmission using computer imaging by way of still-image capture and store and forward; and
C. other technology that facilitates access to health care services or medical specialty expertise.
Texas Medicaid Regulations Pertaining to Telemedicine and Telehealth Services

A copy of the most recent manual regarding provision of telemedicine and telehealth service funded by the Texas Medicaid program is available at: Texas Medicaid - TMHP.com . The most recent version is dated December, 2018. NOTE: At the time the manual was produced, the Texas Medicaid program did not pay for behavior analysis services provided by Licensed Behavior Analysts, per se. If Texas Medicaid payment for ABA services for at least some patient populations is incorporated in legislation enacted as a result of the 2019 legislation session, provision of telehealth ABA services funded by Texas Medicaid will have be addressed by the Texas Medicaid program with language specifically authorizing such services.

Review of Licensure Statutes and Regulations of Human Service Professions in Texas

Profession	Licensing Entity	Findings
Behavior Analysis	Texas Department of Licensing and Regulation	No references found in statute or in rules
Marriage and Family Therapists	Texas Board of Examiners of Marriage and Family Therapists	No references found in statute or in rules
Professional Counseling	Professional Counselors	No references found in statute or in rules
Psychologists	Texas State Board of Examiners of Psychologists	No references found in statute; addressed in Board Policy (below):
Social Workers	Texas Board of Social Workers	No reference found in statute; addressed briefly in rules

Newsletter, Texas State Board of Examiners of Psychologists
Vol 12 No.2 December 1999

- Telepractice Policy Statement
- Policy on Licensees Working in Exempt Facilities
- No Duty to Warn: Says Texas Supreme Court

Telepractice Policy Statement:
The delivery of psychological services by telephone, teleconferencing, and the Internet is a rapidly evolving area. Board rules do not specifically address telepractice, teletherapy, teleconferencing, or electronically providing services. No rules currently prohibit such services. However, it is important for psychologists to be aware of a number of concerns about telecommunication-based service delivery including the following:

1. The increased potential that a therapist will have limited knowledge of a distant community's resources in times of crisis.
2. Problems associated with obtaining informed consent.
3. The lack of standards for training providers in the use of technology as well as the special therapeutic considerations in the use of the medium.
4. The lack of vocal, visual, and other sensory cues.
5. The potential that equipment failures may lead to undue patient anxiety particularly in crisis situations.
6. The potential inability of patients in crisis or those unfamiliar with technology to adequately access and use the technology.
7. The lack of full disclosure of provider credentials.
8. The lack of definition of professional relationships.
9. The lack of confidentiality and privacy.

All of these issues are actively being explored, discussed, and debated at both state and national levels. It is important to remember that the Psychologists' Licensing Act and all other laws affecting the delivery of psychological services apply to all psychological services

delivered anywhere within the state of Texas, regardless of whether or not they are provided via electronic media.
Complaints received by the Board regarding psychological services delivered through electronic media, including telephone, teleconferencing, electronic mail and Internet, will be evaluated by the Board on a case-by-case basis. However, the following general principles apply.
An individual who is physically located in another state shall be considered to be practicing psychology in Texas and, therefore, subject to the Act, if a recipient of psychological services provided by the individual is physically located in the state of Texas. Licensees should also be aware that services they offer to consumers in other states may similarly be regulated by the laws of the state in which the consumers are located.

The Board currently considers the use of non-traditional media to deliver psychological services, including telephone, teleconferencing, e-mail, and the Internet, as "emerging areas" as set forth in Board rule 465.9(e), Competency. That rule states: "in those emerging areas in which generally recognized standards for preparatory training do not exist, psychologists nevertheless take reasonable steps to ensure the competence of their work and to protect patients, clients, students, research participants, and other affected individuals from the potential for harm." Board rule 465.9(d) requires that licensees who provide services in new areas or involving new techniques do so only after undertaking appropriate study, training, supervision, and/or consultation from persons who are competent in those areas or techniques.

Other Board rules that licensees should also consider include:

465.1. Definitions
465.6. Listings and Advertisements
465.8. Psychological Services Are Provided within a Defined Relationship
465.10. Basis for Scientific and Professional Judgments
465.11. Informed Consent/Describing

Psychological Services
465.12. Privacy and Confidentiality
465.15. Fees and Financial Arrangements
465.16. Evaluation, Assessment, Testing, and Reports
465.17. Therapy and Counseling
465.36. Code of Ethics.

Other rules may also apply depending on the type of services involved.

It is important for licensees considering such services to review the characteristics of the services, the service delivery method, and the provisions for confidentiality to ensure compliance with the rules of the Board and the acceptable standards of practice.

Texas Administrative Code Title 22, part 34, Chapter 781, Subchapter B, Rule 781.223
When social workers use technology to provide services, they are subject to all rules and statutes, including this chapter and Occupations Code, Chapter 505, as if providing face to face services.

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Review of State of Texas Statutes and Regulations

Review of Licensure Statutes and Regulations Pertaining to Behavior Analysts in States with Behavior Analyst Licensure

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Summary

In reviewing state statutes and regulations pertaining to behavior analysts of states that license behavior analysts, comments occur in the statutes and/ or regulations of eight states. Kansas, Kentucky, and Massachusetts provide the most extensive coverage of telehealth service provision. Additionally, comments specifically mentioning behavior analysts and utilization of telehealth procedures occur for two states that do NOT license behavior analysts- California and Nebraska. The findings are incorporated in the following table with extended citations in an Appendix.

In general, the directions pertaining to incorporation of telehealth procedures in behavior analysis services address the following:

1. Supervision of behavior interventions via telehealth must be provided by a licensed behavior analyst or licensed psychologist (Alabama, Maryland) or licensed behavior analyst (Kansas, Kentucky, Massachusetts, Tennessee, Oklahoma) in the state in which the client receives services though this requirement seems implicit for all states.

2. Telehealth service provision is required to be HIPPA compliant regarding confidentiality and protection of client information (Kansas, Kentucky, Maryland, Massachusetts, Oregon) though this requirement seems implicit for all states.

3. The standard of care for provision of ABA services via telehealth procedures is the same as for in-person provision of ABA services (Kansas, Massachusetts).

4. Consent specifically for telehealth-based services, in addition to typical consent for services, is required in some states (Kentucky).

5. Insurance is to cover telehealth ABA services the same as is required for in-person service provisions (Kansas, Kentucky)- this might be implicit in statutes and rules in other states.

6.Provision of ABA services via telehealth is to be preceded by an in-person meeting between the licensed service provider and the patient is required in at least one state (Kentucky).

7. Prior to initiation of telehealth ABA services, in an in-person meeting between licensed service provider and patient is to occur in at least one state (Kentucky). In the meeting patient identity is to be verified, and information obtained by the provider regarding non-electronic means of contact between the patient and the provider, limitations and risks of telehealth service provision, emergency contact procedures, interaction expectations, consent for telehealth services, information sharing by the provider, prohibition on fee-splitting, and discontinuation of services.

8.Provision of telehealth ABA services to persons outside the state where the licensed provider is located possibly requires the provider to be a licensed provider in the state where the telehealth service provider is located (Massachusetts).

9. Providers of telehealth services are required to register with a state agency that they provide services in that manner (Alaska).

State	Findings
Alabama	AL 27-54A-2 (3) Behavioral health treatment. Counseling and treatment programs, including applied behavior analysis that are both of the following: a. Necessary to develop, maintain, or restore, to the maximum extent practicable, the functioning of an individual. b. Provided or supervised, either in persons or by telemedicine, by a Board-Certified Behavior Analyst, licensed in the State of Alabama, or a psychologist, licensed in the State of Alabama, so long as the services performed are commensurate with the psychologist's formal university training and supervised experience.
Alaska	No specific reference in stature, but the following is in bold in the middle of the website for BCBA Licensure: Following SB74, businesses engaged in the practice of telemedicine are required to register for placement on the Telemedicine Business Registry (TBR) through the Professional Licensing Section
Arizona	No reference found.
Arkansas	No reference found.
California	NOTE: California does not have specific licensure of behavior analysts. (Amended by Stats. 2018, Ch. 743, Sec. 2.5. (AB 93) Effective January 1, 2019.) ARTICLE 12. Enforcement [2220 - 2319] (Article 12 added by Stats. 1980, Ch. 1313, Sec. 2.)2290.5. (a) For purposes of this division, the following definitions shall apply: (1) "Asynchronous store and forward" means the transmission of a patient's medical information from an originating site to the health care provider at a distant site without the presence of the patient. (2) "Distant site" means a site where a health care provider who provides health care services is located while providing these services via a telecommunications system. (3) "Health care provider" means either of the following: (A) A person who is licensed under this division (behavior analysts are licensed under this division "Healing Arts". (B) An associate marriage and family therapist or marriage and family therapist trainee functioning pursuant to Section 4980.43.3. (4) "Originating site" means a site where a patient is located at the time health care services are provided via a telecommunications system or where the asynchronous store and forward service originates. (5) "Synchronous interaction" means a real-time interaction between a patient and a health care provider located at a distant site. (6) "Telehealth" means the mode of delivering health care services and public health via information and communication technologies to

	facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health care while the patient is at the originating site and the health care provider is at a distant site. Telehealth facilitates patient self-management and caregiver support for patients and includes synchronous interactions and asynchronous store and forward transfers.
Colorado	NA
Connecticut	No reference found
Delaware	NA
Florida	NA
Georgia	NA
Hawaii	No reference found
Idaho	NA
Illinois	NA
Indiana	NA
Iowa	No reference found
Kansas	January 1, 2019, enacted the Kansas Telemedicine Act (HB 2028): mandates the coverage of services delivered via telehealth provided by a healthcare provider licensed by the behavioral science regulatory board (e.g. Behavior Analysts). Coverage includes private insurance and Medicaid. Defines "telemedicine" as provided by means of real-time two-way interactive audio, visual or audio-visual communication. Does exclude telephone only communication from definition. NOTE: For complete policy, see Appendix.
Kentucky	Kentucky Revised Statutes KRS 319C.140, 319C.140 Patient's informed consent -- Confidentiality of medical information -- Administrative regulations governing telehealth services. (1) A treating behavior analyst or assistant behavior analyst who provides or facilitates the use of telehealth, shall ensure: (a) That the informed consent of the patient, or another appropriate person with authority to make the health-care treatment decision for the patient, is obtained before services are provided through telehealth; and (b) That the confidentiality of the patient's medical information is maintained as required by this chapter and other applicable law. At a minimum, confidentiality shall be maintained. NOTE For complete policy, see Appendix.
Louisiana	No reference found
Maine	NA
Maryland	Addressed in statute, definition section: 10.09.28.01 10.09.28.01 (33) "Remote access technology" means the use of HIPAA compliant technological methods to provide auditory and visual connection between a licensed psychologist, a licensed BCBA-D, or a licensed BCBA, who is not directly present, and a BCaBA or an RBT when services are being provided at the participant's home. (34) "Remote supervision" means the monitoring of a BCaBA or an RBT, performed via remote access technology by a licensed psychologist, a licensed BCBA-D, or a licensed BCBA.

Massachusetts	No specific reference found in behavior analyst licensure statute; addressed in general regulation relevant to licensed behavior analysts: Board of Registration of Allied Mental Health and Human Services Professions, Board Policies and Guidelines: Policy on Distance, Online, and Other Electronic-Assisted Counseling: Policy No. 07-03 The Board of Registration of Allied Mental Health and Human Services Professionals ("the Board") voted at its meeting on November 16, 2007 to adopt the following Policy Guideline. This policy guideline is intended as a recommended protocol for the profession to follow. The guideline set forth below does not have the full force and effect of law, as would a Massachusetts General Law or a Board rule or regulation. However, the Board uses policy guidelines as an internal management tool in formulating decisions that relate to issues in the practice of allied mental health and human services. Purpose: The Board acknowledges that therapy and counseling are increasingly being provided at a distance, making use of the internet, telephone and other electronic means of communication. The emergence of new clinical procedures is necessarily accompanied by uncertainty about legal and ethical obligations. The purpose of this policy statement is to offer guidance to Licensees regarding the ethical obligations and standards of conduct in the use of distance, on-line, and other electronic assisted counseling. NOTE For complete policy, see Appendix.
Michigan	No reference found
Minnesota	NA
Mississippi	No reference found
Missouri	No reference found
Montana	No reference found
Nebraska	NOTE: Nebraska does not license behavior analysts. Nebraska 44-7, 106 (c) Behavioral health treatment means counseling and treatment programs, including applied behavior analysis, that are: (i) Necessary to develop, maintain, or restore, to the maximum extent practicable, the functioning of an individual; and (ii) provided or supervised, either in person or by telehealth, by a behavior analyst certified by a national certifying organization or a licensed psychologist if the services performed are within the boundaries of the psychologist's competency;
Nevada	No reference found
New Hampshire	NA
New Jersey	NA
New Mexico	NA
New York	No reference found
North Carolina	NA
North Dakota	No reference found
Ohio	No reference found
Oklahoma	No reference found in statute; apparent reference in policy: 340:100-18-1. Board Certified Behavior Analyst license and Board Certified Assistant Behavior Analyst certification

	(b) Definitions. The following words and terms, when used in this Subchapter, shall have the following meanings, unless the context clearly indicates otherwise: (13) "Two-way interactions" means the observation of the provision of service using real-time visual and auditory contact through the use of technological devices.
Oregon	No reference found in statute; reference in regulations: https://www.oregon.gov/OHA/PH/HLO/Pages/Board-Behavior-Analysis-Regulatory.aspx Health Licensing Office, Behavior Analysis Regulatory Board - Chapter 824, Division 10, GENERAL ADMINISTRATION 824-010-0005 Definitions(11) "Direct supervision" means the training or the observation of an interventionist or a declarant providing client services and at a minimum requires the participation of the supervisor, the interventionist or declarant and client. Participation can include remote supervision through Health Insurance Portability and Accountability Act-compliant technology, as long as it is synchronous audio and visual, and in real time. Note: Has ABA company advertising telehealth service : https://steconsultants.com/portland-vancouver-services/
Pennsylvania	No reference found
Rhode Island	No reference found
South Carolina	NA
South Dakota	No reference found
Tennessee	Tennessee Code Annotated, Title 63 Professions Of The Healing Arts, Chapter 11 Psychologists, Part 3 Applied Behavior Analyst Licensing Committee 63-11-302. Part definitions. As used in this part: (10) "Real-time supervision" means observation and provision of feedback to a supervisee's delivery of ABA services by an LBA or an LABA who is supervised by an LBA during interactions occurring in person or via technology that permits auditory and visual contact between supervisors and supervisees; No reference found in rules.
Texas	No reference
Utah	No reference found
Vermont	No reference found
Virginia	No reference found
Washington	Note: Has ABA company advertising telehealth service : https://steconsultants.com/portland-vancouver-services/
West Virginia	NA
Wisconsin	No reference found
Wyoming	NA

Other Resources:

Telemedicine State Policy Resource Center

Center for Connected Health Policy- National Telehealth Resource

Telepsychology Task Force

Review of Research Regarding Telehealth ABA

Training and Delivery of Services

The use of telehealth technology in the field of applied behavior analysis (ABA) has undergone a number of experimental evaluations in recent years. A majority of the literature has focused on evaluating telehealth in the training of practioners, caregivers, and teachers in ABA technologies. Three relevant reviews of the literature provide guidance regarding the use of telehealth to prepare change agents. First, a systematic literature review by Neely and colleagues evaluated fidelity outcomes for autism-focused interventionists coached via telepractice (Neely, Rispoli, Gerow, Hong, & Hagan-Burke, 2017). They reviewed 19 studies (a majority behavior-analytic) and concluded telehealth training leads to large improvements in change agent implementation of assessments (e.g., functional analysis), teaching strategies (e.g., discrete trial teaching), and behavioral interventions (e.g., functional communication training). In particular, this literature base supports individualized feedback delivered via video-conferencing. Less evidenced is online modules and group trainings. Follow-up reviews evaluated the quality of the telehealth literature (Ferguson, Craig, & Dounavi, 2018; Tomlinson, Gore, McGill, 2018). Both applied the Reichow Evaluative Method for Evaluating and Determining Evidence-Based Practices in Autism (Reichow 2011; Reichow et al. 2008). Both noted methodological weaknesses in the literature base and concluded the use of telehealth to train change agents is currently "not evidence-based".

When considering outcomes for the recipients of the ABA assessments and interventions, all three of the reviews provided some initial guidance. However, none specifically focused on outcomes for the recipients (perhaps a reflection of literature focus on change agent behavior). Therefore, we conducted a systematic literature review. We conducted the search in December 2018 and identified 41 studies that provided data supporting client outcomes. We then synthesized the literature according to (a) participant information, (b) dependent variables, (c) ABA assessment and/or intervention, (d) experimental design, and outcomes for the participant served. All of the 396 participants included were aged 11 or younger. A majority were diagnosed with autism spectrum disorder, pervasive developmental disorder- not otherwise specified, or general developmental disability and delay (n=357). Other diagnoses included attention deficit hyperactivity disorder (n=15), fragile x syndrome (n=6), intellectual disability (n=3), and other disabilities (e.g., traumatic brain injury, Rett Syndrome, other health impairments, etc.). Studies predominately targeted child problem behavior (n=211) and social-communication outcomes (n=175 participants). Overall, the studies reported positive outcomes for 96% of participants (n = 393). Some of the studies reported mixed results for a subset of participants (i.e., Baharav & Reiser, 2010; Barkaia, Stokes, & Mikiashvili, 2017; Dupaul, Kern, Belk, Custer, Daffner, Hatfield, & Peek, 2018; McDuffie, Oakes, Machalicek, Ma, Bullard, Nelson, & Abbeduto, 2016; Meadan, Snodgrass, Meyer, Fisher, Chung, & Halle, 2016; Schieltz et al., 2018; Suess et al., 2014; Wainer & Ingersoll, 2015). When considering the quality of the research, 23 of the 41 studies met minimum design standards. Two randomized control trials indicated equivalent gains in child social-communication for telehealth versus face-to-face parent mediated treatment (Vismara et al., 2018) and equivalent improvement in child behavior for a telehealth versus face-to-face parent mediated behavioral treatment (DuPaul et al., 2018). The remaining studies utilized single-case research methodology and predominately reported medium to strong effects (0.5 – 1.0 Tau-U effect sizes) for the impact of telehealth ABA interventions on client communication outcomes, small to medium effects (0-0.7 Tau-U effect sizes) for the impact of

telehealth ABA interventions on reduction of client problem behavior, and medium to large effects for shaping or teaching new skills (0.5 – 1.0 Tau-U effect sizes). There were some no or negative effects reported for the impact of telehealth ABA interventions on child communication and problem behavior. To note, the study by Schieltz et al. (2018) specifically reported analysis of two failed behavioral interventions conducted via telehealth. The emerging literature supports the use of telehealth ABA interventions but additional research is necessary

General Recommendations

- The research supports the use of telehealth to train/coach on-site therapists or caregivers to implement ABA interventions. In particular, verbal and written instruction, video-modeling, and performance feedback were all active elements in facilitating accurate fidelity for the on-site facilitators
- Regarding client outcomes (e.g., children receiving the therapy), the best evidence supports the use of telehealth to treat challenging behavior by conducting a functional analysis and functional communication training, However, some evidence indicates that not all clients will respond via telehealth treatment. It is recommended that practitioners identify an on-site location where clients and their caregivers (as appropriate) can be treated in the event the client is non-responsive
- Until supportive research has identified the best candidates for telehealth treatment, practitioners should develop a triage protocol and termination criteria for telehealth treatment
- The research supports the use of telehealth to teach simple communication responses (e.g., one-word mands). Practitioners should utilize ongoing data-evaluation procedures to analyze the effects of telehealth treatment for complex communication interventions.

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Challenges of Remote Observation and Coaching

Via Telehealth Technologies (Video Conferencing)

The provision of medical and other human services remotely rather than in-person raises numerous challenges (e.g., securing consistent internet access, assuring confidentiality of information, obtaining adequately informed consent, ensuring treatment efficacy when using remotely-provided treatment, protecting procedural fidelity). These challenges are directly relevant to behavior analysts as they enter the exciting world of remote ABA services using new digital technology.

Below, we summarize the experiences of 18 behavior analyst practitioners at four different sites in Iowa, Texas, and Georgia who provided telehealth caregiver training services to 237 families between January 2015 and April 2019. In preparation for this paper, the practitioners at each site met to generate a list of challenges that they had encountered and solutions that they had employed while providing telehealth services to families. The resulting information was divided into six categories for organizational purposes: (a) technical issues, (b) challenges with remote viewing, (c) disruptions in the client's environment, (d) other issues related to client behavior, (e) issues related to caregiver behavior, and (f) additional issues at the practitioner (host) site. The tables below display common challenges and possible solutions within these categories. A discussion of ethical issues related to the use of telehealth and general guidelines for providing effective telehealth services follow these tables.

Technical Issues

Problem	Possible Solutions
Client does not have access to a computer or laptop with an external webcam and landline	(1) Use any smart device with built-in camera (phone, iPad, tablet) that supports necessary software; (2) establish a lending library; (3) have client conduct sessions at a nearby clinic or center with the equipment
Client does not have access to adequate internet speed	(1) Ask client to upgrade modem or internet service; (2) reduce number of devices accessing internet simultaneously to free up bandwidth; (3) have client conduct sessions in room of the house with best internet access; (4) have client conduct sessions at a nearby clinic or center with adequate internet speed.
Client has difficulty using the software	(1) Provide a detailed task analysis; (2) check if browser is compatible and updated; (3) switch to more user-friendly software; (4) switch devices if possible.
Video feed fuzzy due to connectivity issues	(1) Restart video feed; (2) have client tap screen if using smart phone; (3) increase amount of vocal coaching and have parent describe what is occurring
Visibility issues due to lighting in room (e.g., near a window with natural light)	Move away from the window, close the drapes, or relocate to a room with different lighting
Software failure during appointment	(1) Ask client to videotape session and send for feedback; (2) try backup software options; (3) switch device

Hardware failure	Provide loaner until fixed
Audio failure during appointment	Use telephone, e-mail, or messaging application (with appropriate privacy controls) to communicate with the caregiver

Challenges with Remote Viewing

Problem	Possible Solutions
Client does not remain in range of camera lens due to size of room	(1) Modify position/height of camera (raise up by placing on shelf or tripod; test a variety of positions during initial appointment); (2) use external webcam to give more position options; (3) move to smaller room; (4) use two cameras.
Client frequently elopes from room or area	(1) Use child gate or other barrier (e.g., furniture); (2) move to room with doors; (3) instruct caregiver/staff on how to physically block elopement; (4) position additional camera outside of the room or area; (5) have caregiver/staff carry or attach a smart device to their body so that they can follow the client; (6) consider possible function of elopement and modify relative antecedents (e.g., put desired objects in room)
Client goes behind or under furniture	(1) Move to different room; (2) remove or rearrange furniture; (3) block access to certain areas of the room or access to furniture (via structures/gates); (4) pause session until client is visible
Client behavior difficult to see/hear	(1) Establish a system for caregiver/staff to signal the occurrence of selected target; (2) position additional camera close to client
Practitioner difficult for caregiver/staff to see/hear	(1) Have caregiver/staff use a headphone/mic; (2) establish a signal for practitioner to indicate attempts to communicate; (3) provide more explicit coaching or a task analysis prior to beginning session, (4) signal a "time out" to stop session to discuss and provide feedback on fidelity; (5) text instructions to caregiver

Disruptions in Client's Environment

Problem	Possible Soutions
Items present/available in room disruptive to sessions (e.g., preferred items)	(1) Consider alternative rooms; (2) remove items prior to session; (3) hide items; (4) teach caregiver/staff how to block access to items; (5) incorporate these items into sessions.
The smart device used for the teleconferencing is a preferred item for client	(1) Use two devices (one for the telehealth and one as a preferred item); (2) hide the device (connect the device to an external webcam with an extended cord and place a cover over the device so that it hidden); (3) schedule time for the client to access the device outside of sessions; (4) provide access to competing, highly preferred items during sessions.
Other family members enter room/interrupt sessions	(1) Schedule sessions when other family members not at home; (2) have other caregiver attend to other children in separate location; (3) instruct parent on best methods for

(divert caregiver/client's attention)	redirecting client if they attempt to interact with other family members; (4) for single caregivers with multiple children, have caregiver provide access to preferred items outside of session room, watch via baby monitor, and schedule breaks between sessions
Client breaks/destroys items in room	(1) Instruct caregiver/staff to remove breakable items prior to appointment; (2) consider different location; (3) instruct caregiver to block

Other Issues Related to Client Behavior

Problem	Possible Solutions
Client escalation of dangerous behavior during sessions (aggression/self-injury)	(1) Mail protective equipment; (2) coach caregivers/staff on blocking/use of padding; (3) train caregivers/staff without client present (e.g., model on camera with colleague)
Client reactivity to therapist's presence in the camera or to the vocal instructions	(1) Have caregivers/staff use blue tooth headphones; (2) turn off video feed and/or mute audio; (3) speak to caregivers in client's absence; (4) never speak directly to client; (5) conduct initial free play sessions to reduce reactivity; (6) communicate via text while muting microphone and camera
Client disrobes frequently	(1) Be ready to turn off recording; (2) have client wear clothes that are difficult to remove

Issues Related to Caregiver/Staff Behavior

Problem	Possible Solutions
Emotional responding of implementer (yelling, crying)	Speak to implementer in absence of client
Implementer overly casual (appearing in pajamas)	Discuss expectations at the outset of treatment
Practitioner views evidence of abuse/neglect	Learn mandatory reporting procedures in the client's state and explain mandatory reporting obligations in initial consent meeting
Implementer uses loaner technology inappropriately (for personal use)	Establish contract
Implementer distracted by other things in home (e.g., checking mail, answering door)	(1) Speak with them about expectations; (2) schedule appointments at times less likely to contain distractions (e.g., evenings when there will be fewer visitors, etc.)

Implementer uncomfortable running sessions alone	(1) Recruit other family members to assist; (2) select a treatment that would minimize extinction bursts
Implementer procedural integrity is poor (not responsive to vocal instructions)	(1) Conduct in-vivo outreach; (2) schedule at least once session in clinic; (3) provide modeling and coaching without the client present (e.g., role-play with a colleague); (4) provide more detailed vocal and written instructions/feedback; (5) review recordings with the implementer (video feedback); (6) if multiple implementers available, start with the one with better procedural integrity and have them help train the other implementer

Issues Related to Host (Practitioner) Site

Problem	Possible Solutions
Practitioner must share office with others (confidentiality/distraction)	(1) Use headsets and speak softly; (2) stagger appointment times
Practitioner has difficulty reading implementer's nonverbal cues	(1) insert longer pauses before speaking; (2) practice training sessions with colleagues
Practitioner is not trained in telehealth modality	(1) Develop systematic training procedure and train practitioners to fidelity. (2) Consider probing/training in in-vivo modality first to ensure fidelity in-vivo before translating to telehealth modality

Ethical Considerations

Providing services remotely introduces additional ethical issues that go beyond the challenges outlined in the previous tables. Most important, practitioners should determine if they can provide telehealth services ethically and effectively for clients whose caregivers likely will need more assistance than remote coaching can accommodate should be referred for in-person services. Telehealth technologies also introduce the possibility of breaches to client confidentiality To reduce the likelihood of this risk, all practitioners should use only HIPAA-compliant software from companies that will establish a Business Associated Agreement (BAA) with the practitioner and should employ protocols to ensure that unauthorized individuals do not access videoconferences. Practitioners who provide services to clients residing in other states should familiarize themselves with all relevant state laws regarding their practice (e.g., licensure, reimbursement for telehealth services) to ensure that they remain in compliance. The following articles provide additional discussion of ethical issues related to the delivery of ABA services via telehealth:

Pollard, J. S., Karimi, K. A., & Ficcaglia, M. B. (2017). Ethical considerations in the design and implementation of a telehealth service delivery model. Behavior Analysis: Research and Practice, 17, 298-311. doi: 10.1037/bar0000053

Romani, P. W., & Schieltz, K. M. (2017). Ethical considerations when delivering behavior analytic services for problem behavior via telehealth. Behavior Analysis: Research and Practice, 17, 312-324. doi: 10.1037/bar0000074

General Recommendations

- Practioners should schedule an initial troubleshooting session with new clients before beginning services to detect and resolve potential technological problems (e.g., adequacy of internet speed, compatibility of hardware and software), interferences with remote viewing (e.g., camera position, size of room), and likely disruptions in the client or host environments (e.g., presence of other family members).
- Practioners also should modify the typical terms of service and consent forms to address issues that may arise when providing services via telehealth including expectations about the activities and roles of the caregiver and practitioner during each scheduled appointment; agreements regarding the care, use, and return of loaned equipment; potential limitations of remote coaching (e.g., greater reliance on vocal instructions); and potential limits to confidentiality.
- Arranging for an Information Technology (IT) professional to assist with problems as they arise can help minimize treatment delays. Other strategies that may help the practitioner manage technological issues include remaining in phone contact with caregivers during appointments to ensure adequate communication despite problems with technology and video recording all sessions.

Appendix

Review of Licensure Statutes and Regulations Pertaining to Behavior Analysts in States with Behavior Analyst Licensure

KANSAS

Addressed in recently enacted statute relevant to all human and medical providers included coverage of telehealth by insurance companies and state medical assistance plan:

Kansas Telemedicine Act (Senate Sub for HB 2028) Sec. 3.

(a) The same requirements for patient privacy and confidentiality under the health insurance portability and accountability act of 1996 and 42 C.F.R. § 2.13, as applicable, that apply to healthcare services delivered via in-person contact shall also apply to healthcare services delivered via telemedicine. Nothing in this section shall supersede the provisions of any state law relating to the confidentiality, privacy, security or privileged status of protected health information.

(b) Telemedicine may be used to establish a valid provider-patient relationship.

(c) The same standards of practice and conduct that apply to healthcare services delivered via in-person contact shall also apply to healthcare services delivered via telemedicine.

(d) (1) A person authorized by law to provide and who provides telemedicine services to a patient shall provide the patient with guidance on appropriate follow-up care.

(2) (A) Except when otherwise prohibited by any other provision of law, when the patient consents and the patient has a primary care or other treating physician, the person providing telemedicine services shall send within three business days a report to such primary care or other treating physician of the treatment and services rendered to the patient in the telemedicine encounter.

(B) A person licensed, registered, certified or otherwise authorized to practice by the behavioral sciences regulatory board shall not be required to comply with the provisions of subparagraph (A).

(e) This section shall take effect on and after January 1, 2019.

New Sec. 4.

(a) The provisions of this section shall apply to any individual or group health insurance policy, medical service plan, contract, hospital service corporation contract, hospital and medical service corporation contract, fraternal benefit society or health maintenance organization that provides coverage for accident and health services and that is delivered, issued for delivery, amended or renewed on or after January 1, 2019. The provisions of this section shall also apply to the Kansas medical assistance program.

(b) No individual or group health insurance policy, medical service plan, contract, hospital service corporation contract, hospital and medical Senate Substitute for HOUSE BILL No. 2028—page 2 service corporation contract, fraternal benefit society, health maintenance organization or the Kansas medical assistance program shall exclude an otherwise covered healthcare service from coverage solely because such service is provided through telemedicine, rather than in-

person contact or based upon the lack of a commercial office for the practice of medicine, when such service is delivered by a healthcare provider.

(c) The insured's medical record shall serve to satisfy all documentation for the reimbursement of all telemedicine healthcare services, and no additional documentation outside of the medical record shall be required.

(d) Payment or reimbursement of covered healthcare services delivered through telemedicine may be established by an insurance company, nonprofit health service corporation, nonprofit medical and hospital service corporation or health maintenance organization in the same manner as payment or reimbursement for covered services that are delivered via in-person contact are established.

Possibly relevant reference in regulations:
Reference to continuing education obtained by "telecast (sic)" see Kansas Behavioral Sciences Regulatory Board 102-8-10. Documentation of continuing education. (d.)

KENTUCKY

Kentucky Revised Statutes KRS 319C.140

319C.140 Patient's informed consent -- Confidentiality of medical information - Administrative regulations governing telehealth services.

(1) A treating behavior analyst or assistant behavior analyst who provides or facilitates the use of telehealth, shall ensure:

(a) That the informed consent of the patient, or another appropriate person with authority to make the health-care treatment decision for the patient, is obtained before services are provided through telehealth; and

(b) That the confidentiality of the patient's medical information is maintained as required by this chapter and other applicable law. At a minimum, confidentiality shall be maintained appropriate processes, practices, and technology as designated by the board and that conform to applicable federal law.

(2) The board shall promulgate administrative regulations in accordance with KRS Chapter 13A to implement this section and as necessary to:

(a) Prevent abuse and fraud through the use of telehealth services;

(b) Prevent fee-splitting through the use of telehealth services; and

(c) Utilize telehealth in the provision of applied behavior analysis and in the provision of continuing education.

(3) For purposes of this section, "telehealth" means the use of interactive audio, video, or other electronic media to deliver health care. It includes the use of electronic media for diagnosis, consultation, treatment, transfer of health or medical data, and continuing education.

Effective: July 15, 2010
History: Created 2010 Ky. Acts ch. 150, sec. 14, effective July 15, 2010.

Kentucky Administrative Regulations 201 KAR 43:100
201 KAR 43:100. Telehealth and telepractice.
RELATES TO: KRS 319C.140(2)
STATUTORY AUTHORITY: KRS 319C.140(2)
NECESSITY, FUNCTION, AND CONFORMITY: KRS 319C.140(2) requires the board to promulgate administrative regulations related to utilization of telehealth as a means of healthcare

delivery. This administrative regulation establishes the requirements for telehealth and telepractice in applied behavior analysis.

Section 1. Requirements for Licensees Providing Applied Behavior Analytic Services via Telehealth.

1. A licensee who provides applied behavior analytic services via telehealth shall:
   b) Maintain competence with the technologies utilized, including understanding and adequately addressing the actual and potential impact of those technologies on clients, supervisees, or other professionals;
   c) Maintain compliance with KRS Chapter 319C, 201 KAR Chapter 43, and all other applicable federal, state, and local laws;
   d) At the onset of the delivery of care via telehealth, identify appropriate emergency response contacts local to the client so that those contacts shall be readily accessible in the event of an emergency;
   e) Protect and maintain the confidentiality of data and information in accordance with all applicable federal, state, and local laws; and
   f) Dispose of data and information only in accordance with federal, state, and local law and in a manner that protects the data and information from unauthorized access.
   g) Applied behavior analysis with a client shall not commence via telehealth.
   h) An initial, in-person meeting for the licensee and client who prospectively utilize telehealth shall occur.
3. The licensee shall, at the initial, in-person meeting with the client:
   1. Make reasonable attempts to verify the identity of the client;
   2. Obtain alternative means of contacting the client other than electronically;
   3. Provide to the client alternative means of contacting the licensee other than electronically;
   4. Document if the client has the necessary knowledge and skills to benefit from the type of telehealth to be provided by the licensee; and
   5. Inform the client in writing about and obtain the client's informed written consent regarding:
4. The limitations of using technology in the provision of applied behavior analytic services;
   a) Potential risks to confidentiality of information due to technology in the provision of applied behavior analytic services;
   b) Potential risks of disruption in the use of telehealth technology;
   c) When and how the licensee will respond to routine electronic messages;
   d) In what circumstances the licensee will use alternative communications for emergency purposes;
   e) Who else may have access to client communications with the licensee;
   f) How communications can be directed to a specific licensee;
   g) How the licensee stores electronic communications from the client; and
   h) That the licensee or client may elect to discontinue the provision of services through telehealth at any time.

Section 2. Jurisdictional Considerations.

1. A person providing applied behavior analytic services via telehealth to a person physically located in Kentucky while services are provided shall be licensed by the board.

2. A person providing applied behavior analytic services via telehealth from a physical location in Kentucky shall be licensed by the board and may be subject to licensure requirements in other states where the services are received by the client.

Section 3. Representation of Services and Code of Conduct. A licensee using telehealth to deliver services shall not:

1. Engage in false, misleading, or deceptive advertising; and
2. Split fees. (40 Ky.R. 2649; 41 Ky.R. 35; eff. 8-1-2014.)

MASSACHUSETTS

Board of Registration of Allied Mental Health and Human Services Professions, Board Policies and Guidelines: Policy on Distance, Online, and Other Electronic-Assisted Counseling: Policy No. 07-03. The Board of Registration of Allied Mental Health and Human Services Professionals ("the Board") voted at its meeting on November 16, 2007 to adopt the following Policy Guideline. This policy guideline is intended as a recommended protocol for the profession to follow. The guideline set forth below does not have the full force and effect of law, as would a Massachusetts General Law or a Board rule or regulation. However, the Board uses policy guidelines as an internal management tool in formulating decisions that relate to issues in the practice of allied mental health and human services.

Purpose: The Board acknowledges that therapy and counseling are increasingly being provided at a distance, making use of the internet, telephone and other electronic means of communication. The emergence of new clinical procedures is necessarily accompanied by uncertainty about legal and ethical obligations. The purpose of this policy statement is to offer guidance to Licensees regarding the ethical obligations and standards of conduct in the use of distance, on-line, and other electronic assisted counseling.

Policy: The Board's policy with regard to all distance or electronic-assisted provision of clinical services is as follows:

1. The services offered by licensees of this Board across a distance by electronic means, fall within the jurisdiction of the Board just as traditional, face-to-face services do. Therefore all Board policies and regulations will apply to these services.
2. Distance delivery of counseling and therapy is considered to occur in two locations: where the client is located and where the clinician is located.
3. Therefore, the provision of counseling and/or therapy to individuals located within Massachusetts at the time services are occurring, are considered to fall under the jurisdiction of the Board, regardless of the location of the provider.
4. Mental health professionals licensed by any jurisdiction other than Massachusetts, and not licensed by any Massachusetts Board or not eligible for an exception to Massachusetts licensure, are considered unlicensed by this Board for practice in Massachusetts.
5. Mental health professionals licensed by other jurisdictions who wish to provide services to clients within Massachusetts, are encouraged to apply for Massachusetts licensure. Some, licensees may find the following helpful:
    1. Mental Health Counselors: 262CMR 2.03, (1) Licensure for CCMHC's in good standing with NBCC
    2. MFT's: 262 CMR 3.04 Licensure by Reciprocity for MFT's.

6. Board licensees who wish to provide services via electronic means to clients located outside of Massachusetts are urged to ensure that they meet the requirements for practice within the jurisdiction where the client is located.
7. Licensees are encouraged to carefully review the way in which the structure of their relationships with clients will be impacted by distance-therapy or counseling to ensure compliance with Board regulations and standards of practice.
8. The following are some areas of practice that licensees should carefully consider:
    a) Informed consent
    b) Confidentiality
    c) Basis for making clinical judgments
    d) Areas of competence
    e) Avoiding harm
    f) Fees and financial arrangements
    g) Advertising
    h) Abandonment of clients
    i) Handling requests for obtaining clinical records
9. The Board expects licensees to understand and overcome the significant challenges inherent in providing counseling and therapy without face-to-face contact with the client.
10. Some of the challenges that licensees are expected to manage include, (subsequent information not found)

Summary and Recommendations Regarding Telehealth ABA Services in Texas

General Conclusions

1. Provision of ABA services via telehealth is already occurring in Texas. For example, LBAs at several universities in Texas are conducting research related to telehealth ABA (e.g., University of Houston Clear Lake, University of Texas San Antonio, Baylor University, and Texas Tech University). Currently the research addresses training and supervision of persons providing ABA services. According to informal reports, similar ABA services involving training and supervision are being provided for persons providing ABA services for persons diagnosed with autism; confirmation of those reports has proven elusive to date.

2. At present, there are no statutes or rules in Texas regarding licensure of behavior analysis that explicitly address provision of behavior analysis services using telehealth procedure. There are, however, statutes and rules regulating telehealth provision of medical and human service professions that appear potentially relevant to behavior analysts. The Texas Medicaid program has issued a handbook providing regulation of telehealth and telemedicine provision of Medicaid-funded services. If Medicaid coverage is extended to behavior analytic services, then those directions will be applicable to telehealth ABA

3. The evidence base for telehealth ABA has grown substantially over the past decade. To date, the data indicate that telehealth ABA services are effective in training and supervising persons implementing ABA interventions and behavior analytic assessments (e.g., functional analyses, preference assessments, etc; Barretto, Wacker, Harding, Lee, & Berg, 2006; Boisvert, Lang, Andrianopoulos, & Boscardin, 2010; Fisher, Luczynski, Hood, Lesser, Machado, & Piazza, 2014; Gibson, Pennington, Stenhoff, & Hopper, 2010; Machalicek et al., 2009; Vismara, Young, Stahmer, McMahon Griffith, & Rogers, 2009; Wacker et al., 2013). At present the evidence to support providing ABA interventions directly to patients does not meet empirical standards for recommendation (Cook et al., 2014; Gillam & Gillam, 2006; Kratochwill et al, 2010; Reichow, Doehring, Cicchetti, & Volkmar, 2010; Tate et al., 2016). Until sufficient empirical evidential support for doing so is published in the professional literature, applications of telehealth ABA involving direct intervention are to be limited to research activities.

4. As with all behavior analytic services including Medicaid-funded services, the intervention procedures used in provision of ABA services using telehealth methods are to be evidence-based. A good basic resource regarding evidence ABA interventions is Slocum, et al. (2014). Information regarding ABA interventions that are considered evidence-based may be found in behavior-analytic journals (e.g., Journal of Applied Behavior Analysis, Behavior Analysis in Practice, The Analysis of Verbal Behavior), behavior-analytic organizations (e.g., Association for Behavior Analysis International, Association for Professional Behavior Analysts, Behavior Analyst Certification Board). Specific information related to evidence ABA practices is available at behavior-analytic consumer websites (e.g., The National Autism Center,

https://www.nationalautismcenter.org/national-standards-project/; Roth, Gillia, & DiGennaro Reed. (2014)- particularly interventions with evidence indicated as "Conclusive"; Weitlauf, McPheeters, Peter; Warren, 2014; Young, Corea, Kimani, & Mandell, 2010). Some relevant information is contained in some older reviews, as well (e.g., National Research Council, 2001; New York Department of Health, 1999).

Recommendations

1. Practitioners providing telehealth ABA services to persons in Texas should be licensed in Texas to provide ABA services in Texas or else meet one of the exemption conditions (c.f., university or college instruction, working with non-human organisms, OBM, as duties as public school employee).

2. Persons in Texas providing telehealth ABA services to a person outside of Texas should be licensed to provide ABA services in the governmental jurisdiction in which the client claims permanent residence. Persons providing telehealth ABA from a location in Texas should be licensed in Texas as well as in the jurisdiction in which the client resides. These considerations are relevant to when either a client or a therapist is outside of Texas such as when traveling, on vacation, or military deployment.

3. Persons providing telehealth ABA services must be adequately trained and supervised in best practices for providing services remotely and in ethical issues uniquely relevant to telehealth service provision (e.g., collecting, storing, and transmitting sensitive information). Training of this nature could be provided by university programs, organizations providing telehealth ABA services, Texas Association for Behavior Analysis (TxABA) such as at workshops and at the annual conference, other professional organizations (e.g., ABAI, APBA). Participation only in workshop and classroom instruction insufficiently prepares a person to provide telehealth ABA services. For maximally effective services and adequate protection of the public, inclusion of supervised "hands-on" training by an LBA with demonstrated expertise providing such telehealth ABA services as well as competency-based training regarding ethical issues is essential for persons intending to provide telehealth ABA services.

4. Persons providing telehealth ABA services should prepare contingency plans in advance to address challenges that are likely to occur during provision of those services as addressed earlier in this report as well as others that subsequently become known. These contingency plans should be reviewed with the client prior to the onset of telehealth services, as well as whenever they are updated.

5. Further research is needed regarding client characteristics or situations that appear most likely to result in effective provision of telehealth ABA services. Findings regarding that research should be articulated by the profession as well as those in which effective provision of telehealth ABA services is unlikely or otherwise ill-advised.
6. ABA services may be provided via telehealth as part of a more comprehensive model for addressing needs of clients (e.g., diagnostics, neurological assessments, speech, OT, PT, medical, etc.), as well as for training of future clinicians via virtual grand rounds.

7. The governmental agency that licenses behavior analysts in Texas should promulgate rules including those explicitly addressing provision of ABA services by means of telehealth procedures, attending to challenges in providing services via telehealth that seldom arise when providing the services in person. Input should be requested from the Texas Association for Behavior Analysis (TxABA) and LBAs providing telehealth ABA services.

8. Emerging ethical issues related to telehealth ABA services should be monitored and addressed on an ongoing basis.

9. Update recommendations based on ongoing research and experience annually.

Questions to be considered

1. What ecological analysis of the service environment needs to be conducted before initiating telehealth ABA?
2. What preliminary training should a service provider have completed before conducting ABA interventions with supervision by telehealth procedures?
3. In what conditions might telehealth ABA be contraindicated?
4. What is the minimum equipment and internet access that is required for effective telehealth ABA?
5. Is an onsite consultation required before initiation of telehealth ABA services?
6. How will access to necessary equipment (e.g., computer, video camera) and broadband internet services be made available in rural area and/ or to persons with severely limited financial resources?

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