Creating Connections:

Addressing the Needs of Children with Autism and Other Developmental Disabilities Using Telehealth

2017 Capacity Assessment

WASHINGTON STATE DEPARTMENT OF HEALTH

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Prepared by Washington State Department of Health Staff
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Glossary

ABA: Applied Behavior Analysis

Applied behavior analysis (ABA) is a systematic approach for influencing socially important behavior in patients through identifying reliably related environmental variables and using behavior change techniques based on these findings. Behavior analysts provide services consistent with the dimensions of ABA. Common services may include, but are not limited to: conducting behavioral assessments, analyzing data, writing and revising behavior-analytic treatment plans, training others to implement components of treatment plans, and overseeing the implementation of treatment plans. Behavior analysts provide services to clients with a variety of needs including, but not limited to: organizational functioning (e.g., staff performance, management and pay structure interventions), skill deficits (e.g., communication, adaptive behavior), and problem behavior (e.g., aggression, self-injurious behavior).

ABA Providers

There are three types of ABA providers in Washington State: **Certified Behavior Technician, Licensed Assistant Behavior Analyst**, and **Licensed Behavior Analyst**.

Certified Behavior Technician (CBT)

A certified behavioral technician is a paraprofessional who implements a behavior analysis treatment plan under the close, ongoing supervision of a licensed behavior analyst or a licensed assistant behavior analyst, but who doesn't design or supervise the implementation of a behavior analysis treatment plan.

To become a CBT, the technician must:

- Be at least 18 years of age;
- Have a high school diploma or equivalent; and
- Be a Behavior Analyst Certification Board registered behavior technician (RBT).

OR

Successfully complete a 40-hour behavior technician training program outlined in WAC 246-805-310 that includes:

- Classroom, online, or supervisor-led instruction
- Experiential learning
- Evaluation and assessment

Licensed Assistant Behavior Analyst (LABA)

A licensed assistant behavior analyst is an individual who is licensed to engage in the practice of applied behavior analysis under the supervision of a licensed behavior analyst (LBA).

To become an **LABA**, the analyst must:

- Be certified as a board certified assistant behavior analyst (BCaBA) from the Behavior Analyst
  Certification Board.

OR

- Graduate from a recognized bachelor's degree program under WAC 246-805-210. An official transcript must be provided as evidence of the degree required;
- Complete a minimum of 155 classroom hours of instruction in behavior analysis topics described in WAC 246-805-220. An official transcript must be provided as evidence of the course work required; and
- Complete a supervised experience requirement under WAC 246-805-230.

Licensed Behavior Analyst (LBA)

A licensed behavior analyst is an individual who is licensed to engage in the practice of applied behavior analysis.

To become an LBA, the analyst must:

- Have be a board certified behavior analyst (BCBA), certified by the Behavior Analyst Certification Board.

OR

- Have a master's or doctorate degree in behavior analysis or other natural science, education, human services, engineering, medicine, or field related to behavior analysis approved by the secretary. An official transcript must be provided as evidence of the degree required;
- Completed a minimum of two 225 classroom hours of graduate-level instruction in behavior analysis topics. An official transcript must be provided as evidence of the course work required;
- Completed a supervised experience requirement, consisting of a minimum of 1,500 hours; and
- Completed the national BCBA examination.

ASD/DD: Autism Spectrum Disorders and other Developmental Disabilities

Autism spectrum disorders (ASD) are neurodevelopmental disorders characterized by impaired social communication skills and isolated areas of interest. ASD is an umbrella diagnosis for autistic disorder, Asperger's disorder, childhood disintegrative disorder, and pervasive developmental disorder not otherwise specified. Autism varies widely in severity, but is generally marked by communication problems, social difficulties and, often, repetitive behaviors. Developmental disabilities (DDs) are a group of conditions due to an impairment in physical, learning, language, or behavior areas.

BCBA: Board Certified Behavior Analyst

A board certified behavior analyst (BCBA) is certified at the graduate level in applied behavior analysis to provide behavior-analytic services. In addition, BCBAs supervise the work of board certified assistant behavior analysts (BCaBA), registered behavior technicians (RBT), and others who implement behavior-analytic interventions.

COE: Centers of Excellence for Autism Diagnosis

Centers of excellence (COEs) are diagnostic centers for autism spectrum disorders (ASD) that qualify Washington State Medicaid clients for applied behavior analysis (ABA). COEs are trained and certified by the Health Care Authority, which administers Washington's Medicaid program. A COE can be any medical practice, psychology practice, or multidisciplinary team that has been trained and certified by HCA.

NDC: Neurodevelopmental Centers

A neurodevelopmental center (NDC) is a Department of Health-designated non-profit agency, hospital, or other organization located in Washington State that provides outreach, evaluation, diagnosis, treatment planning, and specialized therapies including but not limited to occupational, physical, and speech therapy to children and youth up to 20 years of age with special health care needs.

Executive Summary

Introduction

Telehealth remains an untapped resource for providing services to children and their families across the state. Our assessment, conducted in 2017, shows that there are inadequate numbers of providers and applied behavior analysis (ABA) providers specifically to meet the needs of children with autism spectrum disorders and other developmental disabilities. This is especially true in rural and urban regions of Washington, resulting in long waiting times for diagnostic and treatment services. In order to use telehealth to address this issue, we will need to build capacity across the state to use this technology.

To better understand the current telehealth landscape and potential barriers providers and caregivers may face, the Autism Spectrum Disorders and Other Developmental Disabilities (AS3D) Initiative at Washington State Department of Health reviewed Medicaid coverage, state laws and rules, and conducted a provider capacity assessment, a family and caregiver survey, and key informant interviews with a variety of providers (e.g., psychologists, physicians, and behavioral technicians). This report shares recommendations for expanding the existing telehealth infrastructure which will be incorporated into a strategic plan to be released in 2018.

Provider Capacity Assessment

The goals of the provider capacity assessment were to understand the current capacity of health care providers to offer telehealth services, to understand challenges that limit capacity, and to determine if providers needed technical support around telehealth for children with autism spectrum disorders and other developmental disabilities (ASD/DD). The survey focused on the capacity for telehealth in neurodevelopmental centers (NDCs), Medicaid-designated centers of excellence for autism diagnosis (COEs), and applied behavior analysis (ABA) providers.

Results

According to the results, an average of 60 percent of the providers' patients were covered by Medicaid. Many providers reported concerns about their ability to bill and be reimbursed by Apple Health (Washington State's Medicaid program) for telehealth services for children with autism spectrum disorders and other developmental disabilities, for physical, speech, and occupational therapies and ABA services. Lack of equipment and funding were also top barriers to the implementation and use of telehealth. Among providers that are not yet offering telehealth services, "provider training" and "lack of technical knowledge" were common barriers. Providers were also concerned with privacy, HIPAA compliance, and malpractice liability related to virtual appointments. Among survey participants, the demand among patients for telehealth services would need to increase in order to justify the additional investments necessary to provide those services. Southwest and Eastern Washington have the lowest percentage of providers offering any telehealth services (22 percent each), which represents an opportunity for outreach in those areas to expand telehealth capacity.

AS3D Key Informant Interviews

Key informant interviews were conducted to supplement the information given by providers in the provider capacity assessment. The goal of the key informant interviews was to learn from a variety of providers (e.g., psychologists, physicians, and behavioral technicians) about their experiences with telehealth for children with autism spectrum disorder and other developmental disabilities. The interviewees were selected based on experience and expertise using telehealth and were identified through AS3D partnership activities.

RESULTS

While there is a fair amount of support among providers for the use of telehealth, there are barriers that need to be addressed. Providers wanted more information on how to bill and get reimbursed for telehealth services and want clarity (training and clearly written insurance policies) on exactly what is currently billable according to insurance, including Medicaid. Additionally, providers want training on setting up a telehealth program to include how to train staff. Providers also wanted information on standards of care for services delivered via telehealth as well as information on how to access language interpreters.

Family and Caregiver Survey

The purpose of the family and caregiver survey was to assess how caregivers of children and youth with special health care needs (CYSHCN) perceive telehealth services and what telehealth services might mitigate or eliminate. This survey included families and caregivers of children with special health care needs, including autism spectrum disorders and other developmental disabilities.

RESULTS

The most common barrier (reported by caregivers) to accessing health care services was waitlists. The second greatest challenge was transportation. The third most common challenge was having access to providers in their communities. Caregivers reported experiencing delays with speech, occupational, autism-related therapies including ABA therapy, and other behavioral or social therapy. Caregivers also noted insurance coverage as a barrier to services access. They are most receptive to trying telehealth for consultation or coaching and to access pre-recorded videos. Half of participants would consider using telehealth to learn how to do ABA therapy with their child, and 37 percent were open to using it for diagnostic services.

Caregivers also reported that they would want to have a clearer understanding about the "qualifications of the provider," in the case where the telehealth provider is different from the provider they have been seeing in person. When asked about potential benefits of using telehealth, caregivers noted the following advantages: reduced stress related to leaving the home environment and long commutes to a doctor's office, greater scheduling flexibility and shorter wait times for appointments, saving time and money on transportation to appointments, and having access to specialists in other areas.

Conclusions/Recommendations

Overall, the capacity assessments show that caregivers are very interested in using telehealth to receive services and that providers see it as a viable option for their practices. Both caregivers and providers see telehealth as a way to support consultation, screening, diagnosis, functional analysis, applied behavioral analysis supervision, and parent coaching or training. Washington Medicaid covers many services that are allowed to be delivered via telehealth.

However, there are barriers to successful implementation. These include lack of knowledge on how to use telehealth technology, a need for infrastructure (for example, internet bandwidth large enough to support telehealth), start-up costs, equipment and maintenance, billing and reimbursement questions, a need for appropriate equipment for active children, insurance policies that do not include telehealth, and questions about Health Insurance Portability and Accountability Act of 1996 (HIPAA)-compliant telehealth. Further supports are needed around how to access interpreter services for children and families receiving ABA services. Technical assistance related to billing and reimbursement for telehealth services should be considered a priority.

Overall, the information gained from the literature, key informant interviews, and the surveys support the need for parent/caregiver and provider training. Additionally, having a person who is the single-point of contact for telehealth in the state would help advance telehealth throughout the state. This contact could be a resource for information and technical assistance for providers and families as well as drive the development and testing of telehealth services for children with autism spectrum disorders and other developmental disabilities would greatly assist the advancement of telehealth. (For more details, see "State-level Staff Member Dedicated to Telehealth", on page 29).

Introduction

Children with autism spectrum disorders and other developmental disabilities (ASD/DD) have unmet health care needs for a variety of reasons. In Washington, these include provider shortages, transportation, and geographic challenges, especially in rural areas of the state. Telehealth offers an untapped opportunity to expand the capacity of systems and meet the needs of children and their families. Research shows that telehealth is an effective tool for consultation, diagnosis, parent coaching, behavioral assessment and intervention (e.g., functional analysis and functional communication training), and the supervision of behavioral technicians[1–6] Further, telehealth has been shown to cost less than the in-person delivery of care for children with autism spectrum disorders and other developmental disabilities. Telehealth is also an identified strategy in the National Standards for the Systems of Care for Children and Youth with Special Health Care Needs* in the Access to Services Domain and in other national best practices for children with special health care needs literature.

[1] Simacek, J., Reichle, J., & McGowan, Q. P. (n.d.). 9. Parent-Implemented Communication Intervention for Children with Significant Neurodevelopmental Disabilities and Problem Behavior: An Application of Telehealth as a Service Delivery Mechanism. Leadership and Education in Neurodevelopmental Disabilities. Retrieved from http://www.amchp.org/programsandtopics/CYSHCN/projects/spharc/technical-assistance-calls/Documents/SPHARC_April2016_TelehealthCall_ReichleSlides.pdf

[2] Vismara LA, Young GS, Stahmer AC, Griffi th EM, Rogers SJ. Dissemination of evidence-based practice: can we train therapists from a distance? J Autism Dev Disord. 2009;39(12):1636–1651.

[3] Vismara LA, Young GS, Rogers SJ. Telehealth for expanding the reach of early autism training to parents. Autism Res Treat. 2012; 2012:121878.

[4] Wainer AL, Ingersoll BR. Increasing access to an ASD imitation intervention via a telehealth parent training program. J Autism Dev Disord. 2015; 45(12):3877–3890.

[5] Wacker, D. P., Lee, J. F., Padilla Dalmau, Y. C., Kopelman, T. G., Lindgren, S. D., Kuhle, J., Waldron, D. B. (2013). Conducting Functional Communication Training via Telehealth to Reduce the Problem Behavior of Young Children with Autism. J Dev Phys Disabil, 35-48.

[6] Wacker, D. P., Lee, J. F., Padilla Dalmau, Y. C., Kopelman, T. G., Lindgren, S. D., Kuhle, J., Waldron, D. B. (2013). Conducting Functional Analysis of Problem Behavior via Telehealth. *Journal of Applied Behavior Analysis*, 1(Spring), 31-46.

*https://www.lpfch.org/publication/standards-systems-care-children-and-youth-special-health-care-needs

Case Study: Seattle Children's Autism Center

Seattle Children's Autism Center is currently piloting a clinic-to-clinic telehealth service model to increase access to care for our patients referred from remote locations in Washington. The specialties we are piloting include:

- **Biobehavioral Program:** Provides specialized behavioral assessment and treatment for individuals diagnosed with developmental disability, including ASD, who engage in challenging behavior. Services are provided by psychologists who are also board certified behavior analysts.
- **Pediatric Feeding Program:** Provides comprehensive and interdisciplinary assessment and intervention for children with feeding disorders with or without ASD. Services are provided by psychologists who are also board certified behavior analysts and dietitians.
- **Medication Management:** Evaluation and management of medications for individuals diagnosed with ASD. Services are provided by psychiatrists, ARNPs, and neurologists.

Seattle Children's is currently serving families at the SCH Regional Clinics in Tri-Cities, Wenatchee, Federal Way, Olympia, and Everett. As a result of this work, one goal is to assist in the developmental of a telehealth infrastucture Washington through learning communities.

In a clinical setting, telehealth is referred to as "synchronous telehealth," a live, two-way interaction between a person (patient, caregiver, or provider) and a provider using audiovisual telecommunications technology. This type of service is also referred to as "real-time" and may serve as a substitute for an in-person encounter. Having access to telehealth is a goal for this initiative.

The main focus of this report is to (1) share the results of two statewide telehealth capacity assessments and key informant interviews and (2) share recommendations that serve as the basis of a strategic plan for process implementation of a telehealth infrastructure to support services for children with autism spectrum disordor and other developmental disabilities. Services include screening, diagnosis/evaluation, and access and intervention as well as family and provider training.

Background

System of Care for Autism Spectrum Disorders and Other Developmental Disabilities in Washington State

In Washington, there are a variety of systems and supports for children who are experiencing autism and other developmental disabilities and their families. For families that are covered by the state's Medicaid program — Apple Health — there are three primary ways to access care: Medicaid-designated centers of excellence for autism diagnosis (COEs), applied behavior analysis (ABA) providers, and neurodevelopmental centers (NDCs). In order to access applied behavior analysis, children covered by Apple Health must be assessed for autism at a COE. For applied behavior analysis, individuals and entities providing care must be approved by the

Washington State Health Care Authority and licensed by the Department of Health. The state's neurodevelopmental centers (NDCs) provide a variety of services to support children and families. NDCs may also be a COE and/or an ABA provider.

> "Telehealth makes it possible for children with special health care needs to get the care they may otherwise go without, which is particularly important for families who live in rural areas far from large medical centers or pediatric specialist practices."
> **From *Realizing the Promise of Telehealth for Children with Special Health Care Needs*, August 2015. Lucile Packard Foundation**

Telehealth Introduction

Telehealth encompasses a broad variety of technologies and tactics to deliver virtual medical, health, and education services. Telehealth is a way for providers to deliver public health and health care services through video conferencing. The term "telehealth" is now more commonly used than "telemedicine" as it describes the wide range of diagnosis and management, education, and other related fields of health care. In this report, the term "telehealth" will encompass the concepts of telemedicine, telehealth[7], mHealth[8] and tele-mentoring[9].

Telehealth Services

Telehealth can increase access to timely and high-quality screening, diagnostic, and intervention services for children and youth at risk for autism spectrum disorder and other developmental disabilities and their families by expanding outreach in medically underserved communities and increasing access to multidisciplinary care.

Telehealth can be used for diagnostic services, consultation between providers, parent and provider training and parent coaching and education. In addition, as the capacity for telehealth grows, there may be opportunities for telehealth to be used for diagnosis, additional provider training, and to use "store and forward"[10] videos that assist in the assessment of behavioral interventions.

> "When I was providing services in New Mexico, having access to telehealth was the difference between no services and services."
> **An AS3D Key Informant Interview with an Applied Behavior Analysis Provider**

[7] **Telehealth** encompasses a variety of technologies and tactics to deliver virtual medical, health, and education services. For the purposes of this survey, the term "telehealth" (telehealth) will encompass the concepts of telemedicine, telehealth, mHealth and tele-mentoring. This survey focuses on the application of telehealth in the clinic or home setting and WA Medicaid policy.

[8] **mHealth** is a form of telemedicine using wireless devices and cell phone technologies.

[9] **Telementoring** is the practice of developing mentorship relationships between learners and those with more experience in a particular subject or area of expertise; experts are geographically removed from learners and use web and phone-based methods to interact.

[10] **Store and forward** technologies allow for the electronic transmission of medical information, such as digital images, documents, and pre-recorded videos through secure email transmission.

Telehealth Policies and Laws in Washington State

Though there are policies for Medicaid and other health insurance coverage related to telehealth, currently there is not a complete system of care that allows providers to bill and receive reimbursement for services delivered via telehealth.

The Washington State Legislature has defined telehealth in law and within the state's Medicaid program, Apple Health, rules. (For an analysis of Washington State's telehealth laws and reimbursement policies by the Center for Connected Health Policy, see **Appendix A**). However, from a review of Washington's Medicaid policies, it is challenging to determine which billing codes and which provider types are allowed to bill for services specific to children with autism spectrum disorders and other developmental disabilities via telehealth, other than the information published in the ABA Provider Guide. Medicare publishes a list of billing codes which allow telehealth (see https://www.cms.gov/Medicare/Medicare-General-Information/Telehealth/index.html), but there is no such list for Medicaid. Additionally, Medicaid managed care organizations may or may not cover services given via telehealth. In the Medicaid Physician-Related Services Provider Guide, guidance says to contact the managed care organization to find out if telemedicine is covered for a specific service.[11]

In addition to the Washington Medicaid's Physician-Related Services program, Medicaid covers services delivered via telehealth for prenatal genetic counseling and under the applied behavior analysis (ABA) benefit, ABA program supervision by a board certified behavior analyst (BCBA) when the child is present as well as family training, which does not require the child's presence. Under the Medicaid benefit, registered dieticians can bill for services using telehealth. Additionally, the Medicaid agency reports that physical, occupational, and speech therapy via telehealth have not been excluded from coverage, however, there is not published language around telehealth in any of these Medicaid program guides. HCA reports that the language "medical provider" was used in order to leave the door open for the use of telehealth with the intent of the legislature being able to expand telehealth services. Currently, the agency reports not having any complaints about denials, so if providers are billing for telehealth, it is going through with successful payment. This is important as this group of providers (NDCs, COEs, ABAs) are actively supporting and providing services to children with autism and other developmental disabilities and need to have access to complete and accurate information about telehealth.

In addition, recently, the state's legislature required that all insurance plans certified by the state's Office of the Insurance Commissioner cover telehealth services just as they cover services in person and that the rates paid for services delivered via telehealth must be equal to those of an in-person visit. (The Revised Code of Washington 48.43.735 can be found in **Appendix B.**)

Washington State professional licensing for physicians, advanced registered nurse practitioners, ABA providers and occupational, physical, and speech therapists appears to allow for services to be delivered via telehealth if the standards of care are met. However, there are not uniform written rules governing all licensed care professionals related to telehealth. For example, there are Washington Administrative Codes (WAC) for physical therapy and telehealth but no published WAC for speech therapy. In addition, the Office of the Insurance Commissioner has not yet published WAC rules regarding telehealth parity and parity in payment—however, these

[11] Physicians-Related Services Provider Guide, January 2018, page 89.

are outlined in the Revised Code of Washington (RCW) 48.43.735. (The complete RCW 48.43.735 can be found in **Appendix B**). The *Telehealth Handbook of Evidence-Based Practices in Intellectual and Developmental Disabilities* (2016, Springer International Publishing. Singh (ed.) includes additional information about telehealth standards of care for this population. Additional telehealth references and resources can be found in **Appendix E**.

Autism Spectrum Disorders and Other Developmental Disabilities (AS3D) Initiative Goals

The Washington State Department of Health's Children and Youth with Special Health Care Needs Program was awarded a federal grant in September 2016 to improve access to coordinated, comprehensive systems of services that lead to early diagnosis and entry into services for children with autism spectrum disorders and other developmental disabilities and their families with an emphasis on medically underserved and rural populations. The Autism Spectrum Disorders and Other Developmental Disabilities grant, referred to as "AS3D," is a collaborative effort with many partners from other state agencies and family-led and community-based organizations. A major focus for AS3D is maximizing existing telehealth laws and other infrastructure to increase access to services in rural and other medically underserved communities and to facilitate communication and capacity building among providers.

Key Telehealth Objectives for AS3D's Work

1. Increase access to timely and high-quality screening, diagnostic, and intervention services for children and youth at risk for autism spectrum disorders and other developmental disability and their families by expanding outreach in medically underserved communities and increase access to multidisciplinary care through the use of telehealth and shared resources.
2. Conduct a statewide telehealth capacity assessment to identify the existing infrastructure to provide telehealth and identify promising telehealth practices currently being used; and develop a strategic plan to maximize, market, and conduct trainings on how to use existing telehealth infrastructure for autism spectrum disorder and other developmental disability screening, diagnosis/evaluation, and accessing intervention.
3. Use results from a telehealth capacity assessment to devise billable methods to increase telehealth access to needed intervention services available for children with autism and other developmental disabilities at neurodevelopmental centers and other locations.

For more information on the objectives and strategies of the AS3D initiative, see **Appendix C**.

Since the beginning of the AS3D grant, the Department of Health staff have actively worked to identify key components of telehealth including conducting key informant interviews, assessing policy, convening a telehealth ad hoc committee (**Appendix D**), reviewing the literature (**Appendix E**), developing and deploying two online surveys — a capacity assessment for providers (**Appendix F**) and another aimed families to gauge their comfort and experience with telehealth in English (**Appendix G**) and in Spanish (**Appendix H**). Additionally, staff have worked with the Department of Health's Office of Rural Health because traditionally telehealth has been focused on reaching rural areas of the state.

Telehealth Capacity Assessment

Washington State Department of Health staff worked with the AS3D telehealth ad hoc committee[12] to determine if there was capacity in the system of care for children with autism spectrum disorders and other developmental disabilities for telehealth. After reviewing the available literature for clinical effectiveness and other surveys, the ad hoc committee undertook a capacity assessment.

The goals of the telehealth capacity assessment included:

- To determine the current status of telehealth services through the three target groups – neurodevelopmental centers (NDCs), Medicaid-designated centers of excellence for autism diagnosis (COEs), and applied behavior analysis (ABA) providers.
- To gain information about barriers to the use of telehealth.
- To help with the development of an informed direction for the telehealth strategic plan.
- To identify specific providers that might be "early adopters" for telehealth who in turn might participate in a learning community.

The capacity assessment is comprised of the following:

- **Provider Capacity Assessment:** An online capacity assessment survey focusing on the Health Care Authority's centers of excellence for autism diagnosis, autism behavioral analysis providers, and neurodevelopmental centers.
- **AS3D Key Informant Interviews:** Key informant interviews were conducted with a variety of providers (e.g., psychologists, physicians, and behavioral technicians) to learn about their experiences with telehealth for children with autism and other developmental disabilities.[13]
- **Family and Caregiver Survey:** An online survey of family and caregivers conducted in both Spanish and English.

Provider Capacity Assessment

The goal of the Provider Capacity Assessment was to understand the current capacity of health care providers to use telehealth, to identify any barriers to telehealth, and learn about providers' interest in receiving technical assistance. The survey was focused on providers serving in NDCs and COEs and ABA providers.

METHODOLOGY

The survey was developed based on existing telehealth capacity surveys in other states, autism grant goals and scope of work, and input from the AS3D ad hoc subcommittee. The survey was open from June 2017 through August 2017 and distributed to ABA providers, COEs, and to NDC directors. Additional survey recruitment support was provided by the Northwest Autism Center and the Washington Autism Alliance and Advocacy organizations through their listserv and by word of mouth. Emphasis was placed on recruiting geographically diverse participants.

[12] The AS3D Telehealth ad hoc committee included staff from the following organizations: Northwest Autism Center, Department of Early Learning, Holly Ridge Neurodevelopmental Center, Seattle Children's Hospital, Coordinated Care, and Washington State Department of Health.

[13] AS3D Key Informant interviewees included independent ABA practitioners, a hospital-based psychologist, a hospital-based physician, a neurodevelopmental center, a national telehealth support center, state staff from Kentucky, a private telehealth ABA company, three researchers, and USDA.

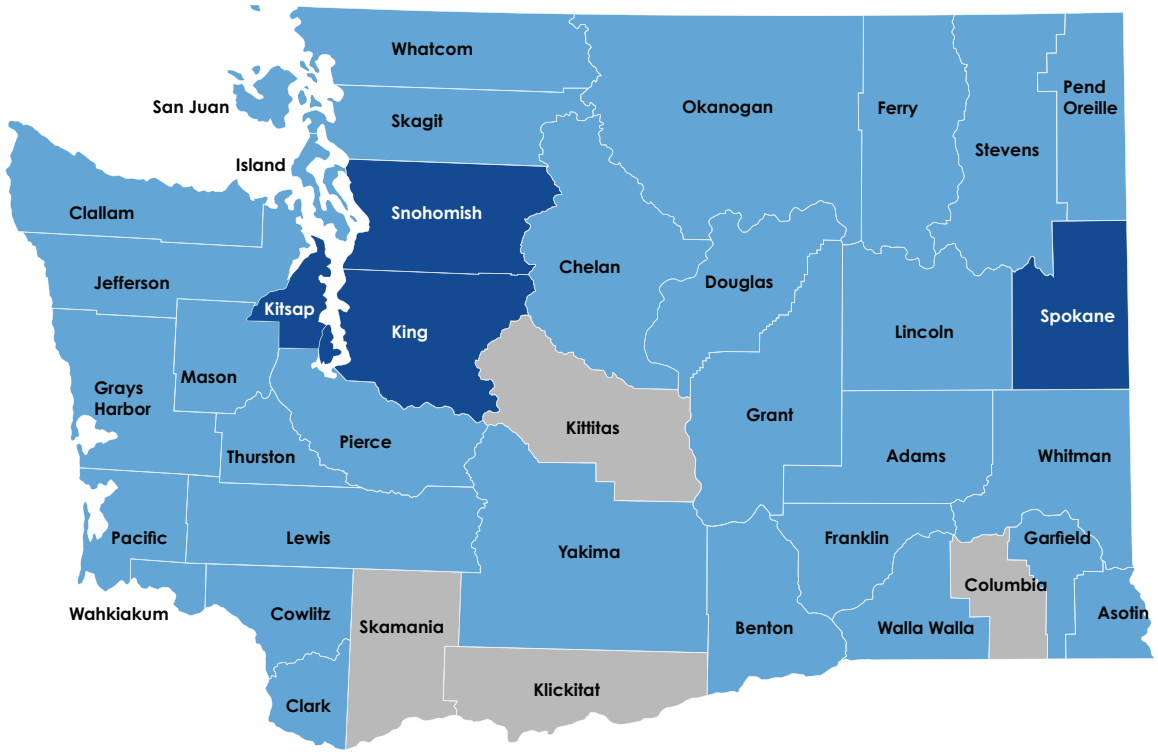
RESULTS

Insurance Status of Patients

Providers reported that 60 percent[14] of their patients were covered by Medicaid. Among ABA providers specifically, Medicaid coverage of patients varied significantly, indicating that Medicaid-focused billing assistance for ABA services will apply much more heavily to some ABA providers than others. On average, 10 percent of patients receiving ABA day treatment, 70 percent of patients receiving on-site services, and 30 percent of patients receiving community/in-home ABA services are covered by Medicaid. However, these averages are not meant to be representative of the Medicaid patient population of a typical ABA provider.[15]

Provider Region and Type

Among the surveyed providers, a total of 52 responded to the survey. Counties with the highest representation of patients served by participating providers were King (19), Spokane (17), Snohomish (13), and Kitsap (11). There were also respondents serving patients in Oregon, Idaho, Montana, and Canada. No providers serving patients from Columbia, Kittitas, Klickitat, and Skamania counties participated in the survey.



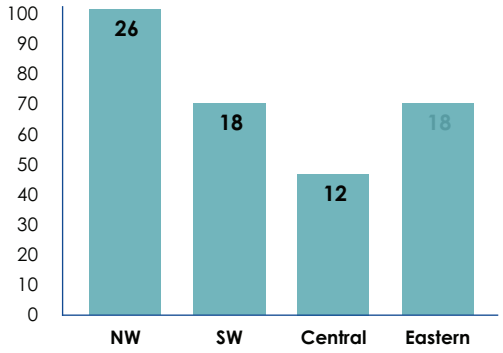
Geographic Profile of Provider Respondents

0 1 – 9 10+

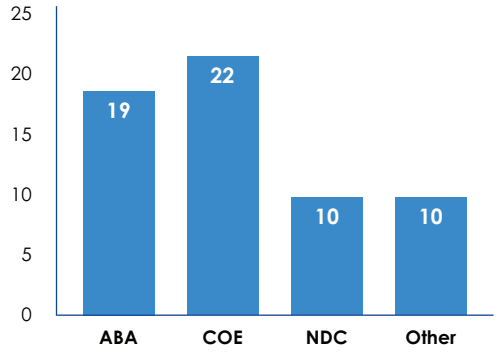
[14] 60 percent is the median of patients covered by Medicaid. The interquartile range was 30-70%, with a total range from 0 to 90%.

[15] The full interquartile ranges for patients covered by Medicaid receiving these services from ABA providers are: 0-90% for ABA day treatment; 10-100% for on-site services; and 30% for community/in-home services.

Graph 1: Survey Respondents by CYSHCN Service Region



Graph 2: Survey Respondents by Service Provider Type



Twenty-six providers responded from the Northwest region, which includes King County and the greater Seattle area, while 12 providers responded from the less densely populated Central region. This discrepancy may be reflective of the population and provider distribution within the state. (**Graph 1**) Most respondents were from either a COE or ABA provider, but NDCs and other institutions were also represented. (**Graph 2**)

It is important to note that the categories of ABA providers, COEs, and NDCs are not mutually exclusive. For example, as indicated in **Table 1**, four of the neurodevelopmental centers (NDCs) are also centers of excellence (COEs), and at least one NDC also identified as an autism behavioral analysis (ABA) provider.

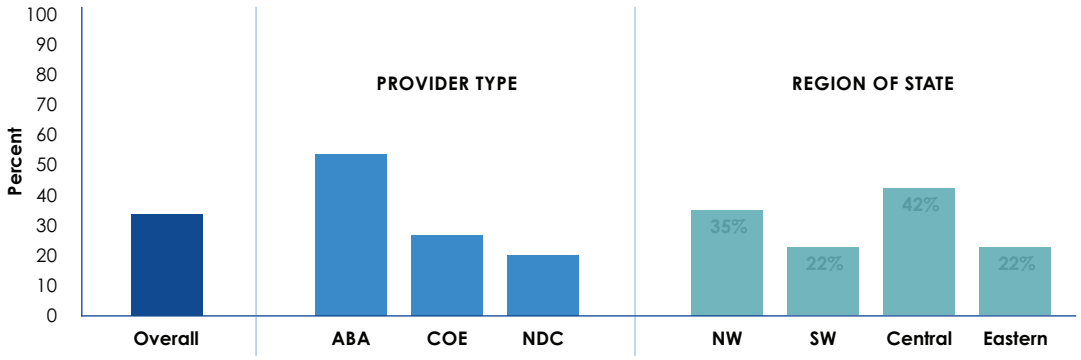
Table 1: Provider Organization Affiliations

Autism Behavioral Analysis (ABA)	Center of Excellence (COE)	Neurodevelopmental Center (NDC)
Private Practice (12) Non-profit (5) Hospital based (2)	Clinic — Multi-practice (10) Clinic — Private practice (6) Hospital based (2) Other (5)	Free standing (8) COE (4) Hospital based (1) ABA (1)

Providers Offering Telehealth

The survey found that organizations in each category offered telehealth services of some kind and each region had providers offering telehealth (**Graph 3**). More respondents identified as COEs than ABA providers, indicating that COEs are more convenient for an in-person visit. ABA providers are more likely to offer telehealth services, which improves accessibility to patients regardless of geographical proximity. Central Washington had the lowest representation among respondents (12), but the highest percent of those providers offered telehealth services (42 percent), which may indicate an effort by those providers to compensate for the limited on-site locations in the area to receive services. Conversely, the low number of providers offering telehealth serving Southwest and Eastern Washington may represent an opportunity for increased outreach.

Graph 3: Percentage of Providers Offering Any Telehealth



According to the provider survey, when telehealth services are offered, they are not necessarily used. Of the responding providers that offer telehealth services, generally, about 5 to 20 percent of patients use telehealth services, with one outlier — 60 percent of one provider's patients use telehealth services. (For more information on reasons for low telehealth interest, see "Family and Caregiver Survey" section.)

Telehealth Services Offered

Telehealth services offered by responding providers included family training (frequency = 5), supervision (3), education (2), individual consultation, diagnosis, behavioral health treatment, and staff training. Providers reported that patients connected via telehealth to NDCs, ABA providers, behavioral analysts, school district workers, and early intervention specialists.

Of the two NDCs offering telehealth, neither offered telehealth for diagnostic services, but both offered telehealth for consultation and training. Out of six COEs that offered telehealth, one used it for diagnosis and consultation services and the others used it for services such as parent education and support groups, intake services and return treatment visits, behavioral health services, feedback on evaluations for families that come a great distance, patient education, communicating with providers/staff, training of providers, and staff meetings. Out of 10 ABA providers offering telehealth, six used telehealth for treatment, nine used it for family training, and six used it for ABA supervision.

Telehealth Services Offered

- Supervision
- Inpatient consultation for eating disorders
- Clinical case management (supervision)
- Parent training & education (e.g., behavior analysis)
- Parent support groups
- Diagnostic services
- Patient education, communicating with providers/staff
- Staff training and meetings
- Intake services
- Return treatment visits
- Behavioral health
- Feedback on evaluations
- Tech supervision (e.g., BCBA)
- Consultation with school districts about physical therapy and speech therapy
- Therapy and special education

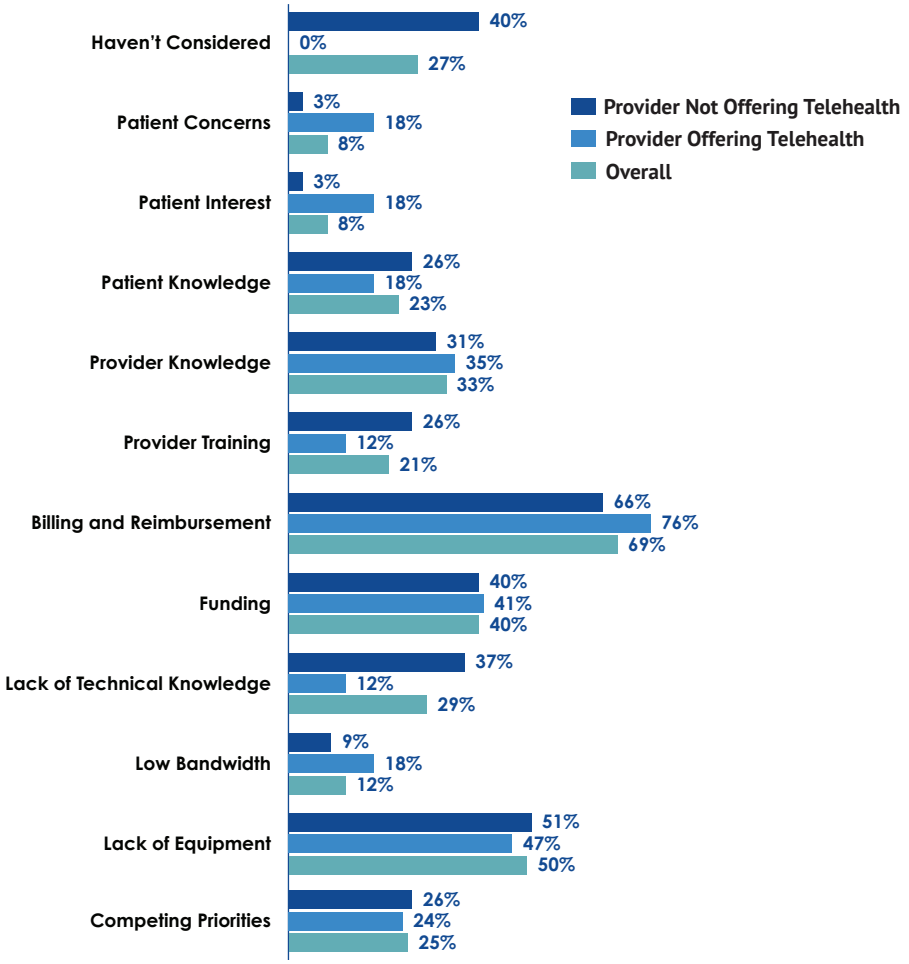
Barriers to Providing Telehealth

Both providers offering telehealth and those not offering it, responded that "billing and reimbursement" is the number one barrier to the implementation and use of telehealth, followed by "lack of equipment" and "funding" — three barriers that are likely to be interconnected and may be resolved with similar strategies (e.g., if more reimbursement money were received for telehealth services through proper billing, there would be more funding for equipment and other expenses). (**Graph 4**)

"Patient concerns" and "patient interest" are more prominent barriers among those already offering telehealth than those that do not, possibly because providers who are not offering telehealth are not discussing interest and concern with patients about a service that is not being offered yet and may not even be under consideration. (Patient concerns about telehealth are discussed in more detail in the "Family and Caregiver Survey" results section.)

"Provider training" and "lack of technical knowledge" were much more common concerns among providers who are not offering telehealth than among those who are already offering it. Providers also expressed concern about malpractice liability for virtual visits, meeting HIPAA compliance requirements specific to telehealth, and maintaining patient privacy and health information security.

Graph 4: Reported Barrier Prevalence by Telehealth Capacity among Providers



Billing and Reimbursement Challenges

Although technical assistance for policy issues is in high demand, the number one topic providers want assistance on is billing for telehealth, and this is consistent across all institutional categories and geographic regions. This matches reported barriers and other qualitative results from this survey.

As billing and reimbursement were known issues prior to the survey, providers were asked to elaborate on specific barriers in these areas, for ABA or in general. Their responses can be summarized with three primary complaints:

- It is hard to identify billing codes that would allow them to be reimbursed for telehealth services;
- There is no specific billing code to use; and
- Some insurance companies do not allow telehealth to be billed.

Providers also found that without identified billing codes or clearly written coverage information for telehealth, it was hard to get reimbursed for the services.

CONCLUSIONS

- Southwest and Eastern Washington have the lowest percentage of providers offering any telehealth services (22 percent each), which represents an opportunity for outreach to providers in those areas to expand telehealth capacity.
- While a range of services are offered, parent coaching, consultation, and training are currently reported as most common.
- Providers offering telehealth are more concerned about patient interest, while those not offering telehealth are more concerned about staff training and technical knowledge.
- There is a high level of concern about proper billing and potential for low reimbursement rates, although progress has been made in providers' ability to bill for telehealth services via insurance mandates and Medicaid coverage.
- Improving telehealth billing and reimbursement systems could generate funds to invest in more telehealth equipment and technical training.
- Telehealth availability is currently highest among ABA providers, but is limited around the state.

AS3D Key Informant Interviews

Currently, the Washington Medicaid benefit allows ABA supervision to be provided through telehealth. DOH conducted a focus group with ABA supervisors as well as the behavior technicians. Through our key informant interviews, we learned that there are varying degrees of success using telehealth and many barriers to overcome.

METHODOLOGY

AS3D interviewees were selected based on experience and expertise with using telehealth for their services. Individuals were identified through AS3D partnership activities or were referred the grant from other AS3D partners.

DEMOGRAPHICS

We interviewed board certified behavior analysts (BCBAs), psychologists, physicians, and behavioral technicians.

RESULTS

Benefits of Telehealth

Response from Board Certified Behavior Analysts Supervising Behavioral Technicians

Supervisors reported that having access to telehealth for supervision was convenient.

"I was unable to travel because I had just had surgery. I was able to provide supervision using telehealth. It was great, we were able to support the behavior technicians and families. Maybe it wasn't optimal but it worked well."

Response from a Board Certified Behavior Analyst

"In New Mexico, telehealth was used extensively to provide parent training and supports to behavioral technicians. Parents really liked it as it made the difference between no services and services that were effective. It worked pretty well in that we determined what kind of equipment made the most sense. For example, we used "Bluetooth" technology for some coaching to reduce the distraction from the coaching through the video connection. We used "zoom" for the platform which worked pretty well as long as we had a good WiFi connection; sometimes we had to use a "hot spot" to insure good (and fast) connectivity."

Telehealth Challenges

Responses from Board Certified Behavior Analysts Supervising Behavioral Technicians

"As a supervisor, I had some challenges. For example, I found that the distance format through telehealth limits my ability to model & coach intervention techniques for both behavioral technicians and parents, which is often critical to staff & parent skill development."

"I have concerns that the telehealth format may be somewhat "cold," limiting regarding developing positive affective relationship (pairing) with staff and family."

"I am concerned about my ability to pick up subtle environmental cues about family dynamics and other environmental antecedents/consequences contributing to skill development and behavior issues when conducting services using telehealth."

Responses from Behavioral Technicians

"The technology was limiting because of using the cell phone and child not remaining in one location."

"Supervision was not effective because of the time it took child to get used to the use of telehealth."

"It just didn't feel 'natural.'"

"In one agency I worked at, I wasn't sure if supervisor was actively engaged, it looked like they were checking their email or something."

"I think that telehealth for supervision may be better for some children but not all; it depends on the behavior."

"All in all, the parents were neutral about telehealth."

"For me, the video felt more personal than a phone call."

"What was frustrating for me, is that I didn't get any training on the equipment and my employer required me to use my personal cell phone or my own iPad."

"I would really like to use telehealth if I got training and my employer gave me the equipment and I was sure if the connection and software was secure and protected my client's confidentiality."

Additional comments can be found in **Appendix K**.

In summary, both supervisors and supervisees reported that telehealth could work if:

- They received training on equipment.
- They received written guidance on evidence-based parent training curriculum best for delivery through telehealth and specific to toddlers.
- The agency provided the appropriate equipment (not using personal equipment).
- Parents had another time to meet with the supervisor face to face.
- Some of the supervision was provided in-person.
- There was improved technology set-up to accommodate an active child.
- Ensuring that the interface technology was HIPAA compliant.

Response from a Physician

"There are considerable barriers for scheduling which results in lost time and billing because of no shows. Additionally, there are challenges with getting reimbursed. So all in all, no one that the physician has been working with is really using telehealth for diagnosis of autism though telehealth though it is a great idea but need to figure out scheduling and reimbursement."

Barriers

Billing Challenges

There are many billing challenges. Interviews revealed the following:

1. In the CPT® coding book that is used by providers for billing medical services, ABA-related CPT® codes do not "allow" for telehealth. For telehealth-allowable codes, there is a "*" by the code number and they are also listed in the Appendix P in the CPT® code book. As a result, some providers use other behavioral health codes instead of ABA codes because these are either "*" by the code or are in the Appendix P.
2. Washington's Medicaid program does not allow ABA to be provided via telehealth.
3. Private insurance as well as Medicaid's policies are confusing and information is in different policy documents depending on what type of provider that is billing.
4. It is hard to work with the Medicaid managed care organizations as they are all different and their policies are different.
5. Facility fees are challenging for hospital-based clinics. The issue with the facility fee is that typically when providers bill for in-person services, a hospital will bill for the provider's fee and also for a facility fee. The concern from a business perspective is that when hospital-based clinics do telemedicine into the home, the hospital-based clinic can't charge the facility fee since the patient isn't in the hospital clinic so the telemedicine service will accrue less revenue than for an in-person service.

Technology Challenges

On a different grant that is being managed in Washington State, researchers learned that even when equipment and Wi-Fi were available, there was a reluctance for adults to use the telehealth for consultation for children who have developmental concerns. Comfort with telehealth or teleconsultation will need to be developed for successful spread of telehealth for providers and families.

One of our grant partners reported concerns about the potential impacts of the FCC lifting net neutrality rules on telehealth. Net neutrality is the principle that prohibits internet service providers such as AT&T, Comcast, and Verizon from speeding up, slowing down, or blocking any content, applications, or websites consumers want to use. This is how the internet has always worked. Some health advocates are concerned that the repeal may adversely impact telehealth and telehealth-related applications. While it is not clear exactly what will happen, it is possible that internet service providers could provide tiered offerings at different prices. If this happens, rural and lower-income providers may suffer while other providers that can afford the higher rates for internet service will be able to provide more telehealth coverage.

For example, telemedicine and mobile health applications currently allow providers to remotely monitor blood glucose levels, manage diabetes, and educate diabetic patients — all while reducing the need for outpatient visits and lowering overall medical costs. So, not having access to all internet applications or having to pay an amount that is out of reach would have a detrimental impact on health care. In this case, repealing the net neutrality regulations would lead to an exacerbation on health disparities, especially in rural and frontier areas of the state.

From all providers, we learned that understanding Medicaid is a challenge in general. Most key informant interviews were followed by Department of Health staff providing links to many related resources (i.e., respite, DSHS-DDA eligibility, Medicaid eligibility, Medicaid policy, etc.)

and introductions to other professional colleagues in order to better understand the system of care in Washington. **See Appendix I** for an example of one such email.

The literature is supportive of services delivered via telehealth especially ABA using a parent coaching model. Other applications and effectiveness literature can be found in **Appendix E**.

CONCLUSIONS

Overall, there is a fair amount of support for the use of telehealth for children with autism and other developmental disabilities. However, there are barriers that need to be addressed. Providers need support with billing and reimbursement, setting up a telehealth program, scheduling, and training staff. There is also confusion around standards of care and what services are allowed via telehealth and covered by Medicaid. In addition, there is not alignment between what the policies around telehealth currently are and what providers and families are experiencing. It is the goal of this work to advance telehealth as a delivery mechanism.

Family and Caregiver Survey

The family and caregiver survey, "Can You Hear Me Now? Caregiver Perceptions of Telehealth for Improving Access to Care for Children with Autism and Other Developmental Disabilities in Washington State," was conducted in the summer of 2017.

The goal of the survey was to assess how caregivers of children and youth with special health care needs (a broader group that includes children with autism spectrum disorder and other developmental disabilities) perceive telehealth services and what barriers they experience when trying to access health services that could potentially be addressed with telehealth alternatives. The results will guide the implementation of Washington States Department of Health's efforts to enhance the delivery of provider service via telehealth.

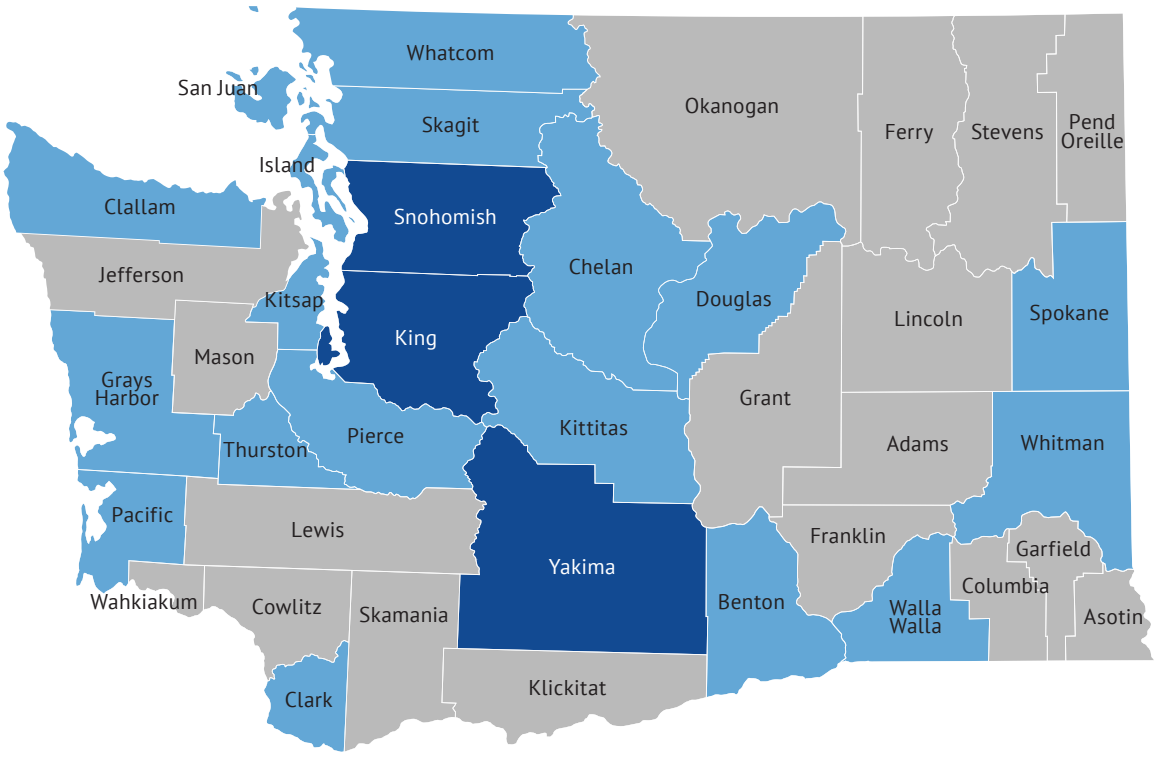
METHODOLOGY

The family and caregiver survey was a mixed-methods formative evaluation conducted by the Washington State Department of Health. An online survey and follow-up interviews were completed to collect data in both English and Spanish from more than 100 caregivers in Washington.

DEMOGRAPHICS

Of the 118 caregivers included in the final analysis, the median age of the children being cared for was 7 years old (IQR 5-13). Approximately two-thirds (86) of the children were male, and 37 were female. Caregivers were mostly mothers (n = 112; 95 percent). Other caregiver types included fathers (2), grandparents (3), and other (1). The race/ethnicity of the children was predominantly White (n = 71; 60 percent), and also included American Indian/Alaska Native (n = 2; 2 percent), Asian (n = 4; 3 percent), Black (n = 6; 5 percent), Hispanic (n = 16; 14 percent), and multiracial (n = 19; 16 percent) children. Responses regarding race/ethnicity of the child were missing from three caregivers.

As indicated in the map on the following page, the counties with the strongest representation in the survey were Snohomish (23), Yakima (24), and King (23). We received no survey responses from caregivers in the light gray counties on the map.



Caregiver Representation by County among Survey Respondents

no respondents | 1 — 14 respondents | 15 or more respondents

RESULTS

Insurance Status of Respondents

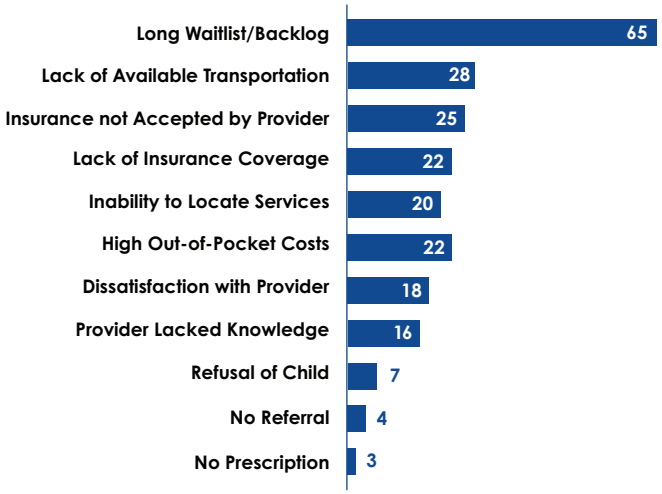
Thirty-nine percent (n = 44) of respondents indicated that their child or youth with special health care needs had a prescription for ABA, although qualitative responses throughout indicated a higher prevalence of autism among respondents. Forty-two percent of the children were covered by Medicaid only, 75 percent had at least some Medicaid coverage, 18 percent were covered by Supplemental Security Income (SSI), and 4 percent covered by TRICARE.

Difficulties Accessing Health Care

Caregivers were asked if, over the last 12 months, they experienced delays or difficulties in health care services (e.g., medical care, dental care, specialized therapies, counseling, or early intervention) due to a range of potential causes. The possible causes were provided in a multiple choice format and they could select all that applied. Facing a waitlist or backlog was the most common reason for delays accessing services, with twice as many people reporting "waitlist/backlog" issues than the next most common barrier, "transportation/local availability." (**Graph 5**)

Twenty-two respondents indicated they had experienced no delays or difficulties in the past 12 months. Caregivers reported delays or difficulties accessing speech therapy (23), occupational therapy (16), autism-related therapy or ABA therapy (16), and behavioral/social therapy (14).

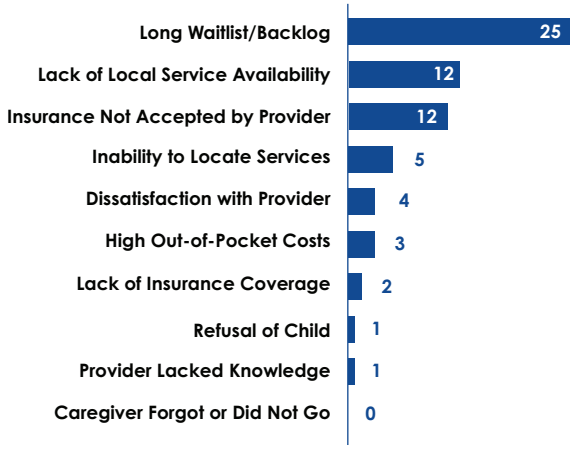
Graph 5: Reasons for Delays/Difficulties Using Any Services in Last 12 Months (n = 118)



Forty-four respondents with children with ABA prescriptions (a probable indicator of having autism) were asked about delays and difficulties accessing ABA services for their child. Similar to barriers for care more generally, "waitlist/backlog issues" was the top reason for delays or difficulties receiving ABA services, and "transportation/local availability" was second. (**Graph 6**) When asked if their child received all their prescribed ABA services, 50 percent of the caregivers said they did not, which means these barriers could be preventing half of ABA-prescribed children from completing their ABA programs. (Eight respondents indicated no delays or difficulties receiving ABA services.)

> "My son gets distracted in new environments. He is fearful of many things so it's hard to gauge when something may trigger his anxiety. I also have a three year old at home, and very few sitter options, so being able to utilize telehealth service would relieve a lot of stress."
> **Response from the Caregiver Telehealth Survey, "Can You Hear Me Now?"**

Graph 6: Reasons for Delays/Difficulties in Accessing Any Services in Last 12 Months (n = 44)

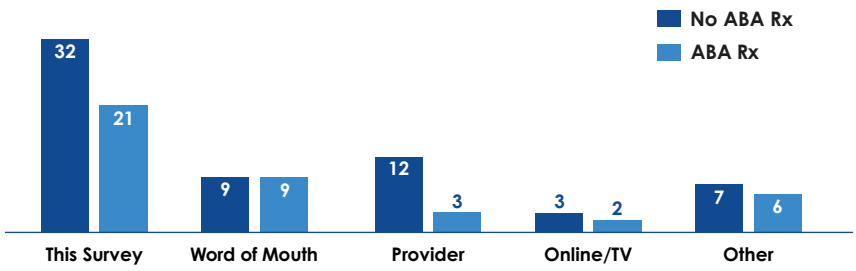


BARRIERS TO TELEHEALTH

To assess the potential of telehealth to address these barriers to care, respondents were asked questions about how they first heard of telehealth, their interest level in it, their ability to use it, concerns that could prevent them from using it, and for what types of services they would be most likely to use telehealth. These responses are reported separately for caregivers of children with ABA prescriptions and those without an ABA prescription in order to distinguish between the types of barriers that prevent families from getting a prescription and barriers that prevent families from accessing care after the prescription has been received. An ABA diagnosis also serves as a likely, though not definitive, indicator that the child has autism, although ABA is prescribed for other developmental disorders as well.

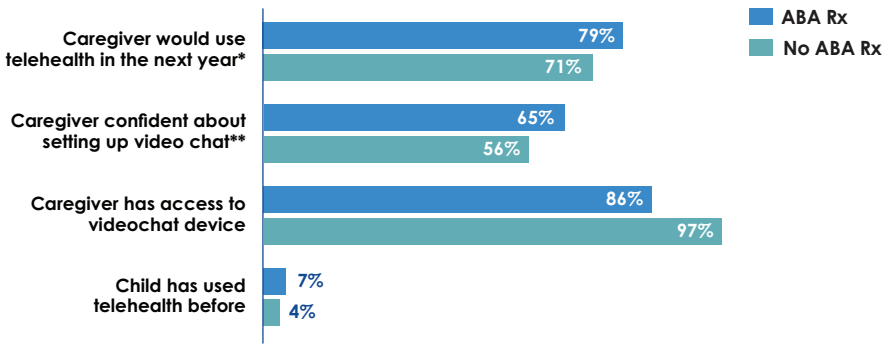
Caregivers whose children have an ABA prescription appear somewhat less likely to be notified of telehealth options by their provider than those caregivers whose children did not have an ABA prescription. (**Graph 7**)

Graph 7: How Did You First Hear about Telehealth?



Interest levels in telehealth were high among respondents. (**Graph 8**) Seventy-nine percent of caregivers with children with an ABA prescription would use telehealth in the next year, provided it was available and covered by insurance, and most (86 percent) have access to a video chat device. Only 65 percent reported feeling "confident" or "very confident" about their ability to set up a video chat. However, as indicated in **Graph 9**, no one reported "not confident

Graph 8: Interest and Capacity in Telehealth Utilization

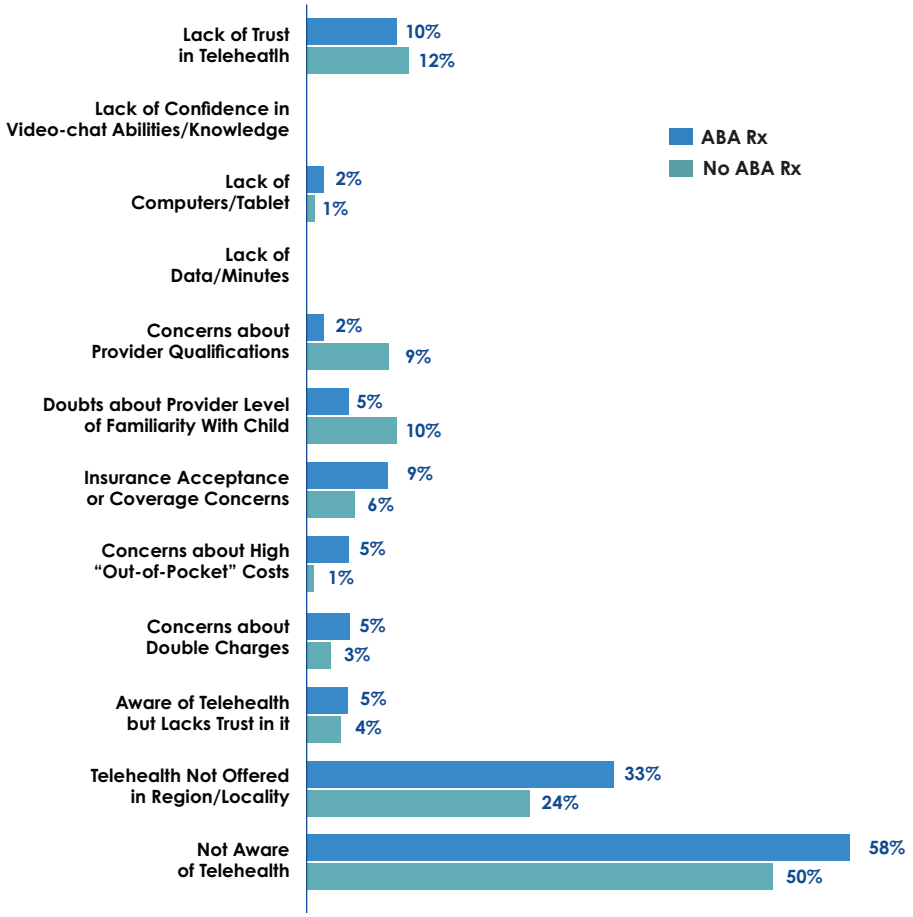


* If available and covered by insurance ** Confident or very confident

about video-chat" as a reason for not trying telehealth. In other words, caregivers appear to be willing to learn that skill, or are unlikely to see it as a barrier. In a follow-up interview with a Spanish-speaking caregiver, the participant expressed some doubts about being able to embrace the technology. After recognizing potential benefit to a telehealth option, however, the parent concluded that "we have to get used to it" even though it may be "a little strange."

> "Maybe we are not ready [for telehealth] or we are not educated enough about the coming technology. That is why we find it a little strange. Maybe, when we get an online appointment or via the internet, it is going to be difficult, but perhaps it could be beneficial since it could be fast and handy. You will not hear, "there is no room for appointments," or... it is going to be odd. More than anything, we have to get used to it."
> **Family and Caregiver Survey Respondent**

Graph 9: Reasons Families Have Not Accessed Telehealth



The primary reason caregivers have not used telehealth before is that they didn't know about it, which is consistent with most respondents not having heard of telehealth prior to this survey. (**Graph 9**) The second most common reason for not using telehealth was that it is not offered locally. There is some concern about insurance coverage, cost, or being double-charged for telehealth, but financial concerns do not appear to be a major barrier to trying it.

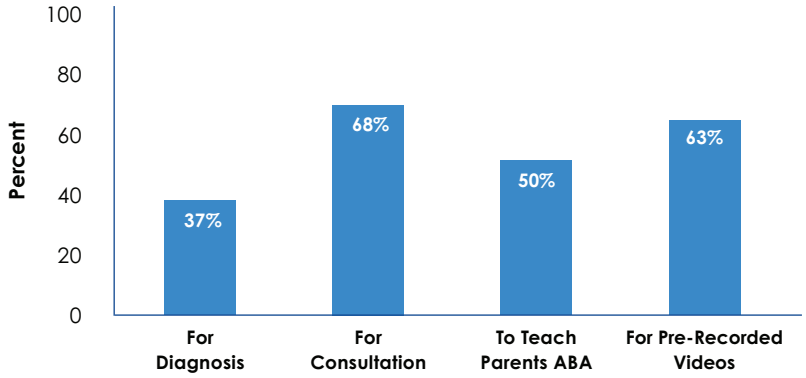
When asked, "What would you want to know before trying telehealth for your child?" caregivers' write-in responses reinforced concerns they expressed when asked why they hadn't used telehealth. For example, concerns about online providers' qualifications and credentials were mentioned 20 times. Many caregivers were also concerned about experiencing technical difficulties during a telehealth appointment (14), and a few (7) were concerned their child would not be receptive to interacting with a doctor through a screen. A few also seemed skeptical about how helpful a telehealth appointment could be without the doctor present to take vitals and examine the child physically, and wanted to know that scheduling an in-person visit would still be a follow-up option if needed (5). One caregiver noted that she needed more specific information about what kind of appointments are geared towards telehealth and which ones she should actually go in and have him be seen for. "It seems to me that the doctor needs to check you out if you have a respiratory struggles from a cold to see if there's any infections going on or do check ears to see if there's an ear infection that kind of thing," she said.

While the survey did not specify reasons for not trusting telehealth, the write-in responses to the question "What would you want to know before trying telehealth for your child?" suggest that distrust toward telehealth could be minimized by providing more information about the following topics:

- Online providers' qualifications and credentials
- The linkage between telehealth appointments and potential in-person follow-up care (e.g., "What types of appointments are best for using telehealth, and which require an in-person visit?")
- Providers' familiarity with the child and his/her medical history (caregivers would prefer to use the same doctor as they see for in-person visits, if possible)
- Evidence that telehealth is beneficial/effective
- How to minimize technical difficulties and ensuring a reliable/secure/confidential online connection
- Security, privacy, and confidentiality of the live telehealth appointment as well as any video or audio recordings of the appointment that are included in the medical record
- How the child might engage/respond differently to interaction with a provider through a screen compared to in person and how this could affect quality of care
- What types of telehealth services are covered by insurance and what out-of-pocket costs (if any) to expect

> "Driving to and from appointments can add up financially. Any money I can save there, I can apply towards other care that we currently can't afford. I might also seek out services that I feel like we can't add to our plate right now, if they were that easily attainable."
>
> **AS3D "Can You Hear Me Now" Family Survey Respondent**

Graph 10: ABA Families Interested in Trying Telehealth For Different Reasons



Respondents were most receptive to using telehealth for consultations, followed by pre-recorded videos. Half of them were interested in using telehealth to learn how to use ABA with their child at home, and only 37 percent were interested in using telehealth for an initial diagnosis. (**Graph 10**)

In response to the question, "Are there ways your child could benefit from telehealth services?" caregivers emphasized that being able to stay at home would reduce stress for themselves and their child with special health care needs. For example, the child may "not like to leave the house," "going places sometimes gives [them] anxiety," or they may have "a hard time in waiting rooms and with doctors in general." For children with autism in particular, telehealth allows for the child to "be in the safety of his own home and it would not disrupt his daily schedule." This was consistent among respondents with and without ABA prescriptions. Additionally, having the opportunity to become familiar with a provider from home via telehealth could help reduce anxiety when an in-person visit is needed, as explained by this survey respondent:

Other significant perceived benefits of telehealth were: cutting down on wait time and having greater scheduling flexibility; saving time and money by not needing to commute to appointments, which might otherwise require hours of travel time, especially for families who live outside of cities; and allowing for access to specialists not currently available to the caregiver.

> "Going to the doctor is pretty intense for my son. Even though his PCP runs a private practice, the visits to her office are incredibly stressful for us both. If we could do some of the more simple and straightforward visits via telehealth services, it would provide a foundation of good experiences for him to draw upon. And should we need to go in person, seeing the person we telehealth with at the location would be idea."
>
> **AS3D "Can You Hear Me Now" Family Survey Respondent**

CONCLUSIONS

- Caregivers experienced delays or difficulties frequently when trying to access occupational therapy, physical therapy, and speech therapy for their child with autism spectrum disorders and other developmental disabilities. Caregivers report that Apple Health does not allow providers to bill for any of these services, if provided via telehealth. This limits the impact that telehealth may have on generating greater access to these services for those covered by Apple Health, but other services may still be made more accessible and affordable with a telehealth option. (Note: This is consistent with what Medicaid agency states as covered. This item will be addressed in the AS3D Telehealth Strategic Plan to be released early 2018.)
- Delays and difficulties accessing ABA were also experienced by several caregivers. Telehealth has potential to help these families, although only some ABA services — such as parent training and supervision — are currently billable through Apple Health.
- Caregivers are most receptive to using telehealth to watch pre-recorded videos and for consultation purposes. Caregiver trust toward telehealth services could be improved by addressing issues such as the telehealth provider's qualifications, evidence of its effectiveness, the technological logistics and privacy protections of a telehealth appointment, and insurance coverage/costs.
- The appeal of telehealth to caregivers is primarily related to how it could: 1) be less stressful for the child and/or parent to not have to leave the house for an appointment; 2) provide greater scheduling flexibility and shorter wait times; 3) help families save time and money they would otherwise spend on transportation; and 4) provide access to specialists in other areas.

Next Steps and Recommendations

In order to create a health care landscape where providers can provide care and education through telehealth, we recommend the following next steps.

Provide Trainings for Providers

Trainings for providers on how to plan for and implement telehealth as well as how to use the equipment and bill are needed. These trainings should be provided to primary care providers, neurodevelopmental centers, centers of excellence, and autism behavioral analysis providers. Additionally, it may be appropriate to explore the role of family navigators to assist with telehealth visits in clinics or other community settings. To ensure maximum availability and participation, trainings should be conducted using telehealth technology and online whenever possible.

The National Consortium of Telehealth Resource Centers (NCTRC), consisting of two national and 12 regional centers, offers a ready-made resource for telemedicine guidance. Health care providers, organizations, and vendors interested in knowing more about telemedicine and telehealth have a ready resource at their fingertips: a network of telehealth resource centers covering every region of the country. The centers are funded by three-year renewable grants from the U.S. Department of Health and Human Services' Health Resources and Services Administration (HRSA) Office for the Advancement of Telehealth (OAT), which is part of the Office of Rural Health Policy.

The mission statements of the Telehealth Resource Centers consist of:

1. Providing technical assistance, training (including travel expenses) and support for healthcare providers and entities planning or providing telehealth services
2. Disseminating information or research findings related to telehealth services
3. Supporting effective collaboration among telehealth resource centers
4. Conducting evaluations to determine the best utilization of telehealth technologies to meet healthcare needs
5. Supporting the integration of technologies used in clinical information systems with other telehealth technologies
6. Fostering the use of telehealth technologies to provide healthcare information and education for health care providers and consumers in a more effective manner
7. Implementing special projects or studies

It is the intent of the AS3D DOH team to engage the NW Regional Telehealth centers to assist Washington. Additional details will be outlined in the **AS3D Telehealth Statewide Strategic Plan** to be released in early 2018.

Many of the respondents indicated that they needed additional information about connectivity as well as about how and what equipment to purchase. One mechanism is to offer Telehealth Expansion Workshops. In 2016, the Department of Health provided free all-day financing and telehealth expansion workshops designed for rural hospital leadership, staff, and board members. It is a goal to continue to offer this workshop in the future to support the AS3D grant work. Additional details are to be address in the AS3D Strategic Plan to be published in 2018.

Have a State-level Staff Member Dedicated to Telehealth

Grant partners have indicated that there is a need for a single point of contact for telehealth in Washington. To our knowledge, no one entity has all the answers or connections to the many issues needed for successful telehealth implementation. Given the complexity of telehealth for the provision of health care services, having a dedicated state-level staff person would be useful in addressing licensing issues, coordinating policy changes across the different state agencies, providing technical support for billing, etc. This position could do the following:

- Provide comprehensive telehealth information to providers that addresses payer policies and technical support, and telehealth training.
- Act as a centralized location for technical support on billing for telehealth within Washington that spans all payers.
- Act as a liaison to the regional telehealth technical assistance centers, the Washington State Department of Commerce, the United States Department of Agriculture (USDA), telecommunications companies, and other relevant entities in order to build a well-functioning comprehensive infrastructure.
- Act as a liaison within the Washington State Department of Health to ensure the needs of the programs, such as emergency preparedness, Children with Special Health Care Needs, licensing, etc., are addressed when implementing telehealth policy and infrastructure.
- Coordinate and disseminate telehealth best practices training for professionals and families.
- Navigate the professional licensing boards to create uniform telehealth policies across licensing categories.
- Facilitate efforts to educate families and consumers about telehealth as an option for care and to ensure that family choice and voice is included in telehealth efforts.
- Work with insurers including Medicaid to clearly articulate which are the eligible billing codes for telehealth and to expand those as appropriate.
- Convene a telehealth stakeholder workgroup.
- Assist in the implementation of local demonstration projects to identify best practices for how telehealth can be used to improve care for children with autism and other developmental disabilities.
- Explore options for "non-traditional" telehealth such as using telehealth in child care to facilitate diagnosis and staff training — which is reimbursable when the services are provided by a licensed professionals.
- Provide technical supports around the standards of care for interventions provided through telehealth.
- Provide supports to access interpreter services for medically covered services delivered via telehealth.

Additional details will be outlined in the **AS3D Strategic Plan** to be released in early 2018.

> "La parte más difícil fue el tiempo de espera para recibir los servicios. Tuvimos que esperar 3 años, lo que en mi opinión es demasiado tiempo, y no debería ser así."
>
> *The most difficult thing was the waiting time to be able to receive services. We had to wait three years, which in my opinion is long time to wait, and it should not be so.*
> **AS3D Key Informante interview con a Parente interview, Septiembre 2017**

Another recommendation to be considered as a crucial step is that there are ongoing opportunities to convene telehealth stakeholder meetings that include both providers and consumers. As more providers and families become users of telehealth, it would be a helpful to convene early adopters to participate in a learning community to help inform and spread telehealth. Additionally, there needs to be uniformity of telehealth policy across professional licensing categories within the Washington State Department of Health. Clarity from insurers including Medicaid on what services are allowed and which providers can bill for services via telehealth is also needed.

More Recommendations in Upcoming AS3D Statewide Strategic Plan

The AS3D Telehealth Statewide Strategic Plan will be released in late winter/early spring of 2018. The strategic plan will incorporate the recommendations above. Through the literature, interviews, and surveys, it is clear that telehealth provides great opportunities to meet the needs of children and families. For providers, telehealth offers cost-saving and practice efficiencies.

Overall, telehealth is an underutilized modality and represents the potential for providing diagnostic and treatment services to children with autism and other developmental disabilities and for supporting their parents and caregivers. The plan will outline opportunities to partner with the Northwest Regional Telehealth Resource Center and other state and federal agencies to identify opportunities for convening mini-conferences for providers to learn about telehealth and how to implement, including how to ensure adequate broadband internet or to fund "hot spots," how to acquire equipment for providers and families, and how to help providers get ready to implement telehealth in their practices. Additionally, based on findings from the surveys, there are providers that we would like to connect with to learn more beyond what they shared in the online provider capacity assessment.

We plan to work closely with the AS3D Family Engagement ad hoc committee to identify opportunities for families to provide input in to telehealth planning to insure that family-voice and choice is included in telehealth planning. Create opportunities for families receive training and that providers include family training when offering telehealth as an option to deliver services. Additionally, we are exploring available online training resources for providers that are considering telehealth.

> "I just wanted to say "thank you" to the state of Washington on your initiatives to expand access to integral services, such as ABA therapy, and knowing that telehealth is a viable option to do this."
> **An applied behavior analysis telehealth provider**

Appendix A

State Profile from Center for Connected Health Policy: Washington

Excerpted from the Comprehensive Scan of the 50 States and District of Columbia
by the Center for Connected Health Policy

Washington

STATE LAW/REGULATIONS	MEDICAID PROGRAM
Source: Revised Code of WA Sec. 70.41.020 & 71.24.	*Source: WA State Health Care Authority, Medicaid Provider Guide, Physician-Related Svcs./Health Care Professional Svcs., p. 76 (Oct. 1, 2017); School Based Health Care Services, p. 28 (Jan, 1, 2017) (Accessed Oct. 2017).*
Source: WA Admin. Code Sec. 182-551-2010.	
Source: WA Admin. Code Sec. 246-915-187.	

STATE LAW/REGULATIONS	MEDICAID PROGRAM
Source: WA Admin. Code Sec. 182-531-1730.	
Source: Revised Code of WA Sec. 48.43,435.	
Source: WA Admin. Code Sec. 182-531-0100.	
Source: Revised Code of WA Sec. 71.24.	*Source: WA State Health Care Authority, Medicaid Provider Guide, Physician-Related Svcs./Health Care Professional Svcs., p. 76 & 171 (Oct. 1, 2017).*
	Source: WA State Health Care Authority, Medicaid Provider Guide, Applied Behavior Analysis for Clients 20 and Younger, p. 35 (Oct. 1, 2017) & 182-531A-1200. (Accessed Oct. 2017),

STATE LAW/REGULATIONS	MEDICAID PROGRAM
	Source: WA State Health Care Authority, Medicaid Provider Guide, Physician-Related Svcs./Health Care Professional Svcs., p. 74 (Oct. 1, 2017). (Accessed Oct. 2017).
Source: Revised Code of WA Sec. 48.43,435 & 71.24.	
	Source: WA State Health Care Authority, Medicaid Provider Guide, Home Health Svcs. (Acute Care Svcs.), p. 26-28 (Oct. 1, 2017). (Accessed Oct. 2017).
	Source: WA State Health Care Authority, Medicaid Provider Guide, Applied Behavior Analysis for Clients 20 and Younger, p. 40 (Oct. 1, 2017). (Accessed Oct. 2017).

STATE LAW/REGULATIONS	MEDICAID PROGRAM

Source: WA State Health Care Authority, Medicaid Provider Guide, Physician-Related Svcs./Health Care Professional Svcs., p. 74 (Oct. 1, 2017). (Accessed Oct. 2017).

Source: Washington Medical Quality Assurance Commission, Guidelines for Appropriate Use of the Internet in Medical Practice,

STATE LAW/REGULATIONS	MEDICAID PROGRAM
Source: Revised Code of WA Sec. 41.05700 & Admin Code 182-531-1730.	*Source: WA State Health Care Authority, Medicaid Provider Guide, Physician-Related Svcs./Health Care Professional Svcs., p. 75 (Oct. 1, 2017). (Accessed Oct. 2017).*
	Source: WA State Health Care Authority, Medicaid Provider Guide, School Based Health Care Services, p. 27 (Jan. 1, 2017 (Accessed Oct. 2017).
Source: RCW 48.43.735.	
Source: RCW 43.70.250 (HB 1337 – 2017) http://lawfilesext.leg.wa.gov/biennium/2017-18/Pdf/Bills/Session%20Laws/House/1337.SL.pdf#page=1	
Source: RCW 48.43.735.	

STATE LAW/REGULATIONS	MEDICAID PROGRAM
Source: RCW 48.43.735.	*Source: WA State Health Care Authority, Medicaid Provider Guide, Physician-Related Svcs./Health Care Professional Svcs., p. 65 (Oct. 1, 2017). (Accessed Oct. 2017).*
Source: WA Admin. Code Sec. 246-915-187.	*Source: WA State Health Care Authority, Medicaid Provider Guide, Physician-Related Svcs./Health Care Professional Svcs., p. 65 (Oct. 1, 2017). (Accessed Oct. 2017).*
Source: WA Admin. Code Sec. 284-43-204.	

Appendix B

Revised Code of Washington (RCW) 48.43.735. Reimbursement of health care services provided through telemedicine or store and forward technology.

Please note that there are two dates for the following RCW. The first rule reflects rules that are effective until January 1, 2018 and the second that is effective as of January 1, 2018. This is the result of legislative action designed to advance telehealth services in Washington State.

RCW 48.43.735. Reimbursement of health care services provided through telemedicine or store and forward technology. (**Effective until January 1, 2018**.)
(1) For health plans issued or renewed on or after January 1, 2017, a health carrier shall reimburse a provider for a health care service provided to a covered person through telemedicine [or] store and forward technology if:
(a) The plan provides coverage of the health care service when provided in person by the provider;
(b) The health care service is medically necessary; and
(c) The health care service is a service recognized as an essential health benefit under section 1302(b) of the federal patient protection and affordable care act in effect on January 1, 2017.

(2)(a) If the service is provided through store and forward technology there must be an associated office visit between the covered person and the referring health care provider. Nothing in this section prohibits the use of telemedicine for the associated office visit.

(b) For purposes of this section, reimbursement of store and forward technology is available only for those covered services specified in the negotiated agreement between the health carrier and the health care provider.

(3) An originating site for a telemedicine health care service subject to subsection (1) of this section includes a:
(a) Hospital;
(b) Rural health clinic;
(c) Federally qualified health center;
(d) Physician's or other health care provider's office;
(e) Community mental health center;
(f) Skilled nursing facility; or
(g) Renal dialysis center, except an independent renal dialysis center.

(4) Any originating site under subsection (3) of this section may charge a facility fee for infrastructure and preparation of the patient. Reimbursement must be subject to a negotiated agreement between the originating site and the health carrier. A distant site or any other site not identified in subsection (3) of this section may not charge a facility fee.

(5) A health carrier may not distinguish between originating sites that are rural and urban in providing the coverage required in subsection (1) of this section.

(6) A health carrier may subject coverage of a telemedicine or store and forward technology health service under subsection (1) of this section to all terms and conditions of the plan in which the covered person is enrolled, including, but not limited to, utilization review, prior authorization, deductible, copayment, or coinsurance requirements that are applicable to coverage of a comparable health care service provided in person.

(7) This section does not require a health carrier to reimburse:
(a) An originating site for professional fees;
(b) A provider for a health care service that is not a covered benefit under the plan; or
(c) An originating site or health care provider when the site or provider is not a contracted provider under the plan.

(8) For purposes of this section:
(a) "Distant site" means the site at which a physician or other licensed provider, delivering a professional service, is physically located at the time the service is provided through telemedicine;
(b) "Health care service" has the same meaning as in RCW 48.43.005;
(c) "Hospital" means a facility licensed under chapter 70.41, 71.12, or 72.23 RCW;
(d) "Originating site" means the physical location of a patient receiving health care services through telemedicine;
(e) "Provider" has the same meaning as in RCW 48.43.005;
(f) "Store and forward technology" means use of an asynchronous transmission of a covered person's medical information from an originating site to the health care provider at a distant site which results in medical diagnosis and management of the covered person, and does not include the use of audio-only telephone, facsimile, or email; and
(g) "Telemedicine" means the delivery of health care services through the use of interactive audio and video technology, permitting real-time communication between the patient at the originating site and the provider, for the purpose of diagnosis, consultation, or treatment. For purposes of this section only, "telemedicine" does not include the use of audio-only telephone, facsimile, or email.
[2015 c 23 § 3.]

NOTES:
Effective date—Adoption of sections—2015 c 23 §§ 2-4: See notes following RCW 41.05.700.
Intent—2015 c 23: See note following RCW 41.05.700.

RCW 48.43.735

Reimbursement of health care services provided through telemedicine or store and forward technology. (**Effective January 1, 2018**.)
(1) For health plans issued or renewed on or after January 1, 2017, a health carrier shall reimburse a provider for a health care service provided to a covered person through telemedicine or store and forward technology if:
(a) The plan provides coverage of the health care service when provided in person by the provider;
(b) The health care service is medically necessary;
(c) The health care service is a service recognized as an essential health benefit under section 1302(b) of the federal patient protection and affordable care act in effect on January 1, 2015; and
(d) The health care service is determined to be safely and effectively provided through telemedicine or store and forward technology according to generally accepted health care practices and standards, and the technology used to provide the health care service meets the standards required by state and federal laws governing the privacy and security of protected health information.

(2)(a) If the service is provided through store and forward technology there must be an associated office visit between the covered person and the referring health care provider. Nothing in this section prohibits the use of telemedicine for the associated office visit.

(b) For purposes of this section, reimbursement of store and forward technology is available only for those covered services specified in the negotiated agreement between the health carrier and the health care provider.

(3) An originating site for a telemedicine health care service subject to subsection (1) of this section includes a:
(a) Hospital;
(b) Rural health clinic;
(c) Federally qualified health center;
(d) Physician's or other health care provider's office;
(e) Community mental health center;
(f) Skilled nursing facility;
(g) Home or any location determined by the individual receiving the service; or
(h) Renal dialysis center, except an independent renal dialysis center.

(4) Except for subsection (3)(g) of this section, any originating site under subsection (3) of this section may charge a facility fee for infrastructure and preparation of the patient. Reimbursement must be subject to a negotiated agreement between the originating site and the health carrier. A distant site or any other site not identified in subsection (3) of this section may not charge a facility fee.

(5) A health carrier may not distinguish between originating sites that are rural and urban in providing the coverage required in subsection (1) of this section.

(6) A health carrier may subject coverage of a telemedicine or store and forward technology health service under subsection (1) of this section to all terms and conditions of the plan in

which the covered person is enrolled including, but not limited to, utilization review, prior authorization, deductible, copayment, or coinsurance requirements that are applicable to coverage of a comparable health care service provided in person.

(7) This section does not require a health carrier to reimburse:
(a) An originating site for professional fees;
(b) A provider for a health care service that is not a covered benefit under the plan; or
(c) An originating site or health care provider when the site or provider is not a contracted provider under the plan.

(8) For purposes of this section:
(a) "Distant site" means the site at which a physician or other licensed provider, delivering a professional service, is physically located at the time the service is provided through telemedicine;
(b) "Health care service" has the same meaning as in RCW 48.43.005;
(c) "Hospital" means a facility licensed under chapter 70.41, 71.12, or 72.23 RCW;
(d) "Originating site" means the physical location of a patient receiving health care services through telemedicine;
(e) "Provider" has the same meaning as in RCW 48.43.005;
(f) "Store and forward technology" means use of an asynchronous transmission of a covered person's medical information from an originating site to the health care provider at a distant site which results in medical diagnosis and management of the covered person, and does not include the use of audio-only telephone, facsimile, or email; and
(g) "Telemedicine" means the delivery of health care services through the use of interactive audio and video technology, permitting real-time communication between the patient at the originating site and the provider, for the purpose of diagnosis, consultation, or treatment. For purposes of this section only, "telemedicine" does not include the use of audio-only telephone, facsimile, or email.

[2017 c 219 § 1; 2016 c 68 § 3; 2015 c 23 § 3.]
NOTES: Effective date—2017 c 219: "Sections 1 through 3 of this act take effect January 1, 2018." [2017 c 219 § 4.]

Effective date—2016 c 68: "Sections 3 through 5 of this act take effect January 1, 2018." [2016 c 68 § 7.]

Intent — 2016 c 68: "The legislature recognizes telemedicine will play an increasingly important role in the health care system. Telemedicine is a meaningful and efficient way to treat patients and control costs while improving access to care. The expansion of the use of telemedicine should be thoughtfully and systematically considered in Washington state in order to maximize its application and expand access to care. Therefore, it is the intent of the legislature to broaden the reimbursement opportunities for health care services and establish a collaborative for the advancement of telemedicine to provide guidance, research, and recommendations for the benefit of professionals providing care through telemedicine." [2016 c 68 § 1.]

Effective date—Adoption of sections—2015 c 23 §§ 2-4: See notes following RCW 41.05.700.
Intent—2015 c 23: See note following RCW 41.05.700.

Appendix C

AS3D Telehealth Goals

Goal 1 is to "improve access to interventions for children, youth and families with ASD/DD, including those in medically underserved and rural areas, by increasing the availability, timeliness, quality, and interconnectedness of ID/screening, referral, and diagnosis/evaluation services."

- Objective 1.3 is to: "increase access to timely and high quality screening, diagnostic and intervention services for children and youth at risk for ASD/DD and their families by expanding outreach in medically underserved communities and increasing access to multidisciplinary care through the use of telehealth (telehealth) and shared resources."
  - A key strategy (Strategy 1E) in achieving this objective is to use expand the ability of neurodevelopmental centers (NDCs) around the state to provide Medicaid billable multiple diagnostic and intervention services; a key activity is to use results from the telehealth capacity assessment (Goal 3) to devise billable methods to increase telehealth access to needed intervention services available at NDCs.
  - A key strategy (Strategy 1H) is to improve the quality of care at Medicaid-specific diagnostic and treatment provider networks through virtual telehealth quality improvement (QI) learning collaboratives;
  - ongoing support and training for centers of excellence and ABA providers will include information on using and billing for telehealth.

Goal 3 is to "strengthen the policies, state-level leadership and systems-level integration needed to ensure the timely ID of children and youth with ASD/DD and access to family-centered, comprehensive, coordinated, and culturally and linguistically competent services."

- Objective 3.2 is to: "assure maximized implementation of federal and state health laws, rules and regulations as relates to accessing needed services in the ID and treatment of ASD/DD."
  - A key strategy (Strategy 3C) in achieving this objective is to (1) conduct a statewide telehealth capacity assessment to identify the existing infrastructure to provide telehealth and identify promising telehealth practices currently being used; and (2) develop a strategic plan to maximize, market, and conduct trainings on how to use existing telehealth infrastructure for ASD/DD screening, diagnosis/evaluation, and accessing intervention.

> "I just wanted to say "thank you" to the state of Washington on your initiatives to expand access to integral services, such as ABA therapy, and knowing that telehealth is a viable option to do this. Our organization, CSERV, is a telehealth provider of ABA therapy and will be working with a Washington family shortly to ensure their child receives therapy and parent training online. We hope to treat more families in Washington and understand that these grants such as the one may also help our plight with private insurers to cover telehealth services within member's plans. Most of our families are looking for additional options to receive ABA therapy due to geographical location, long wait-lists or lack of providers in their area."
>
> **An email from an AS3D Key Informant Interviewee**

Appendix D

AS3D Telehealth Ad Hoc Committee Members

Adrienne O'Brien
Department of Early Learning

Amy T. Edmonds
DOH Graduate Student Intern

Bradley Klos
DOH – Epidemiologist

Dana Stevens
Northwest Autism Center

Dawn Sidell
Northwest Autism Center

Debra Dineen
HollyRidge Neurodevelopmental Center

Elizabeth Allen
Coordinated Care Health

Jean-Marie Dymond
DOH – Healthy Starts and Transitions

Ryan Sain
Northwest Autism Center

Yaniz Padilla
Seattle Children's

Appendix E

Resources and Literature

This is a summary of the current literature as it pertain to telehealth for evaluation, assessment, parent training and applied behavior analysis (ABA) therapy; there is additional literature and this cannot be considered a complete representation. The information presented divides the literature into three main categories: Evaluation, Assessment, and ABA therapy, which includes parent training and supervision of behavior analysts. Evidence, in the literature, supports the use of telehealth as a modality for assessment, referral, and the delivery of medically necessary behavioral treatment services (applied behavior analysis – ABA) to children with autism and other developmental disabilities for whom ABA is the appropriate intervention.

(Note: Many of the summaries include excerpts from the cited resource.)

Telehealth — General Information and Capacity Assessment

1. Realizing the Promise of Telehealth for Children with Special Health Care Needs
The Children's Partnership, the University of California-Davis Children's Hospital, and the Center for Connected Health Policy, with support from the Lucile Packard Foundation for Children's Health, 2015.
Available online: http://www.lpfch.org/sites/default/files/field/publications/realizing_the_promise_of_telehealth.pdf

Summary:
Families of children with special health care needs are painfully acquainted with the frequent difficulty of gaining access to specialty care, especially in rural areas. One emerging solution is the use of telehealth technology to allow for remote appointments.

This report highlights telehealth successes for children with special needs, the barriers to its use, and possible policy solutions. Focusing on California, the authors suggests providing comprehensive telehealth information to providers; educating families on its use; expanding billing codes and the locations and modalities that can be billed; convening a stakeholder group to identify policy barriers and solutions; and implementing pilot programs for children served by the California Children's Services program.

2. Conducting a Telehealth Needs Assessment by DeGaetano & Shore
Clinical Videoconferencing in Telehealth, *Behavioral Telehealth* Book Series, 2015

Summary:
This chapter presents a step-by-step process of how to conduct an initial assessment of needs to inform telehealth program development. It discusses why this process is essential and reviews a streamlined approach based on an example of a psychologist who is the mental health manager of a small rural clinic interested in establishing limited clinical videoconferencing (CV) services. The chapter then covers another scenario with greater scope and complexity by focusing on the perspective of a director of telehealth who is tasked with implementing telehealth programs across a large hospital system.

3. Telehealth Index: 2017 Consumer Survey
American Well, 2017.
Available online at: http://go.americanwell.com/rs/335-QLG-882/images/American_Well_Telehealth_Index_2017_Consumer_Survey.pdf

Summary:
American Well commissioned Harris Poll to conduct two online studies of more than 4,000 adults. The results are weighted to be representative of the American adult population across standard demographics.

Key findings:
1. Consumers are delaying needed care
2. Video visits offer a viable solution
3. Patients are willing to see physicians who offer video visits
4. Consumers see many applications for telehealth

4. Telehealth Capacity Assessment Tool (TCAT)
National Frontier and Rural Addiction Technology Transfer Center, 2013.
Available online at: http://www.attcnetwork.org/regcenters/productDocs/20/NFAR_TCAT_web.pdf

Summary:
The TCAT is designed to help organizations assess their readiness to adopt telehealth technologies. The initial step in the assessment process is to determine organizational readiness. The readiness assessment phase may be as simple as leaders in the organization completing the TCAT to ensure that critical areas have been considered, or as complex as a formal facilitated process among the organization's key personnel, Board of Directors, and other stakeholders. By using the TCAT, organizations can identify their strengths and weaknesses — where they are meeting essential components and where they do not — as well as define activities that can strengthen the organization's ability to refocus programs and continually improve the quality of their telehealth technology efforts. In addition, the TCAT can be used as a measurement tool over time to allow the organization to assess its increased competency and capacity in the areas that support using telehealth technologies.

5. State of Telehealth
Dorsey and Topol, New England Journal of Medicine, 2016.
Available online at: http://www.nejm.org/doi/full/10.1056/NEJMra1601705

Summary:
Telehealth is the provision of health care remotely by means of a variety of telecommunication tools, including telephones, smartphones, and mobile wireless devices, with or without a video connection. Telehealth is growing rapidly and has the potential to transform the delivery of health care for millions of persons. Although several reviews have examined the historical use and effects of telehealth, few articles have characterized its current status. This article examines the trends of telehealth, its limitations, and the possibilities for future adoption.

6. Operating Procedures for Pediatric Telehealth
American Telemedicine Association, 2017.
Available online at: http://hub.americantelemed.org/resources/telemedicine-practice-guidelines

Summary:
This guidance, which is based on clinical and empirical experience, was developed by work groups that include experts from the field and other strategic stakeholders, including clinicians, administrators, technical experts, and industry leaders. This guidance has been designed to serve as an operational reference and an educational tool to help provide appropriate care for pediatric patients. The guidance and recommendations generated by the American Telemedicine Association (ATA) undergo a thorough consensus and rigorous review, with final approval by the ATA Board of Directors. Existing guidance and recommendations are reviewed and updated periodically.

7. Telehealth Project
Kansas Department of Health and Environment, Kansas Special Health Care Needs (KS-SHCN), 2015-2016.
Available online at: https://mchbtvis.hrsa.gov/Narratives/FileView/ShowFile?fileName=SHCN%20Telehealth%20Project_5d89ca25-bed2-4f4a-aeb2-7ed00bd85eb2.pdf&AppFormUniqueId=5a8e2504-64a0-49d7-9385-06990e94eea3

Summary:
The purpose of this project is to address the needs of families of children and youth with special health care needs (CYSHCN) through collaboration, systems integration, and increased capacity for telemedicine/telehealth. The target population includes Kansas CYSHCN and their families in rural communities. The primary objective of this project is to increase capacity for utilization of telemedicine in rural communities.

8. Meeting the Health Care Needs of California's Children
The Children's Partnership.
Available online at: http://www.childrenspartnership.org/research-list/meeting-the-health-care-needs-of-californias-children-the-role-of-telemedicine/

Summary:
This issue brief describes how telemedicine—the application of Information and Communications Technology (ICT) to provide health care services at a distance — is used to improve the health of California's children, especially those who are low-income or living in medically underserved areas. The brief provides an overview of the benefits of telemedicine for children and families, health systems, and communities. It also outlines challenges to successful adoption of telemedicine and provides concrete recommendations for action.

9. Telemedicine in America 2017: Parents Use of Virtual Visits
Nemours Children's Health System, 2017.
Available online at: https://www.nemours.org/content/dam/nemours/wwwv2/filebox/mediaroom/telehealth-survey-executive-summary-final.pdf

Summary:
Findings released April 2017 by Nemours Children's Health System show 64 percent of parents polled have used or plan to use telemedicine within the next year for their child. The survey, Telemedicine in America 2017: Parents Use of Virtual Visits, found that only 15 percent of parents have tried these services, but a strong majority is receptive to online doctor visits for common childhood ailments and routine well-child visits.

Compared to a similar study conducted by Nemours in 2014, parents' use of online doctor's visits, while still relatively low, has grown by 125 percent, and their awareness of telemedicine services has increased 88 percent. While this survey--fielded by Nemours' internal consumer and strategic insights group — demonstrates the growing awareness and increasing acceptance of telemedicine, it also reveals the limited uses that parents consider for online visits. They are most willing to use telehealth services for cold and flu (58 percent), pink eye (51 percent), and rashes (48 percent), in addition to well-child visits (41 percent). According to the Centers for Disease Control and Prevention, acute childhood ailments, such as these, accounted for an estimated 171 million in-office visits in 2012 for children under 18.

Conversely, parents said they are more reluctant to consider telemedicine for treating chronic conditions. Those surveyed said they likely would never consider using telehealth services for diabetes (53 percent), asthma (43 percent), and ADHD (36 percent). Despite this hesitation, previous research published in Pediatrics has shown that these conditions that necessitate chronic care can be effectively treated through telemedicine.

Many parents report that work schedules and time pressures create problems for securing in-office appointments. According to the American Academy of Pediatrics, parents are likely to spend an average of 30 hours on well-child visits during their child's first five years alone. In the poll, parents who have used telemedicine cited convenience, after-hours accessibility, and immediacy as the top three reasons for doing so. A strong majority (74.7 percent) of these parents rated the experience as superior to an in-office doctor visit.

Additional survey findings include:

- Dads surveyed were more likely to have already used telemedicine services for themselves or their children (33.9 percent), compared to moms (21.7 percent).
- Among parents who have tried an online doctor visit for their child, nearly all of them (97.5 percent) rated the experience as equal to or better than an in-office visit.
- Most parents who have already had an online doctor visit for their child cite convenience (80.7 percent) as a prime reason for choosing online rather than in-office doctor visits.
- A majority of those who have already had an online doctor visit for their child also looked to telemedicine for more immediate care than waiting for an in-office visit (53.4 percent) or for an after-hours medical opinion (52.3 percent).
- Among those who were very comfortable with trying new remote sensing devices, such as those attached to a smartphone for sending vitals or other clinical measures to a doctor (48 percent), 29 percent of them already had had an online doctor visit for their child. This suggests a pattern of "early adopters" for new technologies in pursuing children's healthcare.

Telehealth, Evaluation, and Therapy

1. Parent-implemented Communication Intervention for Children with Significant Neurodevelopmental Disabilities and Problem Behavior: An Application of Telehealth as a Service Delivery Mechanism Therapy
Simacek, Reichle, and McGowan, 2016.
Available online at: http://www.amchp.org/programsandtopics/CYSHCN/projects/spharc/technical-assistance-calls/Documents/SPHARC_April2016_TelehealthCall_ReichleSlides.pdf

Summary:
This presentation provides an overview of the data and literature to date on the use of telehealth to provide functional communication training using a parent coaching model.

2. Telehealth
Handbook Evidence-Based Practices in Intellectual and Developmental Disabilities, Wacker, et al., 2016

Summary:
This chapter summarizes telehealth literature related to functional analysis, parent coaching, and the processes used to implement telehealth services. The chapter reviews the history of outpatient and community-based behavioral assessment and treatment programs including home-based services and telehealth-based services. It also describes the clinic-to-clinic telehealth model as well as clinic-to-home telehealth and covers what is needed for implementation. A review of benefits, challenges, and hints for clinic-to-clinic telehealth are provided. Case examples are included.

3. A Novel System for Supporting Autism Diagnosis Using Home Videos: Iterative Development and Evaluation of System Design

JMIR Mhealth Uhealth, Nazneen, et al., 2015.

Available online at: http://mhealth.jmir.org/article/viewFile/mhealth_v3i2e68/2

Summary:

This article explores how mobile technology could help parents receive a complete diagnostic assessment of autism earlier. Interviews were conducted with 11 clinicians and 6 families to solicit feedback from stakeholders about the system concept. Next, the system was iteratively designed, informed by experiences of families using it in a controlled home-like experimental setting and a participatory design process involving domain experts. Finally, in-field evaluation of the system design was conducted with 5 families of children (4 with previous autism diagnosis and 1 child typically developing) and 3 diagnosticians. For each family, 2 diagnosticians, blind to the child's previous diagnostic status, independently completed an autism diagnosis via the system. The outcomes of the assessment between the 2 diagnosticians were compared, and between each diagnostician and the child's previous diagnostic status.

The system that resulted through the iterative design process includes (1) NODA smartCapture, a mobile phone-based application for parents to record prescribed video evidence at home; and (2) NODA Connect, a Web portal for diagnosticians to direct in-home video collection, access developmental history, and conduct an assessment by linking evidence of behaviors tagged in the videos to the Diagnostic and Statistical Manual of Mental Disorders criteria. Applying clinical judgment, the diagnostician concludes a diagnostic outcome. During field evaluation, without prior training, parents easily (average rating of 4 on a 5-point scale) used the system to record video evidence. Across all in-home video evidence recorded during field evaluation, 96 percent (26/27) were judged as clinically useful, for performing an autism diagnosis. For 4 children (3 with autism and 1 typically developing), both diagnosticians independently arrived at the correct diagnostic status (autism versus typical). Overall, in 91 percent of assessments (10/11) via NODA Connect, diagnosticians confidently (average rating 4.5 on a 5-point scale) concluded a diagnostic outcome that matched with the child's previous diagnostic status.

The in-field evaluation demonstrated that the system's design enabled parents to easily record clinically valid evidence of their child's behavior, and diagnosticians to complete a diagnostic assessment. These results shed light on the potential for appropriately designed telehealth technology to support clinical assessments using in-home video captured by families. This assessment model can be readily generalized to other conditions where direct observation of behavior plays a central role in the assessment process.

4. Evaluating Interactive Videoconferencing for Assessing Symptoms of Autism

Telemedicine and e-Health, Reese, et al., 2013.

Available online at: https://www.ncbi.nlm.nih.gov/pubmed/23870046

Summary:

This study expands upon the current literature related to by investigating clinicians' ability to assess autism via telemedicine, specifically to address a disparity in early identification and intervention for rural families. Using interactive videoconferencing, researchers simulated autism assessment procedures with families with an existing diagnosis (autism or developmental disability) using current gold-standard assessment tools. We compared diagnostic accuracy, item-by-item reliability on the Autism Diagnostic Observation Schedule (ADOS)-Module 1, and

the Autism Diagnostic Interview-Revised (ADI-R) as well as parent satisfaction in an in-person and interactive videoconferencing condition. Ten children (3-5 years old) with developmental delays and 11 children matched on chronological age with a diagnosis of autism were assigned to be assessed and interviewed either in-person or over videoconferencing. Clinicians observed both in-person and through videoconferencing regardless of patient assignment.

Results indicated no significant difference in reliability of diagnostic accuracy, ADOS observations, ratings for ADI-R parent report of symptoms, and parent satisfaction between conditions. Results indicate adequate clinician agreement and parent satisfaction regardless of observational condition.

5. An Integrated Telehealth System for Remote Administration of an Adult Autism Assessment
Telemedicine and eHealth, Parmanto, Pulantara, Schutte, Saptono, and McCue, 2013.
Available online at: https://www.ncbi.nlm.nih.gov/pubmed/23230821

Summary:
This article explores a telehealth system to administer an autism assessment remotely. The remote assessment system integrates videoconferencing, stimuli presentation, recording, image and video presentation, and electronic assessment scoring into an intuitive software platform. This is an advancement over existing technologies used in telemental health, which currently require several devices. The number of children, adolescents, and adults with autism spectrum disorders (ASDs) has increased dramatically over the past 20 years and is expected to continue to increase in coming years. In general, there are not many clinicians trained in either the diagnosis or treatment of adults with ASD. Given the number of adults with autism in need, a remote assessment system can potentially provide a solution to the lack of trained clinicians. The goal is to make the remote assessment system as close to face-to-face assessment as possible, yet versatile enough to support deployment in underserved areas. The primary challenge to achieving this goal is that the assessment requires social interaction that appears natural and fluid, so the remote system needs to be able to support fluid natural interaction. Researchers in this study developed components to support this type of interaction and integrated these components into a system capable of supporting the entire autistic assessment protocol. They then implemented the system and evaluated it with real patients. The results suggest that we have achieved our goal in developing a system with high-quality interaction that is easy to use.

6. Behavioral Treatment through In-Home Telehealth for Young Children with Autism
Presentation, Lindgren S. , et al., 2011.
Available online at: http://www.amchp.org/programsandtopics/CYSHCN/projects/spharc/technical-assistance-calls/Documents/SPHARC_April2016_TelehealthCall_LindgrenSlides.pdf

Summary:
This presentation summarized grant activities supported by HRSA/MCH Grant R40-MC22644. It outlines strategies used for behavioral intervention in the Iowa applied behavioral analysis (ABA) studies and shows the outcomes and cost-savings of ABA delivered via telehealth. The outcomes of the intervention show the efficacy of treatment provided through telehealth and show that telehealth can extend ABA to areas of unmet need such as rural, underserved area.

7. Conducting Functional Analyses of Problem Behavior via Telehealth
J Dev Phys Disabil, Wacker D.P., et al., 2013.
Available online at: https://www.ncbi.nlm.nih.gov/pubmed/23543855

Summary:
Behavior consultants conducted functional analyses (FAs) via telehealth with 20 young children with autism spectrum disorders between the ages of 29 and 80 months who displayed problem behavior and lived an average of 222 miles from the tertiary hospital that housed the behavior consultants. Participants' parents conducted all procedures during weekly telehealth consultations in regional clinics located an average of 15 miles from the participants' homes. Behavior consultants briefly trained parent assistants to provide on-site support for families during consultations. FAs completed within a multi-element design identified environmental variables that maintained problem behavior for 18 of the 20 cases, and interrater agreement averaged over 90 percent. Results suggested that behavior analysts can conduct FAs effectively and efficiently via telehealth.

8. The Potential of a Store and Forward Tele-Behavioral Platform for Effective Treatment and Research of Autism
Engineering in Medicine and Biology Society, 2004. IEMBS '04. 26th Annual International Conference of the IEEE, Oberleitner, Laxminarayan, Suri, Harrington, and Bradstreet, 2004
Available online at: http://ieeexplore.ieee.org/document/1403926/?reload=true

Summary:
This paper describes the justification and the design principles of a behavioral medicine store and forward telemedicine platform to facilitate the capturing and communication of spontaneous patient behaviors for the improved evaluation, diagnosis, and ongoing treatment of people with autism. This Tele-Behavioral Health platform will allow families and other caregivers to readily capture spontaneous patient behaviors for subsequent evaluation by appropriate medical specialists. A unique feature of the system is its capability to archive and index the data for access as well as comparison over time by clinicians and other researchers. Such a system may serve as a precursor to further advances in other health information technology applications leading to more effective treatment and a better understanding of this disability.

9. Telemedicine for Children with Developmental Disabilities: A More Effective Clinical Process than Office-Based Care
Telemedicine and eHealth, Langkamp, McManus, & Blakemore, 2015.
Available online at:
https://www.ncbi.nlm.nih.gov/pubmed/25545598

Summary:
Researchers developed Tele-Health-Kids, a school-based program using asynchronous telemedicine to connect children with developmental disabilities (DD) with their primary care physician for the care of minor illnesses. They surveyed parents at enrollment and after the child's first telemedicine visit to assess satisfaction. In the article, they describe 4 cases that illustrate benefits, particularly for children with DD and challenging behaviors, suggesting that asynchronous

telemedicine may actually be superior to traditional in-office visits in some circumstances. Most parents expressed a high level of satisfaction with the program. Benefits identified include decreased stress to the child and the parents as well as increasing the likelihood of a successful medical examination due to greater cooperation by the child. Visits using asynchronous or "store and forward" telemedicine technology may be superior in some situations by allowing the visit to be performed at a pace that can be adjusted to the needs of the child with DD.

10. Preliminary Evidence on the Use of Telehealth in an Outpatient Behavior Clinic.
Journal of Applied Behavior Analysis, Suess, Wacker, Schwartz, Lustig, and Detrick, 2016.
Available online at: https://www.ncbi.nlm.nih.gov/pubmed/27001117

Summary:
This provided a demonstration of the use of telehealth to assess and initiate treatment of problem behavior in an outpatient clinic. Researchers coached parents of children with autism via telehealth to conduct functional analyses during one appointment that lasted one hour and subsequently coached them as they implemented functional communication training during three subsequent appointments (15 min each). Social functions were identified for most children, and problem behavior was reduced by an average of 65.1 percent.

11. Augmentation of Special-Needs Services and Information to Students and Teachers (ASSIST) — A Telehealth Innovation Providing School-Based Medical Interventions
Hawaii Medical Journal, Gallagher, 2004

Summary:
An innovative school-based telehealth technology was introduced in Hawaii with the purposes of: (1) evaluating students for medical/developmental conditions with educational implications, (2) providing a professionally-monitored Internet-based system of learning/development, and (3) delivering medically-based physical and occupational therapy at the student's school. Electronically recorded satisfaction surveys from parents, teachers, and providers revealed significant improvement in all three areas.

12. Impact of a University-Based Outpatient Telemedicine Program on Time Savings, Travel Costs, and Environmental Pollutants
Value in Health, Dullet, et al., 2017

Summary:
The objective of this study was to estimate travel-related and environmental savings resulting from the use of telemedicine for outpatient specialty consultations with a university telemedicine program. The study retrospectively analyzed the telemedicine consultation database at the University of California Davis Health System (UCDHS) between July 1996 and December 2013. Travel distances and travel times were calculated between the patient home, the telemedicine clinic, and the UCDHS in-person clinic. Travel cost savings and environmental impact were calculated by determining differences in mileage reimbursement rate and emissions between those incurred in attending telemedicine appointments and those that would have been incurred if a visit to the hub site had been necessary.

There were 19,246 consultations identified among 11,281 unique patients. Telemedicine visits resulted in a total travel distance savings of 5,345,602 miles, a total travel time savings of 4,708,891 minutes or 8.96 years, and a total direct travel cost savings of $2,882,056. The mean per-consultation round-trip distance savings were 278 miles, average travel time savings were 245 minutes, and average cost savings were $156. Telemedicine consultations resulted in a total emissions savings of 1969 metric tons of CO2, 50 metric tons of CO, 3.7 metric tons of NOx, and 5.5 metric tons of volatile organic compounds.

This study demonstrates the positive impact of a health system's outpatient telemedicine program on patient travel time, patient travel costs, and environmental pollutants.

13. Increasing Access to Applied Behavior Analysis through Telehealth.
University of Iowa Children's Hospital, Lindgren S., 2011.
Available online at: http://www.amchp.org/programsandtopics/CYSHCN/projects/spharc/technical-assistance-calls/Documents/Lindgren_CAAI-Telehealth%205-20-14.pdf

Summary:
This presentation provides an overview of research findings of work being conducted at the University of Iowa Children's Hospital.

Parent Training

1. Telehealth for Expanding the Reach of Early Autism Training to Parents
Autism Research and Treatment, Vismara, Young, & Rogers, 2012
Available online at: https://www.hindawi.com/journals/aurt/2012/121878/

Summary:
Although there is consensus that parents should be involved in interventions designed for young children with autism spectrum disorder (ASD), parent participation alone does not ensure consistent, generalized gains in children's development. Barriers such as costly intervention, time-intensive sessions, and family life may prevent parents from using the intervention at home. Telehealth integrates communication technologies to provide health-related services at a distance. A 12 one-hour per week parent intervention program was tested using telehealth delivery with nine families with ASD. The goal was to examine its feasibility and acceptance for promoting child learning throughout families' daily play and caretaking interactions at home. Parents became skilled at using teachable moments to promote children's spontaneous language and imitation skills and were pleased with the support and ease of telehealth learning. Preliminary results suggest the potential of technology for helping parents understand and use early intervention practices more often in their daily interactions with children.

2.What Drives Attitude towards Telemedicine among Families of Pediatric Patients? A Survey
BioMed Central, Russo, et al., 2017.
Available online at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5240275/

Summary:
Telemedicine has been recognized as a way to improve accessibility, quality, and efficiency of care. In view of the introduction of new telemedicine services, researchers conducted a survey through a self-administered questionnaire among families of children attending the Bambino Gesù Children's Hospital IRCCS, a tertiary care children's hospital located in Rome, Italy.

3. Conducting Functional Communication Training via Telehealth to Reduce the Problem Behavior of Young Children with Autism.
J Dev Phys Disabil, Wacker D. P., et al., 2013.

Summary:
For this study, functional communication training (FCT) was conducted by parents of 17 young children with autism spectrum disorders who displayed problem behavior. All procedures were conducted at regional clinics located an average of 15 miles from the families' homes. Parents received coaching via telehealth from behavior consultants who were located an average of 222 miles from the regional clinics. Parents first conducted functional analyses with telehealth consultation (Wacker, Lee, et al., in press) and then conducted FCT that was matched to the identified function of problem behavior. Parent assistants located at the regional clinics received brief training in the procedures and supported the families during the clinic visits. FCT, conducted within a non-concurrent multiple baseline design, reduced problem (Oberleitner , Laxminarayan, Suri, Harrington, & Bradstreet, 2004) behavior by an average of 93.5 percent. Results suggested that FCT can be conducted by parents via telehealth when experienced applied behavior analysts provide consultation.

4. A Randomized Controlled Trial of COMPASS Web-Based and Face-to-Face Teacher Coaching in Autism
J Consult Clin Psychol, Rubble, McGrew, Toland, Dalrymple, & Jung, 2013

Summary:
Most children with autism rely on schools as their primary source of intervention, yet research has suggested that teachers rarely use evidence-based practices. To address the need for improved educational outcomes, a previously tested consultation intervention called the Collaborative Model for Promoting Competence and Success (COMPASS; Ruble, Dalrymple, & McGrew, 2010; Ruble, Dalrymple, & McGrew, 2012) was evaluated in a second randomized controlled trial, with the addition of a web-based group.

Forty-nine teacher-child dyads were randomized into 1 of 3 groups: (1) a placebo control group, (2) COMPASS followed by face-to-face coaching sessions, and (3) COMPASS followed by web-based coaching sessions. Three individualized goals (social, communication, and independence skills) were selected for intervention for each child. The primary outcome of independent ratings of child goal attainment and several process measures (e.g., consultant and teacher fidelity) were evaluated.

Using an intent-to-treat approach, findings replicated earlier results with a very large effect size (d = 1.41) for the face-to-face group and a large effect size (d = 1.12) for the web-based coaching group relative to the placebo group. There were no differences in overall change across goal domains between the face-to-face and web-based groups, suggesting the efficacy of videoconferencing technology.

The evaluation found that COMPASS is effective and results in improved educational outcomes for young children with autism. Videoconferencing technology, as a scalable tool, has promise for facilitating access to autism specialists and bridging the research-to-practice gap.

5. Increasing Access to an ASD Imitation Intervention via a Telehealth Parent Training Program
Journal of Autism and Developmental Disorders, Wainer & Ingersoll, 2014.
Available online at: https://doi.org/10.1007/s10803-014-2186-7

Summary:
A hybrid telehealth program, combining self-directed internet-based instruction with remote coaching, was created to introduce parents of children with ASD to an imitation intervention. A single-subject multiple-baseline design study evaluated the effect of the program on changes in parent and child behavior. Parents improved in their use of the intervention techniques and their children demonstrated concurrent increases in spontaneous imitation skills. Parents also indicated that the intervention and telehealth service delivery model were acceptable, useable, and effective. Results suggest that this hybrid telehealth program has the potential to increase access to ASD services.

Cost Savings

1. Telehealth and Autism: Treating Challenging Behavior at Lower Cost
Pediatrics, Lindgren, et al., 2015.

Summary:
This study looked at whether challenging behavior in young children with autism and other developmental disabilities can be treated successfully at lower cost by using telehealth to train parents to implement applied behavior analysis (ABA). Researchers compared data on the outcomes and costs for implementing evidence-based ABA procedures to reduce problem behavior by using three service delivery models: in-home therapy, clinic-based telehealth, and home-based telehealth. Participants were 107 young children diagnosed with autism or other neurodevelopmental disorders, and data analysis focused on the 94 children who completed treatment.

All three service delivery models demonstrated successful reduction of problem behavior by training parents to conduct functional analysis and functional communication training. The mean percentage reduction in problem behavior was >90 percent in all 3 groups after treatment, and treatment acceptability based on parent ratings was high for all groups. Total costs for implementing treatment were lowest for home telehealth, but both telehealth models were significantly less costly than in-home therapy. These findings support the potential for using telehealth to provide research-based behavioral treatment to any family that has access to the Internet.

Reimbursement

1. Applied Behavioral Analysis (ABA) Program Billing Guide (For clients age 20 and younger)
Washington State Health Care Authority - Medicaid Program, 2017.
Available online at:
https://www.hca.wa.gov/billers-providers/claims-and-billing/professional-rates-and-billing-guides#a

Summary:
This Washington State Health Care Authority – Medicaid Program guide contains instructions for centers of excellence (COEs) who conduct the clinical diagnostic evaluation and applied behavior analysis (ABA) service for providers. This guide may also be helpful to primary care providers who want to assist children and their families in accessing ABA services and navigating the pathway to care.

2. How to Get Reimbursed for Telehealth
eVisit, 2017.
Available online at: www.eVisit.com

Summary:
This guide was developed to assist providers with billing and reimbursement for telehealth based on common questions we hear from providers including: How do you bill for telemedicine? What do you need to know about state telemedicine policy? How does reimbursement differ for Medicare or Medicaid vs. private payers?

Training, Education, and Assistance

California Telehealth Resource Center Online Classes
Available online at: http://www.caltrc.org/knowledge-center/training/

This curriculum, available at no charge, includes lessons on:

- California Telehealth Network – Orientation
- Change Management
- Clinical Health Informatics
- Consumer Health Informatics
- Electronic Health Records/Health Information Exchange (EHR/HIE
- Broadband Adoption
- Telehealth

Telehealth Resource Training Centers Telehealth Training Module
Available online at: *https://www.telehealthresourcecenter.org/overview/telehealth-training-module*

Northwest Regional Telehealth Resource Center (NRTRC)
Available online at: https://www.nrtrc.org/

NRTRC provides technical assistance, program support, education and information to telehealth networks in our seven-state region.

Telemental Health Toolkit
Available online at: https://www.nrtrc.org/education-article-62

Summary:
This is a 13-part series which discusses telemental health. The videos are aimed at assisting providers who will be using videoconferencing for care provision. The preparation for, approaches to and incorporation of videoconferencing are similar for any discipline and this toolkit will help any caregiver prepare for meeting patients or clients.

Telehealth Resource Center Telehealth Training
Available online at: https://www.telehealthresourcecenter.org/toolbox-module/finding-training-programs

Project ECHO
Available online at: https://echo.unm.edu/about-echo/

Summary:
The ECHO model™ increases access to specialty treatment in rural and underserved areas by providing front-line clinicians with the knowledge and support they need to manage patients with complex conditions such as: hepatitis C, HIV, tuberculosis, chronic pain, endocrinology, behavioral health disorders, and many others. The model links expert specialist teams at an academic 'hub' with primary care clinicians in local communities – the 'spokes' of the model. Together, they participate in weekly teleECHO™ clinics, which are like virtual grand rounds, combined with mentoring and patient case presentations.

Telehealth ROCKS (Rural Outreach for Children of Kansas)
Available online at: http://www.kumc.edu/community-engagement/ku-center-for-telemedicine-and-telehealth/telehealth-rocks/services.html

Florida Tech's Scott Center for Autism Treatment Telehealth Initiative
Press release available online at: https://newsroom.fit.edu/2017/01/25/florida-techs-scott-center-launches-telehealth-initiative/

Summary:
The aim of the Scott Center Telehealth/Telemedicine Initiative is to help significantly broaden the reach of the facility by eroding the barriers of expense and geography that currently constrain delivery of services. The Scott Center also has information to assist families and caregivers, available here: https://www.thescottcenter.org/advisor/tool-kits

Northwest Access Fund Low-Interest Loans for Families
Available online at: http://washingtonaccessfund.org/apply-for-loans/

Summary:
Northwest Access Fund is a community development nonprofit established by and for people with disabilities. The fund provides access to assistive technology and economic opportunity for individuals with disabilities in Washington and Oregon.

Washington State Telemedicine Collaborative Resources
Available online at: http://www.wsha.org/policy-advocacy/issues/telemedicine/washington-state-telemedicine-collaborative/telemedicine-resources/

Includes links to:
- Telehealth & Healthcare Organizations
- Telehealth Funding Agencies
- Telehealth Related Journals & Newsletters
- Telehealth Tools

National Consortium of Telehealth Resource Centers
Available online at: https://www.telehealthresourcecenter.org/
Available online at: http://www.cchpca.org/sites/default/files/uploader/Telehealth%20Definintion%20Framework%20for%20TRCs_0.pdf.

Summary:
The National Consortium of Telehealth Resource Centers developed A Framework for Defining Telehealth. The framework was developed to help policy makers, practitioners, payers, and the public understand how to accurately apply "telehealth" and its key components.

CSERV
Available online at: http://www.cservtelehealth.com/
CSERV is provider that delivers all ABA services via telehealth.

ARTICLE: A Brief Introduction to the World of Telehealth: Access to ABA Therapy Expanding Through Technology
Available online at: https://www.tbh.com/autism-treatment/a-brief-introduction-to-the-world-of-telehealth/

ARTICLE: What Does Telemedicine Mean for the Special Needs Population?
Available online at: https://www.special-learning.com/blog/article/175

Appendix F

AS3D Provider Capacity Assessment Survey

ASD/DD Telehealth Capacity Assessment Survey

Introduction

The Washington State Department of Health's Children with Special Health Care Needs Program was awarded a federal grant in September 2016 to improve access to coordinated, comprehensive systems of services that leads to early diagnosis and entry into services for children with autism spectrum disorders and other developmental disabilities within the state and their families with an emphasis on medically underserved and rural populations. The Autism Spectrum Disorders and Other Developmental Disabilities grant, referred to as "AS3D", is a collaborative effort with many partners from other state agencies and family-led and community-based organizations.

The purpose of the collaborative "AS3D" initiative is to integrate state systems of care for Washington (WA) State children and youth with autism spectrum disorders and other developmental disabilities (ASD/DD), with a special emphasis on medically underserved populations. A major focus for AS3D is maximizing existing telehealth (TH) laws and other infrastructure to increase access to services in rural and other medically underserved communities and to facilitate communication and capacity building among providers. TH encompasses a broad variety of technologies and tactics to deliver virtual medical, health, and education services; TH is not a specific service, but a collection of means to enhance care and education delivery. TH is a mode of delivery of public health and health care services using communication technologies that support long distance care or education through video conferencing. Telemedicine is often still used when referring to traditional clinical diagnosis and monitoring that is delivered by technology. However, the term "Telehealth" is now more commonly used as it describes the wide range of diagnosis and management, education, and other related fields of health care. For the purposes of AS3D, the term "telehealth" (TH) will encompass the concepts of telemedicine, TH, mHealth and tele-mentoring.

mHealth is a form of telemedicine using wireless devices and cell phone technologies.

Telementoring is the practice of developing mentorship relationships between learners and those with more experience in a particular subject or area of expertise; experts are geographically removed from learners and use web and phone-based methods to interact.

Telehealth (TH) encompasses a variety of technologies and tactics to deliver virtual medical, health, and education services. For the purposes of this survey, the term "telehealth" (TH) will encompass the concepts of telemedicine, TH, mHealth and tele-mentoring[1]. This survey focuses on the application of TH in the clinic or home setting and WA Medicaid policy.

Thank you for supporting our project by completing this Telehealth Capacity Assessment, which will help to inform this work!

Provider Information

* 1. What type of provider are you? Please select all that apply.

- [ ] Neurodevelopmental Center (NDC) - free standing
- [ ] Neurodevelopmental Center (NDC) - hospital based
- [ ] Neurodevelopmental Center (NDC) - ABA
- [ ] Neurodevelopmental Center (NDC) - COE
- [ ] Center of Excellence for Autism Diagnosis (COE) - clinic - multi-practice
- [ ] Center of Excellence for Autism Diagnosis (COE) - clinic - private practice
- [ ] Center of Excellence for Autism Diagnosis (COE) - hospital based
- [ ] Center of Excellence for Autism Diagnosis (COE) - other
- [ ] Applied Behavioral Analysis Provider (ABA) - hospital based
- [ ] Applied Behavioral Analysis Provider (ABA) - private practice
- [ ] Applied Behavioral Analysis Provider (ABA) -non-profit
- [ ] Other (please specify)

* 2. Which counties do you serve?
(i.e. In which counties or geographic regions do your patients reside?)

- [ ] Adams
- [ ] Asotin
- [ ] Benton
- [ ] Chelan
- [ ] Clallam
- [ ] Clark
- [ ] Columbia
- [ ] Cowlitz
- [ ] Douglas
- [ ] Ferry
- [ ] Franklin
- [ ] Garfield
- [ ] Grant
- [ ] Grays Harbour
- [ ] Island
- [ ] Jefferson
- [ ] King
- [ ] Kitsap
- [ ] Kittitas
- [ ] Klickitat
- [ ] Lewis
- [ ] Lincoln
- [ ] Mason
- [ ] Okanogan
- [ ] Pacific
- [ ] Pend Orielle
- [ ] Pierce
- [ ] San Juan
- [ ] Skagit
- [ ] Skamania
- [ ] Snohomish
- [ ] Spokane
- [ ] Stevens
- [ ] Thurston
- [ ] Wahkiakum
- [ ] Walla Walla
- [ ] Whatcom
- [ ] Whitman
- [ ] Yakima
- [ ] Oregon (ANY)
- [ ] Idaho (ANY)
- [ ] Canada (ANY)
- [ ] Other (please specify)

* 3. What is the approximate percentage of your current patients on Medicaid?

ABA-Specific Medicaid Questions

4. What is the approximate percentage of Medicaid patients served by each program type?

	Approximate Percentage
On-Site Early Intensive ABA Day Treatment Program	
On-clinic services	
Community or in-home ABA	

Telehealth

* 5. Do you offer any services using telehealth (consulting, parent education, training, etc.)?

- ◯ Yes
- ◯ No
- ◯ I don't know

Information on Telehealth Services Used

* 6. Which services are available at your site through TH?

7. Which other providers or types of providers are you connecting with through TH?

8. What services are you connecting to other providers for using TH?

9. Approximately what percentage of patients have received telehealth services in the past 6 months?

10. **IF YOU ARE A NDC,**
which of the following TH services do you provide?

- [ ] Diagnosis
- [ ] Consultation
- [ ] Therapy
- [ ] Other (please specify)

11. **IF YOU ARE A COE FOR AUTISM DIAGNOSIS:**
are you using TH for diagnosis and consultation?

- [ ] Yes
- [ ] No
- [ ] Don't know

12. **IF YOU ARE AN ABA PROVIDER,**
which of the following TH services do you provide?

- [ ] ABA treatment
- [ ] Family training
- [ ] ABA supervision
- [ ] Other (please specify)

13. Have you had any challenges with billing for TH services? If so, please describe.

14. Have you had any challenges with being reimbursed for TH services? If so, please describe.

Barriers to TH Utilization

* 15. Which, if any, of the following have been barriers to your practice implementing TH, or using it more often?

- [ ] Competing clinic/practice priorities
- [ ] Lack of technology (i.e. equipment)
- [ ] Funding
- [ ] Not aware of or comfortable with the technology
- [ ] No internet or low bandwidth
- [ ] Billing and reimbursement
- [ ] Provider training
- [ ] Providers are unsure of how
- [ ] Families don't know TH
- [ ] Families aren't interested in TH
- [ ] Families are concerned about the effectiveness of TH
- [ ] No barriers/I don't know
- [ ] Haven't considered TH as an option
- [ ] Other (please specify)

* 16. Do you need technical support or assistance for TH policy?

- ( ) Yes
- ( ) No
- ( ) Don't know

* 17. Do you need technical support and assistance for TH billing?

- ( ) Yes
- ( ) No
- ( ) Don't know

* 18. Would your clinic/practice be interested in learning more about TH to provide the following?

- [ ] Autism screening and evaluation
- [ ] ABA therapy
- [ ] Family training
- [ ] Not at this time

* 19. Are you interested in serving on a committee working on statewide systems improvement for:

- [ ] ABA workforce
- [ ] Telehealth
- [ ] Family navigation
- [ ] 2017 annual Washington Autism Advisory Council (WAAC) planning
- [ ] Not at this time

* 20. Are you interested in either of the following?

- [ ] Updates on AS3D activities
- [ ] Listserv around key topics related to Autism and Developmental Disabilities
- [ ] Neither at this time, thank you!

21. If you answered "Yes" to any of the previous questions on this page, please include your name, contact information, and location (optional) so that we can follow-up with your need for technical support or assistance and/or your interest in AS3D!

22. OPTIONAL - What organization(s) do you represent?

Thank you!

Please contact Jean-Marie Dymond, AS3D Grant Coordinator, at jean-marie.dymond@doh.wa.gov for more information.

Thank you for taking the time to complete this survey. Your input matters!

Appendix G

AS3D Family Telehealth Assessment (English)

Family/Caregiver Telehealth Survey - English

This survey is for parents or main caregivers of children 0-17 years old with special health care needs (including Autism Spectrum Disorder and other developmental disabilities). If you have more than one child with special health care needs, please focus your answers on your youngest child. You will be paid $50.00 if you are selected to participate in a voluntary 20-minute phone call after taking this survey.

The WA Department of Health wants to make sure children with special health care needs receive the high quality health services they need, when they need them. We want to learn about any difficulties you face in getting services for your child and your opinion of telehealth. Telehealth (also called telemedicine) refers to a variety of services that use internet technology to bring medical, health, and education services to patients.

Taking part in this survey is voluntary. Your responses will have no impact on the benefits you may receive. Your personal information will not be released.

Thank you – your answers will help us improve services for children with special health care needs.

1. How old is your child?

Years

Months

2. What is your child's gender?

- ◯ Female
- ◯ Male

3. Has a doctor ever told you that your child has any of these conditions? [Choose all that apply.]

- [ ] Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD)
- [ ] Autism, Asperger's Disorder, pervasive developmental disorder, or other Autism Spectrum Disorder
- [ ] Depression
- [ ] Anxiety
- [ ] Behavioral or conduct issues, such as oppositional defiant disorder or conduct disorder
- [ ] Any developmental delay that affects [his/her] ability to learn
- [ ] Intellectual disability
- [ ] Down Syndrome
- [ ] Asthma
- [ ] Diabetes
- [ ] Epilepsy or seizure disorder
- [ ] Migraines or frequent headaches
- [ ] A head injury, concussion, or traumatic brain injury or concussion
- [ ] Heart problem, including congenital heart disease
- [ ] Blood problems such as anemia or sickle cell disease
- [ ] Cystic Fibrosis
- [ ] Cerebral Palsy
- [ ] Muscular Dystrophy
- [ ] Arthritis or other joint problems
- [ ] Allergies

4. How old are you? [In years.]

5. What is your relationship to your child?

- ( ) Mother (biological, adoptive, or foster)
- ( ) Father (biological, adoptive, or foster)
- ( ) Grandparent
- ( ) Other

Other (please describe)

6. What is the highest grade or year of school you have completed?

- ( ) Never attended school or only attended kindergarten
- ( ) Grades 1 through 8 (Elementary)
- ( ) Grades 9 through 11 (Some high school)
- ( ) Grade 12 or GED (High school graduate)
- ( ) College 1 year to 3 years (Some college or technical school)
- ( ) College 4 years or more (College graduate)
- ( ) Graduate degree (Master's degree, doctorate, or professional degree)

7. What is your home ZIP code? [Enter a 5-digit ZIP code; for example, 98105. If your child has more than one home, provide the home ZIP code where he/she spends the most time.]

8. Do you have more than one child (age 17 or under) with special health care needs?

- ◯ Yes
- ◯ No

9. What is your child's race? [Choose all that apply.]

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or other Pacific Islander
- ☐ White

10. Is your child Hispanic or Latino?

- ◯ Yes
- ◯ No

11. What is the main language spoken at home?

- ◯ English
- ◯ Spanish
- ◯ Vietnamese
- ◯ Chinese
- ◯ Russian
- ◯ Hindi
- ◯ Korean
- ◯ Arabic
- ◯ Tagalog
- ◯ German
- ◯ French
- ◯ Mon Khmer, Cambodian
- ◯ Other

Other (please describe)

12. At this time, what kinds of health insurance is your child covered by? [Choose all that apply.]

- ☐ Private insurance (employer, marketplace/health care exchange)
- ☐ Medicaid (Apple Health)
- ☐ Military Insurance (Tricare)
- ☐ Social Security Income (SSI)
- ☐ No insurance
- ☐ Other

The next questions are about all the types of services children may need or use, such as medical care, dental care, specialized therapies, counseling, medical equipment, special education, and early intervention. These services can be obtained in clinics, schools, child care centers, and other places.

1. Over the past 12 months, did your child have any difficulties or delays in services because of any of the reasons below? [Choose all that apply.]

- ☐ **No difficulties or delays in services**
- ☐ Out-of-pocket health care cost was too much
- ☐ No insurance or not covered by health insurance
- ☐ Can't find provider who accepts child's insurance
- ☐ Not available in my area or transportation problems
- ☐ Provider did not know how to treat or provide care
- ☐ Not satisfied with provider
- ☐ Did not know where to go for care/treatment
- ☐ Child refused to go
- ☐ No referral
- ☐ No prescription/order
- ☐ Did not go or forgot appointments
- ☐ Waiting list, backlog, or other problems getting appointments
- ☐ Other (please describe)

2. If your child has had difficulties or delays in services,**what services have been the hardest to access?** Why?

3. Currently, does your child have a prescription for Applied Behavior Analysis (ABA)? [ABA is a common treatment for Autism Spectrum Disorder and other developmental disabilities.]

- ◯ Yes
- ◯ No

Telehealth (also called telemedicine) refers to a variety of services that use internet technology to bring medical, health, and education services to children and their parents/caregivers.

Providers refer to doctors, nurses, Licensed Behavior Analysts (LBA/BCBA) and other professionals that provide mental, physical, or behavioral care, including Applied Behavior Analysis to patients. Providers may also provide education-related services to parents/caregivers of patients.

The following questions are about online provider visits, which are video calls between providers and patients using computers, tablets, and "smart" phones (mobile phones with video cameras).

1. How did you first hear about online provider visits, where your child would be seen by a provider using a computer, tablet, or smart phone?

- ◯ I first heard of online provider visits through this survey
- ◯ Word-of-mouth (for example, talking to other parents/caregivers)
- ◯ A provider (doctor, nurse, Licensed Behavior Analyst, or other professional)
- ◯ Online or on TV
- ◯ Other

Other (please describe)

2. Has your child ever used an online provider visit?

- ◯ Yes
- ◯ Not sure
- ◯ No

3. Do you have internet access and a computer, tablet, or smart phone that you can use for online video calls from home?

- ◯ Yes
- ◯ Not sure
- ◯ No

4. How confident are you about setting up an online video call (using an online application such as FaceTime™ or Skype™)?

- ○ Not confident
- ○ Somewhat confident
- ○ Confident
- ○ Very confident

5. If you have not used an online provider visit for your child, why not?

- ☐ **I have used an online provider visit for my child**
- ☐ I had never heard of online provider visits before this survey
- ☐ I had heard of online provider visits but they were not available or offered to me in this area
- ☐ I had heard of online provider visits but wasn't sure I could trust health care for my child that's not face-to-face
- ☐ I was concerned about being double-charged if during the online visit the provider told me I need to take my child to see a provider in-person
- ☐ I thought the out-of-pocket health care cost would be too high
- ☐ I didn't think they would take my insurance
- ☐ I would have used an online provider visit if I could have seen a provider familiar with my child
- ☐ I would have concerns over not knowing the provider's background and qualifications
- ☐ I don't have internet at home or data/minutes cost too much to do video calls
- ☐ I don't have a computer, tablet, or smart phone that I can use for video calls
- ☐ I am not confident in my ability to use video call/I have not used video call before
- ☐ I don't trust this method of care

6. Which of the following conditions would you consider using an online provider visit for your child? [Please assume that asthma, diabetes, anxiety, ADHD/ADD, autism, and speech and language issues have already been diagnosed.]

- [ ] Well-child visit (routine check-up)
- [ ] Rash
- [ ] Pink eye
- [ ] Suspected allergic reaction
- [ ] Cold and flu
- [ ] Fever
- [ ] Persistent cough
- [ ] Ear pain or infection
- [ ] Vomiting or diarrhea
- [ ] Asthma
- [ ] Diabetes
- [ ] Anxiety
- [ ] ADHD (Attention Deficit Hyperactivity Disorder) or ADD (Attention Deficit Disorder)
- [ ] Autism Spectrum Disorder
- [ ] Speech and language issues

7. If it was offered and insurance would pay for it, would you use an online provider visit for your child in the next year?

- ( ) Yes
- ( ) Not sure
- ( ) No

8. Are there ways your child could benefit from telehealth services? Please describe.

Telehealth (also called telemedicine) refers to a variety of services that use internet technology to bring medical, health, and education services to children and their parents/caregivers.

Providers refer to doctors, nurses, Licensed Behavior Analysts (LBA/BCBA) and other professionals that provide mental, physical, or behavioral care, including Applied Behavior Analysis to patients. Providers may also provide education-related services to parents/caregivers of patients.

The following questions are about online provider visits, which are video calls between providers and patients using computers, tablets, and "smart" phones (mobile phones with video cameras). We also ask about your child's access to Applied Behavior Analysis (ABA).

1. How did you first hear about online provider visits, where your child would be seen by a provider (using a computer, tablet, or smart phone)?

- ◯ I first heard of online provider visits through this survey
- ◯ Word-of-mouth (for example, talking to other parents/caregivers)
- ◯ A provider (doctor, nurse, Licensed Behavior Analyst, or other professional)
- ◯ Online or on TV
- ◯ Other

Other (please describe)

2. Do you have internet access and a computer, tablet, or smart phone that you can use for online video calls from home?

- ◯ Yes
- ◯ Not sure
- ◯ No

3. How confident are you about setting up an online video call (using an online application such as FaceTime™ or Skype™)?

- ◯ Not confident
- ◯ Somewhat confident
- ◯ Confident
- ◯ Very confident

4. Have you ever used an online provider visit for your child?

- ◯ Yes
- ◯ Not sure
- ◯ No

5. If you have not used an online provider visit for your child, why not?

- [ ] I had never heard of online provider visits before this survey
- [ ] I had heard of online provider visits but they were not available or offered to me in this area
- [ ] I had heard of online provider visits but wasn't sure I could trust health care for my child that's not face-to-face
- [ ] I was concerned about being double-charged if during the online visit the provider told me I need to take my child to see a provider in-person
- [ ] I thought the out-of-pocket health care cost would be too high
- [ ] I didn't think they would take my insurance
- [ ] I would have used an online provider visit if I could have seen a provider familiar with my child
- [ ] I would have concerns over not knowing the provider's background and qualifications
- [ ] I don't have internet at home or data/minutes cost too much to do video calls
- [ ] I don't have a computer/tablet/smart phone that I can use for video calls
- [ ] I am not confident in my ability to use video call/I have not used video call before
- [ ] I don't trust this method of care

6. Which of the following conditions would you consider using an online provider visit for your child? [Please assume that asthma, diabetes, anxiety, ADHD/ADD, autism, and speech and language issues have already been diagnosed.]

- [ ] Well-child visit (routine check-up)
- [ ] Rash
- [ ] Pink eye
- [ ] Suspected allergic reaction
- [ ] Cold and flu
- [ ] Fever
- [ ] Persistent cough
- [ ] Ear pain or infection
- [ ] Vomiting or diarrhea
- [ ] Asthma
- [ ] Diabetes
- [ ] Anxiety
- [ ] ADHD (Attention Deficit Hyperactivity Disorder) or ADD (Attention Deficit Disorder)
- [ ] Autism Spectrum Disorder
- [ ] Speech and language issues

7. If it was offered and insurance would pay for it, would you use an online provider visit for your child in the next year?

- ◯ Yes
- ◯ Not sure
- ◯ No

8. Are there ways your child could benefit from telehealth services? Please describe.

9. How much support does your child need related to his/her Autism Spectrum Disorder or developmental disability?

- ◯ My child needs minimal [low] support
- ◯ My child needs moderate support
- ◯ My child needs substantial [high] support

10. About how many hours per week does your child receive Applied Behavior Analysis (ABA)?

11. Over the past 12 months, did your child receive all the ABA he/she was prescribed or recommended?

- ◯ Yes
- ◯ Not sure
- ◯ No

12. Over the past 12 months, did your child have any difficulties or delays in getting ABA because of any of the reasons below?

- ☐ **No difficulties or delays in getting ABA**
- ☐ Out-of-pocket ABA cost was too much
- ☐ No insurance or not covered by health insurance
- ☐ Can't find provider who accepts child's insurance
- ☐ Not available in my area or transportation problems
- ☐ Provider did not know how to provide ABA
- ☐ Not satisfied with provider
- ☐ Did not know where to go for ABA
- ☐ Child refused to go
- ☐ Did not go or forgot appointments
- ☐ Waiting list, backlog, and other problems getting ABA
- ☐ Other

Other (please describe)

13. **Where** does your child receive ABA from a provider?

- [ ] Not currently receiving ABA
- [ ] Home
- [ ] Community (for example, school or community center)
- [ ] Telehealth
- [ ] Clinic

14. About how long does it take to travel to your ABA provider, in minutes and hours? [If you do not need to travel or your child is not currently receiving ABA, skip this question.]

Hours

Minutes

The following questions are about using online video calls to provide services to children with Autism Spectrum Disorder or other developmental disability. These calls would connect providers (doctors, nurses, or Licensed Behavior Analysts (LBA/BCBA)) with children or their parents/caregivers from their home using a computer, tablet, or smart phone.

Providers can use video calls to:

- **Diagnose children who have Autism Spectrum Disorder and other developmental disabilities**
- **Provide consultation related to Autism Spectrum Disorder and other developmental disabilities**
- **Teach parents/caregivers to use ABA methods to use with their children**
- **Directly provide ABA to children**

Please rate your level of interest in trying out these telehealth services:

1. A health care provider gives your child a diagnosis through an online video call.

- ○ Not interested
- ○ Somewhat interested
- ○ Interested
- ○ Very interested

2. A health care provider gives your child a consultation through an online video call.

- ◯ Not interested
- ◯ Somewhat interested
- ◯ Interested
- ◯ Very interested

3. A Licensed Behavior Analyst (LBA/BCBA) teaches you to provide ABA to your child through an online video call.

- ◯ Not interested
- ◯ Somewhat interested
- ◯ Interested
- ◯ Very interested

4. Pre-recorded videos that can be watched online are another telehealth service we would like your opinion on. **Please rate your level of interest in the following:**

A website provides free, pre-recorded videos with tips and training on addressing your child's needs.

- ◯ Not interested
- ◯ Somewhat interested
- ◯ Interested
- ◯ Very interested

1. What would you want to know before trying telehealth for your child? (Describe your concerns.)

2. We are offering a $50 payment to selected people who would be willing to participate in a ~20 minute phone call. During the call, we will ask some more questions about your opinions of telehealth. Your name, address, phone number, and other personal information will not be released.

If you are interested, please provide your phone number and times you are usually available Monday through Friday.

Phone Number

Availability Monday-Friday

The survey is now complete! Thank you for your participation.

Appendix H

AS3D Family Telehealth Assessment (Spanish)

Familia/cuidador Telesalud Encuesta - Español

Esta encuesta es para padres o cuidadores primarios de niños de 0-17 años con necesidades especiales de atención médica (incluyendo el trastorno del espectro autista y otras discapacidades del desarrollo). Si usted tiene más de un niño con necesidades especiales de atención médica, por favor Centre sus respuestas en su niño menor.

Se le pagará $50 si está seleccionado para participar en una llamada telefónica opcional de 20 minutos después de tomar esta encuesta.

El Departamento de salud de wa quiere asegurar que los niños con necesidades especiales de atención médica reciban los servicios de salud de alta calidad que necesitan cuando los necesitan. Queremos aprender acerca de las dificultades que usted enfrenta en la obtención de servicios para su hijo y su opinión sobre la telesalud. La telesalud (también denominada telemedicina) se refiere a una variedad de servicios que utilizan la tecnología de Internet para llevar servicios médicos, de salud y educación a los pacientes.

Participar en esta encuesta es voluntario. Sus respuestas a las preguntas no tendrán ningún impacto en los beneficios que usted pueda recibir. Su información personal no será liberada.

Gracias – sus respuestas nos ayudarán a mejorar los servicios para niños con necesidades especiales de atención médica.

1. ¿Cuántos años tiene su niño?

Años

Meses

2. ¿Cuál es el género de su niño?

- ◯ Hembra
- ◯ Masculina

3. ¿Alguna vez un médico le ha dicho que su hijo tiene alguna de estas afecciones? [Elija todos los que apliquen.]

- [ ] Trastorno por déficit de atención (ADD) o trastorno por déficit de atención con hiperactividad (ADHD)
- [ ] Autismo, trastorno de Asperger, trastorno generalizado del desarrollo u otro trastorno del espectro autista
- [ ] Depresión
- [ ] Ansiedad
- [ ] Problemas de comportamiento o conducta, como trastorno negativista desafiante o trastorno de conducta
- [ ] Cualquier retraso en el desarrollo que afecta a capacidad para aprender
- [ ] Discapacidad intelectual
- [ ] Síndrome de Down
- [ ] Asma
- [ ] Diabetes
- [ ] Trastorno de epilepsia o convulsiones
- [ ] Las migrañas o dolores de cabeza frecuentes
- [ ] Una lesión en la cabeza, conmoción cerebral, o lesión cerebral traumática o conmoción cerebral
- [ ] Problema del corazón, incluyendo la enfermedad cardíaca congénita
- [ ] Problemas en la sangre como anemia o enfermedad de células falciformes
- [ ] Fibrosis quística
- [ ] Parálisis cerebral
- [ ] Distrofia muscular
- [ ] Artritis u otros problemas de la articulación
- [ ] Alergias

4. ¿Cuántos años tienes? [En años.]

5. ¿Cuál es su relación con su niño?

- ( ) Madre (biológico, adoptivo, o foster)
- ( ) Padre (biológico, adoptivo, o foster)
- ( ) Abuelo
- ( ) Otro

Otro (por favor describa)

6. ¿Cuál es el grado más alto o el año de la escuela que usted ha completado?

- ( ) Nunca asistió a la escuela o solamente asistió a jardín de infantes
- ( ) Grados 1 a 8 (escuela primaria)
- ( ) Grados 9 a 11 (algo de preparatoria)
- ( ) Grado 12 o GED (graduado de la High School secundaria)
- ( ) Colegio 1 año a 3 años (alguna Universidad o escuela técnica)
- ( ) Universidad de 4 años o más (Licenciado)
- ( ) Postgrado (Máster, doctorado o título professional)

7. ¿Cuál es el código postal de su casa? [ingrese un código postal de 5 dígitos; por ejemplo, 98105. Si su niño tiene más de una casa, proporcione el código postal de la casa donde pasa la mayor parte del tiempo.]

8. ¿Tiene más de un niño (de 17 años o menos) con necesidades especiales de atención médica?

- ◯ Sí
- ◯ No

9. ¿Cuál es la raza de su niño? [Elija todos los que apliquen.]

- ☐ Indio Americano o Nativo de Alaska
- ☐ Asia
- ☐ Negro o Afroamericano
- ☐ Hawaiano Nativo u otras Islas del Pacífico
- ☐ Blanco

10. ¿Es su niño hispano o Latino?

- ◯ Sí
- ◯ No

11. ¿Cuál es el idioma principal que se habla en casa?

- ◯ English
- ◯ Spanish
- ◯ Vietnamese
- ◯ Chinese
- ◯ Russian
- ◯ Hindi
- ◯ Korean
- ◯ Arabic
- ◯ Tagalog
- ◯ German
- ◯ French
- ◯ Mon Khmer, Cambodian
- ◯ Otro

otro (por favor describa)

12. En este momento, ¿qué tipo de seguro de salud está cubierto por su niño? [Elija todos los que apliquen.]

- [ ] Seguro privado (empleador, intercambio de atención de salud)
- [ ] Medicaid (Apple Health)
- [ ] Seguro militar (TRICARE)
- [ ] Seguridad social ingreso (SSI)
- [ ] Sin seguro
- [ ] Otro

Las siguientes preguntas son sobre todos los tipos de servicios que los niños pueden necesitar o usar, tales como atención médica, cuidado dental, terapias especializadas, consejería, equipo médico, educación especial e intervención temprana. Estos servicios se pueden obtener en clínicas, escuelas, centros de cuidado infantil y otros lugares.

1. Durante los últimos 12 meses, ¿tuvo su hijo dificultades o retrasos en los servicios debido a cualquiera de estas razones? [Elija todos los que apliquen.]

- [ ] No hay dificultades o retrasos en los servicios
- [ ] Costo del cuidado de la salud era demasiado alto
- [ ] Ningún seguro o servicio no cubierto por el seguro médico
- [ ] No puede encontrar proveedor que acepte el seguro del niño
- [ ] No disponible en mi área o problemas de transporte
- [ ] Proveedor no sabía cómo tratar o proporcionar atención
- [ ] No satisfecho con el proveedor
- [ ] Otro (por favor describa)
- [ ] No sabía dónde ir para el cuidado/tratamiento
- [ ] Niño se negó a ir
- [ ] No remisión
- [ ] No prescripción/orden
- [ ] No ir o olvidó
- [ ] Lista de espera, atraso u otros problemas para obtener citas
- [ ] Otro

2. ¿Si su niño ha tenido dificultades o retrasos en los servicios, cuales servicios han sido de difícil acceso? ¿Por qué?

3. Actualmente, ¿tiene su hijo una prescripción para el análisis de comportamiento aplicado (ABA)? [ABA es un tratamiento común para el trastorno del espectro autista y otras discapacidades del desarrollo.]

- ◯ Sí
- ◯ No

La telesalud (también llamada telemedicina) se refiere a una variedad de servicios que utilizan la tecnología de Internet para llevar servicios médicos, de salud y educación a los niños y sus padres/cuidadores.
Los proveedores se refieren a médicos, enfermeras, analistas de comportamiento con licencia (LBA/BCBA) y otros profesionales que administran atencion mental, física o conductual, incluyendo el análisis de comportamiento aplicado a los pacientes. Los proveedores también pueden administrar servicios acerca de la educacion de los padres/cuidadores de los pacientes.
Las siguientes preguntas son acerca de las visitas de proveedores en línea, que son llamadas de vídeo entre proveedores y pacientes que utilizan computadoras, tabletas y teléfonos "inteligentes" (teléfonos móviles con cámaras de vídeo).

1. ¿Cómo aprendió por primera vez acerca de las visitas de proveedores en línea, donde su hijo visitaría a un proveedor usando una computadora, una tableta o un teléfono cellular?

- ◯ He aprendido acerca de las visitas de proveedores en línea a través de esta encuesta
- ◯ De boca en boca (por ejemplo,) hablar con otros padres/cuidadores
- ◯ Un proveedor (médico, enfermera, Analista de comportamiento con licencia, u otro profesional)
- ◯ En línea o en la TV
- ◯ Otro

Otro (por favor describa)

2. ¿Ha utilizado su niño alguna vez una visita de proveedor en línea?

- ◯ Sí
- ◯ No seguro
- ◯ No

3. ¿Tiene acceso a Internet y un ordenador, tableta o teléfono celular que puedes utilizer para llamadas de video en línea desde casa?

- ◯ Sí
- ◯ No seguro
- ◯ No

4. ¿Qué tan seguro está de configurar una videollamada en línea (utilizando una aplicación en línea como FaceTime o Skype)?

- ◯ No confiado
- ◯ Un poco confiado
- ◯ Confiado
- ◯ Muy confiado

5. Si no ha utilizado una visita de proveedor en línea para su niño, ¿por qué no?

- [ ] He utilizado una visita de proveedor en línea para mi niño
- [ ] Nunca habia escuchado hablar de las visitas de proveedores en línea antes de esta encuesta
- [ ] Escuchado hablar de las visitas de proveedores en línea pero no estaban disponibles o ofrecidos a mí en esta zona
- [ ] Que tenía escuchado hablar de las visitas de proveedores en línea, pero no estaba seguro de que podía confiar en el cuidado de salud que no es cara a cara
- [ ] I estaba preocupado por ser doble carga si durante la visita en línea el proveedor me dijo que tengo que tomar mi niño a ver a un proveedor en persona
- [ ] Pensé que el costo del cuidado de la salud sería demasiado alto
- [ ] Yo no creo que iban a tomar mi seguro
- [ ] Me hubiera utilizado una visita de proveedor en linea si pudiera tener visto un proveedor familiarizado con mi niño
- [ ] Yo tendría preocupaciones por no conocer el historial del proveedor y las calificaciones
- [ ] No tengo Internet en mi casa o los datos/minutos cuestan demasiado para hacer las llamadas de video
- [ ] No tengo un ordenador, tableta, o teléfono inteligente que puedo utilizar para las llamadas de vídeo
- [ ] No estoy seguro de mi capacidad para utilizer video call/no he utilizado videollamada antes de que
- [ ] No confio en este metodo (de servicios medicales en linea)

6. ¿Cuál de las siguientes condiciones consideraría utilizar una visita de proveedor en línea para su niño? [por favor asuma que el asma, la diabetes, la ansiedad, el ADHD, el autismo, y los problemas del habla y el lenguaje ya han sido diagnosticados.]

- [ ] Visita de niño bien (chequeo rutinario)
- [ ] Erupción
- [ ] Ojos rosados
- [ ] Sospecha de reacción alérgica
- [ ] Resfriado o gripe
- [ ] Fiebre
- [ ] Tos persistente
- [ ] Oído dolor o infección
- [ ] Vómitos o diarrea
- [ ] Asma
- [ ] Diabetes
- [ ] Ansiedad
- [ ] ADHD (trastorno de déficit de atención con hiperactividad) o ADD (trastorno por déficit atención)
- [ ] Autismo espectro trastorno
- [ ] Habla y temas de lenguaje

7. Si se ofreciera y el seguro lo pagaría, ¿usaría una visita de proveedor en línea para su niño en el próximo año?

- ◯ Sí
- ◯ No seguro
- ◯ No

8. ¿Hay maneras de que su niño pueda beneficiarse de los servicios de telesalud? Por favor, describa.

La telesalud (también llamada telemedicina) se refiere a una variedad de servicios que utilizan la tecnología de Internet para llevar servicios médicos, de salud y educación a los niños y sus padres/cuidadores.
Los proveedores se refieren a médicos, enfermeras, analistas de comportamiento con licencia (LBA/BCBA) y otros profesionales que administran atencion mental, física o conductual, incluyendo el análisis de comportamiento aplicado a los pacientes. Los proveedores también pueden administrar servicios acerca de la educacion de los padres/cuidadores de los pacientes.
Las siguientes preguntas son acerca de las visitas de proveedores en línea, que son llamadas de vídeo entre proveedores y pacientes que utilizan computadoras, tabletas y teléfonos "inteligentes" (teléfonos móviles con cámaras de vídeo).

1. ¿Cómo aprendió por primera vez acerca de las visitas de proveedores en línea, donde su niño visitaría a un proveedor usando una computadora, una tableta o un teléfono cellular?

- ◯ He aprendido acerca de las visitas de proveedores en línea a través de esta encuesta
- ◯ De boca en boca (por ejemplo,) hablar con otros padres/cuidadores
- ◯ Un proveedor (médico, enfermera, Analista de comportamiento con licencia, u otro profesional)
- ◯ En línea o en la TV
- ◯ Otro

otro (por favor describa)

2. ¿Ha utilizado su niño alguna vez una visita de proveedor en línea?

- ◯ Sí
- ◯ No seguro
- ◯ No

3. ¿Tiene acceso a Internet y un ordenador, tableta o teléfono celular que puedes utilizer para llamadas de video en línea desde casa?

- ◯ Sí
- ◯ No seguro
- ◯ No

4. ¿Qué tan seguro está de configurar una videollamada en línea (utilizando una aplicación en línea como FaceTime o Skype)?

- ◯ No confiado
- ◯ Un poco confiado
- ◯ Confiado
- ◯ Muy confiado

5. Si no ha utilizado una visita de proveedor en línea para su niño, ¿por qué no?

- [ ] He utilizado una visita de proveedor en línea para mi niño
- [ ] Nunca habia escuchado hablar de las visitas de proveedores en línea antes de esta encuesta
- [ ] Escuchado hablar de las visitas de proveedores en línea pero no estaban disponibles o ofrecidos a mí en esta zona
- [ ] Que tenía escuchado hablar de las visitas de proveedores en línea, pero no estaba seguro de que podía confiar en el cuidado de salud que no es cara a cara
- [ ] I estaba preocupado por ser doble carga si durante la visita en línea el proveedor me dijo que tengo que tomar mi niño a ver a un proveedor en persona
- [ ] Pensé que el costo del cuidado de la salud sería demasiado alto
- [ ] Yo no creo que iban a tomar mi seguro
- [ ] Me hubiera utilizado una visita de proveedor en linea si pudiera tener visto un proveedor familiarizado con mi niño
- [ ] Yo tendría preocupaciones por no conocer el historial del proveedor y las calificaciones
- [ ] No tengo Internet en mi casa o los datos/minutos cuestan demasiado para hacer las llamadas de video
- [ ] No tengo un ordenador, tableta, o teléfono inteligente que puedo utilizar para las llamadas de vídeo
- [ ] No estoy seguro de mi capacidad para utilizer video call/no he utilizado videollamada antes de que
- [ ] No confio en este metodo (de servicios medicales en linea)

6. ¿Cuál de las siguientes condiciones consideraría utilizar una visita de proveedor en línea para su niño? [por favor asuma que el asma, la diabetes, la ansiedad, el ADHD, el autismo, y los problemas del habla y el lenguaje ya han sido diagnosticados.]

- [ ] Visita de niño bien (chequeo rutinario)
- [ ] Erupción
- [ ] Ojos rosados
- [ ] Sospecha de reacción alérgica
- [ ] Resfriado o gripe
- [ ] Fiebre
- [ ] Tos persistente
- [ ] Oído dolor o infección
- [ ] Vómitos o diarrea
- [ ] Asma
- [ ] Diabetes
- [ ] Ansiedad
- [ ] ADHD (trastorno de déficit de atención con hiperactividad) o ADD (trastorno por déficit atención)
- [ ] Autismo espectro trastorno
- [ ] Habla y temas de lenguaje

7. Si se ofreciera y el seguro lo pagaría, ¿usaría una visita de proveedor en línea para su niño en el próximo año?

- ( ) Sí
- ( ) No seguro
- ( ) No

8. ¿Hay maneras de que su niño pueda beneficiarse de los servicios de telesalud? Por favor, describa.

9. ¿Cuánto apoyo necesita su niño acerca de su trastorno de espectro autista o discapacidad de desarrollo?

- ( ) Mi niño necesita una ayuda mínima [baja]
- ( ) Mi niño necesita apoyo moderado
- ( ) Mi niño necesita ayuda sustancial [alta]

10. ¿Acerca de cuántas horas por semana recibe su niño el análisis de comportamiento aplicado (ABA)?

11. Durante los últimos 12 meses, ¿recibió su hijo toda la ABA que se le recetó o recomendó?

- ◯ Sí
- ◯ No seguro
- ◯ No

12. Durante los últimos 12 meses, ¿tuvo su niño dificultades o retrasos en la obtención de ABA debido a alguna de las razones siguientes?

- ☐ No hay dificultades o retrasos en los servicios ABA
- ☐ Costo del cuidado de la salud era demasiado alto
- ☐ Ningún seguro o servicio ABA no cubierto por el seguro médico
- ☐ No puede encontrar proveedor que acepte el seguro del niño
- ☐ No disponible en mi área o problemas de transporte
- ☐ Proveedor no sabía cómo tratar o proporcionar atención
- ☐ No satisfecho con el proveedor
- ☐ No sabía dónde ir para el cuidado/tratamiento
- ☐ Niño se negó a ir
- ☐ N o remisión
- ☐ No prescripción/orden para ABA
- ☐ No ir o olvidó
- ☐ Lista de espera , atraso u otros problemas para obtener citas
- ☐ Otro

otro (por favor describa)

13. ¿Dónde se realiza la ABA de su niño?

- ☐ No recibe ABA (en este momento)
- ☐ Casa
- ☐ Comunidad (por ejemplo, centro escolar o comunitario)
- ☐ Telesalud
- ☐ Clinic

14. ¿Acerca de cuánto tiempo se tarda en viajar a su proveedor ABA, en minutos y horas? [Si no necesita viajar o si no estas recibiendo ABA, omita esta pregunta.]

Horas

Minutos

Familia/cuidador Telesalud Encuesta - Español

Las siguientes preguntas son sobre el uso de videollamadas en línea para administrar servicios a los niños con trastorno del espectro autista u otra discapacidad del desarrollo. Estas llamadas conectarían a los proveedores (médicos, enfermeros o analistas de conducta autorizados (LBA/BCBA)) con los niños o sus padres/cuidadores de su hogar usando una computadora, una tableta o un teléfono inteligente.

Proveedores pueden utilizar videollamadas a:

• Diagnosticar los niños que tienen autismo trastorno de espectro y otras discapacidades de desarrollo

• Administrar una consulta relacionada con el trastorno del espectro autista y otras discapacidades del desarrollo

• Enseñe a los padres/cuidadores a usar los métodos ABA para usar con sus niños

• Administrar ABA directamente a los niños

Por favor califique su nivel de interés en el uso de estos servicios de telesalud:

1. Un proveedor de atención de la salud le da a su niñoun diagnóstico a través de una línea de llamada de video.

- ◯ No interesado
- ◯ Un poco interesado
- ◯ Interesado
- ◯ Muy interesado

2. Un proveedor de atención médica le da a su niñouna consulta a través de una llamada de video en línea.

- ◯ No interesado
- ◯ Un poco interesado
- ◯ Interesado
- ◯ Muy interesado

3. Un Licensed Behavior Analyst (LBA/BCBA) le enseña a proporcionar ABA a su niño a través de una videollamada en línea.

- ◯ No interesado
- ◯ Un poco interesado
- ◯ Interesado
- ◯ Muy interesado

4. Los videos pregrabados que usted puede ver en línea son otro servicio de telesalud que quisiéramos su opinión en. Por favor, califique su nivel de interés en lo siguiente:

Un sitio web proporciona videos gratuitos y pregrabadoscon consejos y entrenamiento para satisfacer las necesidades de su niño.

- ◯ No interesado
- ◯ Un poco interesado
- ◯ Interesado
- ◯ Muy interesado

Familia/cuidador Telesalud Encuesta - Español

1. ¿Qué le gustaría saber antes de probar la telesalud para su niño? (Describa sus inquietudes.)

2. Estamos ofreciendo un pago de $50 a las personas seleccionadas que estarían dispuestas a participar en una llamada de teléfono de ~ 20 minutos. Durante la llamada, le haremos más preguntas acerca de sus opiniones sobre la telesalud. Su nombre, dirección, número de teléfono y otra información personal no serán liberados.

Si usted está interesado, por favor proporcione su número de teléfono y tiempos usted está generalmente disponible de Lunes a Viernes.

Número de teléfono

Disponibilidad de Lunes a Viernes

La encuesta ya está completa. ¡Gracias por su participación!

Appendix I

Example e-mail sent to a new WA state ABA provider

Good Morning _____,

Thank you for a very informative conversation yesterday. I look forward to learning more about your experiences using telehealth to deliver services.

As promised, here are the follow-up items on my list:

1. Medicaid

The WA State Health Care Authority is responsible for managing the state's Medicaid program.

The vast majority of children covered by Medicaid are in enrolled in managed care. So if you want to see Medicaid clients, you'll need to contract with those plans. From what I have heard from other providers, there are processes through OneHealthPort that are supposed to make credentialing easier. Here is a link to HCA's managed care information which has the names of the five plans that Medicaid contracts with.

https://www.hca.wa.gov/free-or-low-cost-health-care/apple-health-medicaid-coverage/apple-health-managed-care

ABA Provider guide

This is the link to the general alpha listing; the provider guides and fee schedules are updated regularly so you'll want to get the latest version

https://www.hca.wa.gov/billers-providers/claims-and-billing/professional-rates-and-billing-guides#a

You may also want to sign-up for program updates: https://www.hca.wa.gov/billers-providers/provider-alerts

2. Neurodevelopmental information and contacts

https://www.doh.wa.gov/YouandYourFamily/InfantsandChildren/HealthandSafety/ChildrenwithSpecialHealthCareNeeds/Partners/NeurodevelopmentalCenters

The Neurodevelopmental Centers of Washington (PDF) are a group of 19 community non-profit and hospital-based agencies who provide therapy and related services to young children with neuromuscular or developmental disorders. The centers are located across the state, each one meeting needs specific to its community.

3. **E-mail introductions with Mendy at the Autism Center | Seattle Children's Hospital:**
   (day program coaching and mentoring)
   www.seattlechildrens.org/clinics-programs/autism-center

4. **E-mail introductions to Dana, Dawn & Ryan at the Northwest Autism Center:**
   www.nwautism.org

5. **WithinReach:** www.parenthelp123.org

6. **Seattle Children's Hospital – The Center for Children with Special Needs:** https://cshcn.org/

7. **Ben's Fund:** www.featwa.org/grants/

8. **Lifespan Respite of WA:** www.lifespanrespitewa.org/

9. **DSHS-DDA eligibility link:** https://www.dshs.wa.gov/dda/consumers-and-families/eligibility

Appendix J

Washington Telehealth Activities

Source: Report of the Washington State Telehealth Collaborative, December 2016. Retrieved 11/8/2017, Available online at: http://www.wsha.org/wp-content/uploads/Dec-2016-Telehealth-Collaborative-Reportv3.pdf.

More information: http://www.wsha.org/policy-advocacy/issues/telemedicine/washington-state-telemedicine-collaborative/

Legacy Health (Vancouver, WA)

Provider Telehealth Services:

- Maternal Fetal Medicine
- Tele-Stroke
- Tele-Baby Resuscitation
- Tele-Psychiatry
- Tele-ICU
- Tele-Pediatric Critical Care
- Tele-Cardiology
- Tele-Infectious Diseases

SeaMar

User Telehealth Services:

- Project ECHO HIV and HCV
- Tele-Dermatology
- Tele-Psychiatry

Provider Telehealth Services:

- SPIRIT program for bipolar and PTSD

Virginia Mason Medical Center

Provider Telehealth Services:

- Secure messaging and phone visits for specialty and primary care
- Virginia Mason Virtual Care Clinic (primary and urgent care)
- TeleNeurology
- TeleStroke

Olympic Medical Center

User Telehealth Services:

- Tele-Radiology
- Tele-Stroke
- Tumor Boards
- Tele-Lung
- Tele-Movement Disorders
- Tele-Neurology
- Tele-Pain
- Tele-Psychiatry
- Project ECHO HCV

Group Health Provider

Provider Telehealth Services:

- Secure messaging and phone visits for all specialties and primary care
- Online visits (tele-urgent care/ convenience care)
- Tele-Psychiatry with video
- Tele-Dermatology
- Video visits for pediatric urgent care
- Virtual Consults for all specialties (eConsult)

Seattle Children's Hospital

Provider Telehealth Services:

- Tele-EKG
- Tele-EEG
- Adolescent Medicine
- Dermatology
- Endocrinology
- Neurology
- Pain Medicine
- Pulmonology
- Psychiatry

University of Washington

Provider Telehealth Services:

- Project ECHO (Hep C, HIV, TB, addictions and psychiatry, geriatrics, heart failure)
- TelePain
- TeleStroke
- Maternal Fetal Medicine
- TeleDermatology
- TeleBurns
- TeleGenetics
- TelePsychiatry (inpatient and outpatient)

Multicare

Provider Telehealth Services:

- Doc on Demand (virtual urgent care)
- Zipnosis eCare
- Tele-Intensivist
- Tele-Psychiatry
- Diabetes Education
- Electrophysiology
- OBCareConnect
- Post-Operative Surgery
- Lactation
- Psychiatry
- Speech Therapy
- Remote Home Monitoring

Swedish Providence

Provider Telehealth Services:

- Behavioral Health
- Cancer Social Work
- Cardiology
- Case Management
- Tele-EKG
- Tele-EEG
- Endocrinology
- Endocrine Surgery
- Epilepsy
- Genetic Counseling
- Hospice
- Hospitalist
- Infectious Disease
- ICU
- Lung Cancer Screening
- Maternal Fetal Medicine
- Movement Disorders
- Multiple Sclerosis
- Neonatal Intensive Care
- Neurology
- Oncology
- Pain Management
- Palliative Care
- Pediatric Endocrinology
- Pediatric Intensivist
- Pediatric Hospitalist
- Psychiatry
- Remote Patient Monitoring
- Sleep Medicine
- Social Work
- Stroke
- Tobacco Cessation
- Wound Care
- Health eXpress (Urgent Care)

Appendix K

BCBA and Behavior Technicians Meeting

Additional information from the AS3D key informant interviews.

Key takeaways:

- Access issues: "aging out" of ABA care; differences by insurance status, but providers not always aware of insurance status; Tricare (military family) insurance, faster care than Medicaid; long waiting lists due to capacity.
- Comfort with technology: Differs by individual provider and their age/experience with it. Half seemed very comfortable, half did not feel as comfortable, but felt they could learn.
- How has telehealth worked for you? Concerns related to your work or families? Themes:
  - Most providers have experienced telehealth via its application for supervision, as a supervisor or supervisee.
  - Many of the families they work with are young and comfortable with technology. However, need to be aware of the constraints for families (minutes/data and costs) or devices.
  - Need to make sure use of technology (emails, etc.) is compliant with regulations. Hard to supervise from afar; you personally can't model best practices with the child. You're a talking head on a phone. (Parents were usually not aware of this.)
  - Hard to be supervised from afar, however, effectiveness depends on the supervising BCBA and their comfort level. Some BCBAs are good at assessing the situation via telehealth, and others, not so much. When being supervised, it is helpful to be able to debrief and express concerns before the session happens. Telehealth doesn't allow for this communication as much. Technology has to be reliable and work well with the situation; if a child is running around, how does the supervisor see what's going on if they are located at a fixed location.
  - Many "unknowns" about how to conduct a supervisory session with telehealth in an effective way
  - With regard to parent training sessions via telehealth, parents may not like getting in front of a camera. On the other hand, parents are more in control in what a provider can see in their home, which could be more comfortable for them. Privacy is an issue.
  - Distractions are more obvious via video call
  - Awkward to meet via telehealth with a provider you haven't met in person/less room for trust-building
  - Related to future messaging: Is telehealth a replacement or a temporary solution?
  - Most BCBAs do not do their own billing so this may be less of a concern
- Avenues for learning/disseminating knowledge about telehealth? No one had been introduced to telehealth in their programs or in trainings in a more formal way. Not a centralized place where BCBAs get information. Potential for dissemination of resources through Behavior Analyst Certification Board or Washington Association for Behavior Analysis.

Some illustrative quotes:

"I love technology; what I've seen from the clients' families, they are younger and are comfortable with social media and technology."

"Technology needs to be easily accessible, won't take long, and free. I would have no problems doing reflective supervision over a platform. For families, on the phone is more convenient. Text is easiest. Sometimes, I can't give them a call because their minutes have run out. Many of the families I work with have an IPAD, but there's not always access to WIFI."

"I don't really like it. There is so much that occurs in person…as the supervisor, when I am present supervising, I can model things, I can step in and intervene and show interventions in a way. Can't talk through it. Having the interface is different. You're a talking head on a phone. There is definitely a difference. For whatever reason, I just prefer to be there in person."

"It depends on the BCBA; it's not the best situation but it's not the worst either. It just depends. That particular parent would set us up on the big screen. We'd be mobile, and the kid would go outside … that's inconvenient. I would rather have that than nothing. Some BCBAs are used to it, and would catch things… it wasn't a bad experience but I really like having my supervisor there [in person]."

"It's a way of getting services to people in remote services, but it is not my go-to. I have the opportunity to do that for places it is hard to get to. Better than driving to a person. But it's so easy to walk off screen for people …"

"My client would run in different rooms. It would have been helpful for the BCBA to have planned ahead of time. In the parking lot or earlier in the day, we would be able to talk about things I'd want to work on. It would have been nice to have more structure… If I did only telehealth, would have been difficult. It's important to be there in-person — I love it, it is really important."

"Getting in front of a camera: a lot of the parents don't like being in front, or recording their homes … privacy is a big issue. I put myself in their shoes, and I think that would be an issue."

"I wonder if it makes any difference in developing trust between a provider and a client. Not everyone is going to have that comfort level and that's so important. It's not something we talk about all the time."

"I've heard little snippets here and there… there is someone in the Midwest about providing ABA at a distance. There's never the specifics of exactly what they did and how they did it."

"Parent training is the hallmark of good, but in reality… how burnt out I am as a clinician? Then, I'm also supposed to be providing the parent training? How do I do all of that?"

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For people with disabilities, this document is available on request in other formats.
To submit a request, please call 1-800-525-0127 (TDD/TTY 711).