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Using Telehealth to Adapt Service Delivery for Children During the COVID-19 Pandemic

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Plain Language Summary

The Institute for Human Development (IHD) at Northern Arizona University evaluates children who have problems with their development. These problems are called developmental disabilities (DD). Evaluations give families information about how the child talks, walks, thinks, and does things for themselves like eat or dress. Families can use this information to get services to help their child.

The COVID-19 virus stopped people from seeing each other. Therapists at IHD stopped doing evaluations and therapy visits. Children were not getting the therapy they needed. However, IHD therapists decided to provide some of these services using technology and computers instead of seeing the children in person. This is called teletherapy. During teletherapy, the parents, child, and therapists can see and talk to each other. For this to work, the family needed to have a computer or a tablet device and internet service. The therapists also had technology plus a special computer program called Zoom.

By trying something new, therapists learned that they could use technology for some evaluations and therapy. They did not always need to see the child in person. Teletherapy did not work for all families, but it did help many families. It was something good that came out of the Covid-19 virus. IHD is helping other therapists learn about teletherapy.

The COVID-19 pandemic brought and continues to bring extraordinary financial, physical, and mental health challenges to families throughout the world. Families who have children with intellectual and developmental disabilities (I/DD) have heightened parenting stress even in pre-pandemic times compared to parents of typically developing children (Hayes & Watson, 2013; Woodman et al., 2015). During COVID-19, families who have children with I/DD may confront additional short- and long-term consequences. The loss of essential services due to the need for social distancing places more responsibilities on families to meet all the educational, behavioral, and daily living needs of their child with special needs (Fontanesi et al., 2020). Families may worry about the long-term impact on their child's development due to the suspension of educational programs and lack of social opportunities (Neece et al., 2020). This concern is valid because better outcomes in children with I/DD are obtained through early diagnosis and treatment. Early intervention uses the brain plasticity present in early childhood and contributes to rapid and positive changes in learning and development (National Institute of Child Health and Human

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Development [NICHD], 2017). Children from ethnically and linguistically diverse backgrounds may have more difficulty obtaining an accurate diagnosis for a developmental disability. Under- and over-representation of ethnic and racial minorities in terms of disability may be promoted by issues such as decreased access to health care, inadequate health insurance, and lack of culturally sensitive approaches for evaluation (Flores & Tomany-Korman, et al., 2008; Zuckerman et al., 2014). Although in many areas of the U.S., diagnostic and intervention services for children with I/DD were discontinued at the onset of the COVID-19 pandemic, many programs including those at the Institute for Human Development (IHD) at Northern Arizona University (NAU), continued to serve children with I/DD by modifying or adapting their service delivery to a telehealth model (U.S. Office of Special Education Programs, 2020).

Adaptation in the context of an implementation of an intervention is “defined as a process of thoughtful and deliberate alteration to the design or delivery of an intervention, with the goal of improving its fit or effectiveness in a given context” (Stirman et al., 2019, p. 1). Three child evaluation and intervention programs provided through NAU are examples of programs that were adapted to meet the needs of families when in-person services were restricted. In reporting adaptations to our assessment and intervention processes in response to the COVID-19 pandemic, the adaptations will be discussed in the context of the expanded Framework for Modification and Adaptations (FRAME) developed by Stirman et al. The FRAME process of modifying evidence-based interventions has the following eight components:

1. When and how in the implementation process the modification was made;
2. Whether the modification was planned or unplanned;
3. Who determined that the modification should be made.
4. What is modified;
5. At what level of delivery the modification is made;
6. The type or nature of context or content-level modification;
7. The extent to which the modification is fidelity-consistent; and
8. The reasons for the modification: (a) the intent or goal and (b) the contextual factors that influenced the decision.

Description of Three UCEDD-Provided Direct Services

The Northern Arizona University-Institute for Human Development (NAU-IHD) is a University Center for Excellence in Developmental Disabilities (UCEDD), one of two in the state of Arizona. IHD is an interdisciplinary unit working on projects across a range of university departments, research institutes, community organizations, consumer advocacy groups, and state agencies that impact the delivery of services and supports to persons with disabilities. As part of its vision to promote inclusion of individuals with disabilities, IHD provides training, technical assistance, and direct services in Arizona communities.

This article describes the adaptations that were made in three community service programs at the IHD at NAU in response to the COVID-19 pandemic. We will report on the

modifications made to the provision of evaluations and therapeutic interventions to children with developmental disabilities. The three programs include: The *Augmentative and Alternative Communication (AAC) program*, the *Growing in Beauty Partnership Program (GIBPP)*, and the *Interdisciplinary Training Clinic (ITC)*. These modifications are examined in the context of the eight components of the updated FRAME, a framework for reporting adaptations and modifications to evidence-based interventions (Stirman et al., 2019).

IHD has provided Augmentative and Alternative Communication (AAC) evaluations for almost 20 years. These comprehensive, team-based assessments conducted by a speech-language pathologist (SLP) and an occupational therapist (OT) have traditionally been performed face-to-face. The evidence-based process includes a thorough review of the client's referral information and the onsite assessment incorporates the funder's requirement for hands-on device trials with at least three different types of AAC devices (including, when appropriate, use of access equipment such as switches and mounting options). Furthermore, the evaluations are typically performed in natural setting such as the client's home or school and involve engaging the client in age-appropriate activities designed to elicit contextual communication. The SLP and OT assume responsibility for managing the use of the devices aligned with the activities throughout the evaluation. After the client receives the recommended AAC device, follow-up training by an SLP is provided to the client and family in their home, school, or day program setting.

The *Growing in Beauty Partnership Program (GIBPP)* is comprised of OTs, SLPs, and physical therapists (PT) as a subcontracted program to the Part C Early Intervention program on the Navajo Nation. Services are provided to children birth through 3 years old with significant delays and disabilities and supports their families. Therapists evaluate the child to determine eligibility and scope of services, and then provide interventions to address needs and work towards identified child and family outcomes. Services are typically provided in natural environments, which for children in this age group is most often the home.

The Interdisciplinary Training Clinic (ITC) provides assessment services for young children and their families who have concerns or questions about their children's developmental progress. ITC services are free of charge to families and take place at an IHD clinic on the campus of NAU. The assessment team works collaboratively to determine a diagnosis and follow-up plan. The team typically includes a developmental pediatrician, PT, OT, SLP, and a school psychologist. The ITC also provides university students who are working on advanced degrees in health, education, or other related human service professions with opportunities to observe and participate in the interdisciplinary assessment process.

Impact of COVID on Service Delivery

In March 2020, with new COVID-19 restrictions in place, the three direct service programs were challenged to serve children with I/DD or at-risk for I/DD. Delaying or eliminating services would place this vulnerable population at further risk as they would not receive necessary and timely diagnostic or intervention services to improve their skills and advance their development.

The components of the FRAME model are used to describe the modifications made by the three service programs in response to COVID-19.

Component 1: When and How in the Implementation Process the Modification Was Made

This component in the FRAME addresses the timing of the modification and the challenges that may emerge during the planning and implementation phases (Stirman et al., 2019).

Modifications to all three service programs were made at the end of March 2020 because of the COVID-19 outbreak and its rapid spread in the state of Arizona and on the Navajo Nation. Following the recommendations of the Centers for Disease Control (CDC, 2020), the Governor issued a stay-at-home order that included the following: closure of schools and business, banning of large gatherings, and restricted travel. State and tribally funded (Navajo Nation) programs for individuals with disabilities suspended home-based services. This stay-at-home order affected both the AAC and the GIBPP programs. All buildings on the NAU campus were closed, requiring the closure of the ITC clinic where the interdisciplinary evaluations were conducted.

A logical modification to home-based and in-person assessments was the use of telemedicine, or the evaluation and treatment by health professionals using telecommunications technology. Telemedicine or telehealth has long been a consideration in efficiently serving individuals with developmental disabilities, particularly those living in rural areas (Dimian & Symons, 2017.) A barrier to telehealth throughout the U.S. has been reimbursement restrictions through insurance and government programs.

In Arizona, the Governor authorized an expansion of and payment for telehealth services shortly after the pandemic-imposed shutdowns (Exec. Order No. 2020-15, 2020). Because this was now a sanctioned option, the AAC program pivoted to telehealth service delivery as a choice for AAC device training for families who desired this option and had the technology infrastructure to support its use. However, transitioning to a completely remote "virtual" AAC evaluation was initially deemed problematic primarily for reasons associated with the use and management of the AAC equipment—an essential element of the evaluations.

Component 2: Whether the Modification was Planned or Unplanned

Modifications to interventions that are planned or proactive to enhance intervention goals may differ in outcomes from those that are unplanned or reactive. Planned changes are generally made to enhance implementation success and minimize disruption of the intervention. In contrast, a reactive modification may strive to maintain the elements of the intervention that make it effective (Moore et al., 2013; Stirman et al., 2019).

The COVID-19 pandemic presented a sudden and unanticipated challenge to IHD's community service programs. The AAC program already had a sizable evaluation waiting list due to non-pandemic factors beyond the program's control. The AAC staff members struggled to address new referrals as well as the existing backlog. The discontinuation of services affected

both the clients and the staff. For the clients, the evaluation is a critical step in the process to obtain a communication device. For the therapists, a long-term hold on service provision and the resulting inability to generate revenue could jeopardize job security. For the GIBPP and ITC programs, evaluations are important when connecting families with needed services and supports. For young children, early identification and subsequent intervention provide better developmental outcomes (NICHD, 2017). Although modifications were reactive rather than proactive because of the pandemic, alternatives needed to be identified to overcome these challenges and continue to serve these children at risk.

Component 3: Who Determined the Modification

This component addresses the participatory nature of the modification and the decision making. The drivers of the change may influence the impact of the modification and its widespread use (Stirman et al., 2019).

In the AAC program, team members and leadership had several meetings to discuss how services could be resumed in a manner that (a) protected the health of all participants, (b) would maintain the fidelity of the in-person assessment process, and (c) result in valid device recommendations. As a stopgap measure to restart service delivery, the initial strategy was to begin the evaluation through a remote intake session. This allowed the therapists to gather critical assessment planning information and informally observe the client within the home setting. If the family did not have internet and a computer or mobile device for Zoom access, the intake was carried out telephonically. These meetings were successful, and because of this first "virtual" step, the team re-evaluated their initial assumption that a virtual evaluation was not a feasible alternative, coming to believe instead that some AAC evaluations could be undertaken in a completely virtual format for clients meeting certain criteria.

In the GIBPP program, all major stakeholders in early intervention services were involved in the decision for change in service delivery method, including the Navajo Office of Special Education director and assistant director, the Navajo GIB supervisor, and the GIBPP director. Therapists and families were also consulted to provide information on possibilities of service-delivery methods. Additionally, caretakers at the local foster home on the Navajo Nation were also involved, as multiple children who reside there are serviced by GIBPP. Families with children who were already on caseload for GIBPP, and who indicated a preference to continue services in some format, were surveyed as to their ability to participate in telehealth services. The survey included questions on the availability of a device (phone, tablet, or computer) for telehealth sessions, as well as the family's current access to cellular data and/or WiFi for internet access for live stream video sessions. Additionally, families who identified that they did have access to internet services were further queried as to whether they had limitations in the amount of data that they had available each month, because video streaming for services requires a large amount of data and may not be possible on a limited data plan.

Additional practice guidelines for telehealth were provided by professional organizations such as the American Physical Therapy Association and the American Occupational Therapy Association. These national organizations support legislation and policies that recognize

telehealth as a valid service-delivery modality and support reimbursement of services through telehealth. In addition, these organizations, as well as state and local groups, provided online resources and materials to assist health professionals in delivering telehealth services.

Component 4: What is Modified.

This component of the framework focuses on the types of changes that were made and the relationship of these changes to implementation success and recipient-level outcomes. This component also examines if differences in outcomes are attributable to differences in how the intervention was implemented (Stirman et al., 2019, 2013).

A move to telehealth by the AAC and GIBPP programs necessitated adaptation to service-delivery methods and consideration of the population that could be served; criteria was necessary to ensure virtual connectivity and responsible use of equipment by the family. For the AAC program, a virtual format was adopted for device training and the recipients of the evaluation were screened to meet certain criteria. In the AAC program, based on team consensus, the criteria for virtual evaluations included the following.

1. Clients whose communication needs did not involve significant motor access issues (in other words, clients who could make message selections directly through the device display and did not require alternative access methods such as switch use, head control, or eye gaze). The rationale being that for clients with more complex bodies, the OT would need to be physically present to set up and adjust the access equipment tailored to the client's needs—something that a parent or caregiver would be challenged to do during the evaluation.
2. Parent/guardian's signed agreement to proceed with a remote evaluation, acknowledging the process had been explained to them.
3. Sufficient internet access and a device (computer or tablet) to connect to Zoom.
4. Family agreement to accept delivery of the loaned AAC equipment and return the equipment on time using the prepaid label and instructions.

Serving the GIBPP population presented some unique challenges to telehealth delivery due to the remoteness of the Navajo Nation. The Navajo are historically nomadic, with clusters of homes scattered in primarily rural regions other than a few small towns with populations less than 10,000 (Navajo Division of Health, 2013). The infrastructure for internet broadband coverage is often spotty or very limited (Graves et al., 2020). Additionally, many families live in poverty (Combrink, 2019) and are not able to purchase unlimited cellular data or WIFI coverage plans for access to a strong internet signal necessary for live-streaming video. Families typically own a cellular phone but often do not have a larger screen device (tablet or computer) as would be preferable for tele-intervention sessions.

A loaner program of iPad tablets and/or hotspots with prepaid SIM cards for cellular data

was piloted in various areas with existing GIBPP families. An initial survey was completed by families on the caseload inquiring about their access to internet capability. Those who were not able to participate in video services due to inadequate device and/or limited internet access were offered a loaner iPad and/or cellular data hotspot. Importantly, only families who had a strong and consistent relationship with GIBPP providers were offered loaner equipment, as a relationship was key to trust for safekeeping and eventual return of equipment.

Families who reported they did not have internet access via WIFI or cellular data, or who reported having monthly data caps, were surveyed as to which cellular plans provide coverage in their area and their current subscription plan. Regions on the Navajo Nation vary widely as to which cellular provider offers the most reliable and strongest coverage for internet capability, and word of mouth from families who live in the region appeared to offer the greatest validity in determining which company offers coverage within each family's home area.

The technology equipment delivery method was individualized to each family, as many families live in remote areas of the Navajo Nation. Some families who traveled to Flagstaff (home of GIBPP) for other reasons, were met by their provider and given equipment. When a delivery on the Navajo Nation was required, the therapist making the delivery followed all precautions including wearing a mask and gloves. Typically, the delivering therapist contacted the family on arrival to the home and deposited the equipment on the family's doorstep, then returned to their vehicle but remained in the driveway during a trial video session with the family.

An additional challenge to serving Navajo families through telehealth is the importance of delivering culturally competent care. In a systematic review of telehealth for indigenous peoples, Fraser et al. (2017) reported that although telehealth overcomes some barriers related to access, it must be delivered in culturally appropriate and acceptable methods. Relationship-based care is an important component of Part C services, as parents in everyday caretaking practices are recognized as having the most impact on children in this age group (Adams & Tapia, 2013). As a result, telehealth services need to be culturally sensitive to engage families and be effective (Dawson et al., 2020; Fraser et al., 2017). Part C services on the Navajo Nation are delivered in a team-based model, where GIBPP therapists typically work with Navajo early childhood providers. As part of the modification to telehealth services, GIBPP therapists have continued to consult with Navajo providers to incorporate culturally sensitive practices into video-based services.

Component 5: At What Level of Delivery the Modification is Made

This component reports the effectiveness of modifications at both the individual and group level (Stirman et al., 2019, 2013). To date, 45 virtual AAC evaluations have been successfully completed with device recommendations. The teams reported being able to make sound AAC device recommendations equivalent to those completed during in-person sessions. The funder has not challenged recommendations based on the virtual evaluation format. Only one family expressed concerns about the recommendations from the remote format and the team agreed to do an in-person reassessment.

GIBPP providers and families completed follow-up surveys as to the success and satisfaction with the video services using the loaner equipment. Although limited data has been obtained to date, preliminary results indicate high satisfaction with the use of loaner iPads for video sessions when the family has access to an internet signal within their home. Results are mixed for those families who were also provided a cellular hotspot. Data collected for hotspot sessions included the number of screen freezes and/or dropped calls during the session; 100% of sessions completed with this equipment resulted in some degree of difficulty with the quality of the call based on these measurements. Diagnostics are continuing as to whether other cellular providers may give better results for various families, or if a monthly cellular data plan instead of prepaid data would result in better quality of cellular services for improved video streaming. For families who were not able to achieve adequate video for sessions, services continued through phone calls based on the families' interest.

Component 6: Type or Nature of Content-Level Modifications

This component examines the drift from the original content of the intervention and return or the departure from the original protocol (Stirman et al., 2019, 2013).

At this time, the AAC Program and ITC have returned to limited in-person evaluations while still offering virtual evaluations. AAC has also implemented a hybrid model combining virtual and in-person participation as another option for conducting evaluations. This model has one team member onsite and the other participating remotely. As a COVID-19 precaution, this limits the number of people in the same physical environment, but a therapist remains physically present to manage the device interactions.

The ITC has continued to administer interview measures such as the Vineland, Sensory Profile, and the Functional Communication Assessment in a virtual format. Ideally, this decreases the amount of face-to-face time needed with the child and family and provides essential background information prior to the in-person evaluation. For the ITC in-person portion of the evaluation, and for onsite AAC evaluations, a COVID-19 protocol was instituted that includes temperature checks for staff and family members, use of personal protective equipment (PPE), plexiglass barriers, sanitizing of all surfaces and materials in the evaluation room, limiting the number of family members present, and limiting the number of examiners in contact with the family.

GIBPP continues to provide only virtual services. Therapists can offer families more flexibility in the frequency and duration of sessions. Some families report difficulty engaging in an hour-long session over Zoom or the phone and prefer shorter, more frequent sessions.

Component 7: The Relationship to Fidelity

This component in the FRAME discusses fidelity-consistent modifications that preserve the core elements of the practice. In contrast, the fidelity-inconsistent modifications fail to preserve core elements of the modification (Shelton et al., 2018; Stirman et al., 2019, 2013).

Following attempts at virtual evaluations, the ITC evaluation team determined that a fully virtual evaluation was providing an incomplete picture of the child and was, therefore, a fidelity-inconsistent modification. The modifications in ITC that were fidelity consistent included a reliance on parent report through interview. This was effectively completed through Zoom meetings with primary caregivers. The interview measures are flexible in allowing the examiner to ask follow-up questions and request examples of the child's skills or behaviors. Measures that required specific materials, such as the Battelle Developmental Inventory 2nd edition (BDI-2; Newborg, 2005), or required the skills of a trained examiner were deemed fidelity-inconsistent modifications. By coaching a parent to administer an item, or by substituting available materials, the core elements of the assessment may be compromised.

Use of alternative measures for assessing development, such as the Developmental Assessment of Young Children, 2nd ed. (DAYC-2; Voress & Maddox, 2013) were initially attempted through virtual administration. However, the interview or child observations resulted in incomplete information or unwillingness of the child to perform in their home environment. In addition, child observation was compromised by setup of the technology, poor lighting or sound, or camera angles that were not conducive to observation of the child while they were engaged in a task. Furthermore, medical examination by the developmental pediatrician was not feasible and subtle motor signs such as muscle tone were difficult to detect on camera. Children who were initially seen through Zoom and then later assessed in person in the clinic setting presented differently in the clinic setting. Some appeared to have more severe developmental delays in-person due to the difficulty in detecting subtle motor signs on camera. Other children engaged more with the examiners in the clinic setting, showing higher social and language abilities.

Coaching families virtually is a practice that in many instances has been successful and fidelity consistent. In the GIBPP program, early intervention services are typically provided through a coaching model for caregivers with instruction and mentorship by therapists and developmental specialists. Through this coaching model, caregivers are intended to be supported and instructed in how to provide therapeutic care for their infants and children so that they can continue interventions between sessions. However, prior to the COVID-19 shutdown, some caregivers displayed reluctance in attempting activities as directed by the GIBPP therapist during sessions, and many preferred to have the therapist provide the interventions. During video and/or phone sessions, therapists are not able to provide direct treatment to the child and so video sessions more closely adhere to coaching of caregivers. Thus, caregivers have improved opportunities to practice interventions for their child with the support and direction of therapists during virtual sessions, and presumably are more adept at continuing treatment between sessions for greater duration and frequency of therapeutic interventions. Because of the limited abilities to observe the child directly, therapists have developed their interview techniques to better determine the child's status.

Component 8: The Reasons for the Modification (a) the Intent or Goal, (b) Contextual Factors that Influence the Decision

This component addresses the goal for the modification that may include improvement

in feasibility, increased fit or reach, improved engagement, reduction in cost, improvement in clinical outcomes, or alignment with cultural values (Stirman et al., 2019). In the context of COVID-19, the overall goal of the modification was to maintain engagement within the disability community to identify needs and supports. In addition, it was critical to maintain relationships with GIBPP families that would continue to support the development of children with disabilities.

The shift to remote service delivery yielded unanticipated value-added benefits. Conducting virtual intake sessions for both AAC and ITC evaluations provided the therapists with valuable information beyond what could be gleaned from just reading the referral information and allowed them to be more prepared for the evaluation and what to expect from the client. The practice of virtual intakes will continue even when full in-person services resume.

Family engagement and participation is always a goal and of utmost importance in promoting the child's development (Zwaigenbaum et al., 2015). Therapists in all three programs observed a greater degree of family engagement and participation during virtual evaluations. For example, having the parent be physically responsible for using the devices with their child during the AAC evaluation resulted in a shift away from the expert model where the therapists control the situation, to one in which the therapists coach the parent, thus giving them a more active role. The team noted increased confidence and capability expressed by the parents. It is hoped that this confidence will continue when clients receive their own devices and begin the implementation training.

Telehealth has reduced travel costs for staff—although there have been added costs and more staff time for shipping or delivering the devices to the clients. For the AAC evaluations, occasionally follow-up is needed when the family delays returning the borrowed devices. A small percentage of the clients referred for AAC assessments do not have the technology available to support virtual services. In these situations, the alternatives offered were either an in-person, office evaluation with strict adherence to CDC COVID-19 precautions or the referral was given back to the funder for service by another provider.

Disparities have a greater impact on the delivery of telehealth evaluations and services to GIBPP families living on the Navajo Nation. The barriers to service delivery due to inadequate internet connectivity continue to be an issue in rural Arizona, the Navajo Nation, as well as many other parts of the country (Cole et al., 2019; Farmer et al., 2020), limiting health and educational opportunities. Rural communities are at a high risk during COVID-19 with poorer access to healthcare in general and less access to telehealth services (Summers-Gabr, 2020). As well as access, unfamiliarity with technology in homes may influence the quality of the information that is obtained through remote administration of assessments. Young children may not engage as easily as they may during an in-person assessment if they are unfamiliar with video platforms (Farmer et al., 2020).

Some families initially requested to pause services due to a preference for in-person service delivery or because of pandemic-related stress. As the duration of the pandemic persisted, these families were periodically recontacted to see if they wanted to resume services as the timeline for return to in-person services continues to seem unlikely in the foreseeable

future. Telehealth may place additional demands on caregivers that can affect the quality and validity of an assessment. There may be many home demands on caregivers, particularly during COVID-19, with other children needing supervision for online education (Prime et al., 2020). Caregivers may be unfamiliar with evaluation and intervention processes and how they might facilitate the child's performance (Farmer et al., 2020).

When technology and broadband issues can be overcome, telehealth for IDEA Part C evaluation and intervention services can be an important avenue for service delivery in rural areas such as the Navajo Nation. Although indigenous people have identified a preference for in-person services when feasible, a service-delivery method of an initial visit in-person followed by telehealth visits has been deemed effective and can increase access to services (Fraser et al., 2017). The opportunity to initiate use of telehealth with Navajo families for early intervention highlights an opportunity to continue to use this method post COVID-19 for supplemental services between in-person visits, thereby increasing services for improved relationships and outcomes for children.

Summary

The emergence of COVID-19 as a public health threat required unexpected and rapid modifications for three programs at IHD. A change to a telehealth format provided critical services to a vulnerable population while protecting the health of clients, family, and staff. This modification required teamwork, attention to maintaining fidelity-consistent practices, and a thoughtful assessment of criteria for recipients and infrastructure considerations. Evaluations of program delivery as COVID-19 continues, and in its aftermath, should guide assessment procedures and interventions provided through telehealth and hybrid formats. Program evaluations would include family and provider perspectives, fidelity to practices, and financial considerations.

Our experiences with telepractice for evaluation and intervention delivery highlight the need for administrative support and for providers who demonstrate flexibility and high levels of clinical skills that can translate to telepractice. Clinicians must be able to assess family and child strengths and needs via interview and limited observation through telehealth. Importantly, next steps following an evaluation need to be feasible and based upon the family's identified priorities and resources. Clinician skills are also critical in effective coaching of caregivers to ensure the caregiver's understanding of their child's needs and caregiver confidence in implementing activities that will facilitate their child's development. Additionally, clinicians must be skilled in delivering culturally competent care—both through telehealth and in-person services (Farmer et al., 2020). As the COVID-19 pandemic continues, programs will continue to modify their practices in supporting children and families with developmental disabilities. Clinician competency and clinician engagement with families will be critical post-COVID-19 as programs begin to reopen and as families confront new concerns and challenges (Neece et al., 2020).

Many families from ethnically and linguistically diverse background throughout the U.S. have experienced disproportionate health and socioeconomic disparities during the COVID-19

pandemic (Webb Hooper et al., 2020). Our families with children with developmental disabilities on the Navajo Nation have suffered greatly throughout the pandemic. Further investigation of the utility of telehealth during and following the pandemic for individuals with I/DD from tribal communities is needed. The response to the COVID-19 pandemic, and the health and education disparities that were revealed, highlight the need for social change that achieves true equity and support for individuals with disabilities and particularly for those who are most impacted due to health risks and poverty.

References

- Adams, R. C., & Tapia, C. (2013). Early intervention, IDEA Part C services, and the medical home: Collaboration for best practice and best outcomes. *Pediatrics*, *132*(4), 1073-1088. doi: 10.1542/peds.2013-2305.
- Centers for Disease Control and Prevention. (2020). *Coronavirus (COVID-19)*. <https://www.cdc.gov/coronavirus/2019-ncov/index.html>
- Cole, B., Pickard, K., & Stredler-Brown, A. (2019). Report on the use of telehealth in early intervention in Colorado: Strengths and challenges with telehealth as a service delivery method. *International Journal of Telerehabilitation*, *11*(1), 33-40. <https://doi.org/10.5195/ijt.2019.6273>
- Combrink, T. (2019). Demographic analysis of the Navajo Nation 2011-2015 American Community Survey estimates. Arizona Rural Policy Institute. <https://in.nau.edu/wp-content/uploads/sites/212/Navajo-Nation-2011-2015-Demographic-Profile-.pdf>
- Dawson, A. Z., Walker, R. J., Campbell, J. A., Davidson, T. M., & Egede, L. E. (2020). Telehealth and indigenous populations around the world: A systematic review on current modalities for physical and mental health. *Mhealth*, *6*, 30. <https://doi.org/10.21037/mhealth.2019.12.03>
- Dimian, A. F., & Symons, F. J. (2017). The impact of a delay to early intensive behavioral intervention on educational outcomes for a cohort of Medicaid-enrolled children with autism [doctoral dissertation, The University of Minnesota]. <https://conservancy.umn.edu/handle/11299/188847>
- Exec. Order No. 2020-15. (2020, March 25). *Expansion of telemedicine*. https://insurance.az.gov/sites/default/files/documents/files/eo_2020-15_expansion_of_telemedicine.pdf
- Farmer, R. L., McGill, R. J., Dombrowski, S. C., McClain, M. B., Harris, B., Lockwood, A. B., Powell, S. L., Pynn, C., Smith-Kellen, S., Loethen, E., Benson, N. F., & Stinnett, T. A. (2020). Teleassessment with children and adolescents during the coronavirus (COVID-19) pandemic and beyond: Practice and policy implications. *Professional Psychology: Research and Practice*, *51*(5), 477-487. <https://doi.org/10.1037/pro0000349>
- Flores, G., & Tomany-Korman, S. C. (2008). Racial and ethnic disparities in medical and dental health, access to care, and use of services in U.S. children. *Pediatrics*, *121*(2), e286-e298. <https://doi.org/10.1542/peds.2007-1243>
- Fontanesi, L., Marchetti, D., Mazza, C., Di Giandomenico, S. D., Roma, P., & Verrocchio, M. C. (2020). The effect of the COVID-19 lockdown on parents: A call to adopt urgent measures. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*, 79-81. <https://doi.org/10.1037/tra0000672>

- Fraser, S., Mackean, T., Grant, J., Hunter, K., Towers, K., & Ivers, R. (2017). Use of telehealth for health care of indigenous peoples with chronic conditions: A systematic review. *Rural Remote Health, 17*(3), 4205. doi: 10.22605/RRH4205.
- Graves, J. M., Mackelprang, J. L., Amiri, S., & Abshire, D. A. (2020). Barriers to telemedicine implementation in southwest tribal communities during COVID-19. *Journal of Rural Health, 37*, 239-241. <https://doi.org/10.1111/jrh.12479>.
- Hayes, S. A., & Watson, S. L. (2013). The impact of parenting stress: A meta-analysis of studies comparing the experience of parenting stress in parents of children with and without autism spectrum disorder. *Journal of Autism and Developmental Disorders, 43*(3), 629–642. <https://doi.org/10.1007/s10803-012-1604-y>
- Moore, J. E., Bumbarger, B. K., & Cooper, B. R. (2013). Examining adaptations of evidence-based programs in natural contexts. *Journal of Primary Prevention, 34*(3), 147–161. <https://doi.org/10.1007/s10935-013-0303-6>
- National Institute of Child Health and Human Development. (2017, January 31). Early intervention for autism. <https://www.nichd.nih.gov/health/topics/autism/conditioninfo/treatments/early-intervention>
- Navajo Division of Health. (2013). *Navajo population profile, 2010 U.S. Census*. <https://www.nec.navajonnsn.gov/Portals/0/Reports/NN2010PopulationProfile.pdf>
- Neece, C., McIntyre, L. L., & Fenning, R. (2020). Examining the impact of COVID-19 in ethnically diverse families with young children with intellectual and developmental disabilities. *Journal of Intellectual Disability Research, 64*(10), 739–749. <https://doi.org/10.1111/jir.12769>
- Newborg, J. (2005). *Battelle developmental Inventory* (2nd ed.). Riverside Publishing.
- Prime, H., Wade, M., & Browne D. T. (2020). Risk and resilience in family well-being during the COVID-19 pandemic. *American Psychologist, 75*(5), 631-643.
- Shelton, R. C., Cooper, B. R., & Stirman, S. W. (2018). The sustainability of evidence-based interventions and practices in public health and health care. *Annual Review of Public Health, 39*, 55–76. <https://doi.org/10.1146/annurev-publhealth-040617-014731>
- Stirman, S. W., Baumann, A. A., & Miller, C. J. (2019). The FRAME: An expanded framework for reporting adaptations and modifications to evidence-based interventions. *Implementation Science, 14*(1), 1–10. <https://doi.org/10.1186/s13012-019-0898-y>
- Stirman, S. W., Miller, C. J., Toder, K., & Calloway, A. (2013). Development of a framework and coding system for modifications and adaptations of evidence-based interventions. *Implementation Science, 8*(1), 1–12. <https://doi.org/10.1186/1748-5908-8-65>
- Summers-Gabr, N. M. (2020). Rural-urban mental health disparities in the United States during COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*, 222–224. <https://doi.org/10.1037/tra0000871>
- U.S. Office of Special Education. (2020). *Part C Use of Funds in the COVID-19 Environment Q&A Document*. <https://sites.ed.gov/idea/idea-files/part-c-use-of-funds-in-the-covid-19-environment-q-a-document-june-25-2020/>

Voress, J. K., & Maddox, T. (2013). *Developmental assessment of young children* (2nd ed.). PRO-ED.

Webb Hooper, M., Napoles, A. M., & Perez-Stable, E. J. (2020). COVID-19 and racial/ethnic disparities. *Journal of the American Medical Association, 323*, 2466–2467.

Woodman A. C., Mawdsley H. P., & HauserCram P. (2015) Parenting stress and child behavior problems within families of children with developmental disabilities: Transactional relations across 15 years. *Research in Developmental Disabilities, 36C*, 264–276.

Zuckerman, K. E., Sinche, B., Cobian, M., Cervantes, M., Mejia, A., Becker, T., & Nicolaidis, C. (2014). Conceptualization of autism in the Latino community and its relationship with early diagnosis. *Journal of Developmental and Behavioral Pediatrics, 35*(8), 522-532. doi: [10.1097/DBP.000000000000091](https://doi.org/10.1097/DBP.000000000000091)

Zwaigenbaum, L., Bauman, M. L., Choueiri, R., Kasari, C., Carter, A., Granpeesheh, D., Mailloux, Z., Smith Roley, S., Wagner, S., Fein, D., Pierce, K., Buie, T., Davis, P. A., Newschaffer, C., Robins, D., Wetherby, A., Stone, W. L., Yirmiya, N., ... Natowicz, M. R. (2015). Early intervention for children with autism spectrum disorder under 3 years of age: Recommendations for practice and research. *Pediatrics, 136*(Suppl 1), S60–S81. <https://doi.org/10.1542/peds.2014-3667E>