



UPDATE

Technology in Home Visiting: Strengthening Service Delivery and Professional Development Using Virtual Tools

Introduction

In 2017, before the COVID-19 pandemic entered the national consciousness, the NHVRC highlighted several [home visiting initiatives using technology](#) to provide virtual services. The focus at that time was on service challenges to programs and families, including geographic barriers, transportation issues, and scheduling conflicts. The pandemic shutdowns of 2020 made the findings even more relevant as home visiting programs adapted to virtual service delivery.

In April 2020, O'Neill et al. reported that 88 percent of respondents to a national survey of home visiting programs had stopped offering in-home visits. Most had begun providing services using telephone calls, text messages, and interactive video conferencing. Home visiting professionals came together to support one another and [respond to the challenges](#) of operating virtually.

This brief revisits two initiatives from our 2017 brief to include findings from their evaluations; it also highlights Florida's transition to virtual services in the early months of the pandemic:

- ✔ Parents as Teachers @ University of Southern California Telehealth (USC Telehealth)
- ✔ Families OverComing Under Stress for Early Childhood (FOCUS-EC) Virtual Home Visits for Military Families
- ✔ Florida's Statewide Implementation of Virtual Perinatal Home Visiting During COVID-19

The NHVRC is a partnership of James Bell Associates and the Urban Institute. Support is provided by the Heising-Simons Foundation and previously was also provided by the Robert Wood Johnson Foundation. The views expressed here do not necessarily reflect the views of the foundations.

Suggested citation: Morehouse, E., & Atukpawu-Tipton, G. (2021, July). Technology in home visiting: Strengthening service delivery and professional development using virtual tools (2nd ed.). *National Home Visiting Resource Center Innovation Roundup Brief*. James Bell Associates.

Parents as Teachers @ USC Telehealth

About: From 2015 to 2019, USC Telehealth examined the use of an online videoconferencing platform to deliver the Parents as Teachers (PAT) home visiting model. Services included online home visits and “group connections,” which were activities promoting parent-child interaction, increased knowledge of child development, and social connections with other families. Home visiting professionals also used the platform for staff supervision and training. Client navigators assisted users with scheduling needs and technical issues.

Goals and Purpose: Parents as Teachers @ USC Telehealth aimed to demonstrate comparability between PAT services delivered in the standard format versus those provided via online videoconferencing. Priorities included home-based parent support services, telehealth technology, family engagement, and workforce development.

Who Was Involved: The USC Suzanne Dworak-Peck School of Social Work launched USC Telehealth to provide secure mental health services online. USC Telehealth then partnered with PAT to provide videoconferencing home visiting services to 1,774 families online (Rau et al., 2020). Twenty-five home visiting professionals were trained to provide virtual services, including virtual developmental screening.

Accomplishments: Parents as Teachers @ USC Telehealth provided services to families ineligible for standard PAT services due to location, scheduling conflicts, and/or not meeting eligibility requirements. Tablets and Internet access were provided to families as needed to ensure access to technology. Home visiting professionals were trained using the online videoconferencing platform, and results showed fidelity to the home visiting model across supervision, training, and curriculum delivery (Traube et al., 2019; Traube et al., 2020). Results also showed high parent satisfaction; no families discontinued services due to moving (Traube et al., 2019). The initiative also developed and tested the delivery of virtual developmental screening, receiving the Gary Community Investments and OpenIDEO Early Childhood Innovation Award for this work.

“In our work and investigation around screening, we learned how important it is to empower parents and to believe in parents' capacity to complete their own screenings and have home visitors be the best coach that they can be.”—Angela Rau

Implications: While the use of online videoconferencing expanded the potential reach of home visiting services, challenges to recruitment persisted. Parents as Teachers @ USC Telehealth used a social media marketing campaign to reach more families. Almost half the families who later expressed interest in receiving services said they found the initiative through social media (Rau et al., 2020).

Many of the home visiting professionals and families participating in the initiative preferred virtual home visiting to in-person services. Home visiting professionals reported high levels of

comfort and satisfaction in delivering services through online videoconferencing (Rau et al., 2020; Traube et al., 2020). Additional research is needed to explore the effectiveness of virtual service delivery and continued interest in virtual and hybrid models after the COVID-19 pandemic.

For More Information: Email Dorian Traube (traube@usc.edu) at the USC Suzanne Dworak-Peck School of Social Work or Angela Rau (Angela.Rau@parentsasteachers.org) with PAT. See the NHVRC Reference Catalog for a [recent article](#) about the initiative.

FOCUS-EC Virtual Home Visits for Military Families

About: Researchers at the University of California Los Angeles (UCLA) assessed a virtual version of FOCUS-EC, a home visiting program designed for military families with children aged 3–5. FOCUS-EC sought to help families overcome challenges related to a parent’s military service by strengthening resilience and promoting positive parent-child interaction. Services were delivered to families through online home visits using a videoconferencing platform.

Goals and Purpose: The initiative sought to explore the efficacy of virtual home visiting by completing a randomized controlled trial of the virtual version of FOCUS-EC. Families were assessed 3, 6, and 12 months into their enrollment in the study.

Who Was Involved: UCLA researchers began the randomized controlled trial in 2013. Of the 199 civilian-dwelling military families who took part in the study, half received virtual FOCUS-EC home visiting services and half received self-guided, online parent education.

Accomplishments: The study found greater improvements in parent and child outcomes for those participating in the virtual FOCUS-EC program compared to self-guided online parent education (Mogil et al., 2021). Results across both parent-reported and observational measures indicated that virtual delivery of FOCUS-EC led to significant and sustained positive improvements in child behavior, parenting practices, and parent-child interaction. The study also found that participation in virtual FOCUS-EC reduced parent symptoms of posttraumatic stress disorder (PTSD).

Implications: The randomized controlled trial showed that virtual home visiting provides high-quality services to military families and families living in isolated areas (Mogil et al., 2021). Using a virtual platform can also create unexpected opportunities for relationship building. For example, some home visiting professionals built rapport with families while setting up electronic devices. Virtual home visits also provided a real-time window into families’ lives, enabling home visitors to offer in-the-moment-feedback.

Although the initiative has ended, UCLA researchers have used the findings to support virtual visits for families with infants in the neonatal intensive care unit (NICU).

“This study really helped us to pivot very quickly [in early 2020] to use this virtual framework for the rest of our families that weren't a part of this study.”—Catherine Mogil

For More Information: Email Catherine Mogil (cmogil@mednet.ucla.edu) at the Semel Institute for Neuroscience and Human Behavior at UCLA. [Read more](#) in the NHVRC Reference Catalog.

Florida's Statewide Implementation of Virtual Perinatal Home Visiting During COVID-19

About: After transitioning to virtual service delivery in March 2020, the Florida Maternal, Infant, and Early Childhood Home Visiting Program (FL MIECHV) evaluated its perinatal home visiting programs to understand the impact of the transition (Marshall et al., 2020).

Goals and Purpose: The evaluation aimed to depict the impact of the COVID-19 pandemic and the resulting transition to virtual home visiting services on FL MIECHV staff and administrators.

Who Was Involved: The Florida Association of Healthy Start Coalitions administers FL MIECHV and contracted researchers from the University of South Florida (USF) to conduct the evaluation of virtual service delivery. The research team sent surveys to FL MIECHV staff across the state (60 surveys were received), and the statewide MIECHV project coordinator conducted 9 focus groups with program staff, administrators, and supervisors.

Accomplishments: Results showed that most FL MIECHV staff felt supported and confident in the transition to virtual home visiting. Respondents shared that they were motivated by working with engaged families and that they received support for virtual service delivery from colleagues and other community agencies. Having identified financial assistance as families' most common need, they also dedicated time during virtual visits to discuss resources such as food banks, food assistance programs, and unemployment benefits (Marshall et al., 2020).

“Virtual home visiting appears to be feasible and provides an essential connection to supports for families who may not otherwise have the means or knowledge to access them” (Marshall et. al., 2020, p. 1224).

Implications: Home visiting staff play a central role in addressing the unique needs of families during times of crisis, particularly for families who reside in disenfranchised communities. Florida's quick pivot to virtual services can help other states understand the infrastructure and resources needed to support home visiting staff and families.

For More Information: Contact Jennifer Marshall (jm@usf.edu) at The Chiles Center at the USF College of Public Health. Visit a [recent entry](#) on Florida's efforts in the NHVRC Reference Catalog.

Summary and Implications

As home visiting programs transition back to in-person visits, they should consider how lessons learned during the pandemic can help them support families in the future. For example, virtual tools can help home visitors overcome continued challenges to service delivery and respond to unexpected circumstances. Potential benefits include—

- ✔ Continuing the reach of home visiting services during times of crisis
- ✔ Expanding home visiting services to families living in remote areas
- ✔ Promoting parent engagement among those who prefer virtual visits
- ✔ Increasing scheduling flexibility
- ✔ Engaging service providers and additional family members as needed

Many organizations and groups have developed resources with a telehealth focus, especially during the COVID-19 pandemic. Additional resources can be found via the following:

- [Rapid Response Virtual Home Visiting: Resources](#)
- [Alliance for the Advancement of Infant Mental Health: COVID-19 Resources](#)
- [First 5 Association of California: Home Visiting Learning and Practice Innovation Hub](#)
- [Inside the Virtual Visit: Using Tele-Intervention to Support Families in Early Intervention](#)

More research is needed to better understand the perceptions and long-term benefits of virtual home visiting services (e.g., supporting family engagement among caregivers who prefer a virtual and/or hybrid approach). Further research could also help determine which home visiting components (e.g., goal setting, developmental screening) are better conducted virtually versus in-person and vice versa.

Conclusion

The use of technology in home visiting services offers flexibility to support participants in a variety of circumstances. Families have unique strengths, needs, concerns, and interests that must be acknowledged and used to effectively tailor services. As the field continues to explore what components of home visiting work best for particular types of families in different contexts (Home Visiting Applied Research Collaborative, 2018), virtual service delivery may provide a viable option to increase retention, strengthen engagement, and improve family outcomes.

Acknowledgments

Thank you to Dorian Traube, Angela Rau, and Catherine Mogil for sharing information about their technology innovations in home visiting. Thank you to Allison Meisch, Joelle Ruben, and Jill Filene at James Bell Associates for their support shaping and refining the brief.

References

- Home Visiting Applied Research Collaborative. (2018). Introduction to precision home visiting. Child Trends and James Bell Associates. <https://www.hvresearch.org/precision-home-visiting/introduction-to-precision-home-visiting/>
- Marshall, J., Kihlström, L., Buro, A., Chandran, V., Prieto, C., Stein-Elger, R., Koeut-Futch, K., Parish, A., & Hood, K. (2020). Statewide implementation of virtual perinatal home visiting during COVID-19. *Maternal and Child Health Journal*, 24(10), 1224–1230. <https://doi.org/10.1007/s10995-020-02982-8>
- Mogil, C., Hajal, N., Aralis, H., Paley, B., Milburn, N. G., Barrera, W., Kiff, C., Beardslee, W., & Lester, P. (2021). A trauma-informed, family-centered, virtual home visiting program for young children: One-year outcomes. *Child Psychiatry & Human Development*, 1–16.
- O'Neill, K., Korfmacher, J., Zagaja, C., & Duggan, A. (2020). COVID-19's early impact on home visiting. First report from a national HARC-beat survey of local home visiting programs. Home Visiting Applied Research Collaborative. <https://www.hvresearch.org/wp-content/uploads/2020/04/COVID-19s-Early-Impact-on-Home-Visiting.pdf>
- Rau, A., Traube, D., Hunt-O'Brien, D., & Kemner, A. (2020). *A programmatic study: Parents as Teachers and University of Southern California Virtual Home Visiting Pilot*. Parents as Teachers. <https://parentsasteachers.org/virtual-service-delivery>
- Traube, D. E., Cederbaum, J. A., Taylor, A., Naish, L., & Rau, A. (2020). Telehealth training and provider experience of delivering behavioral health services. *The Journal of Behavioral Health Services & Research*, 48(1), 93–102.
- Traube, D. E., Hsiao, H. Y., Rau, A., Hunt-O'Brien, D., Lu, L., & Islam, N. (2019). Advancing home based parenting programs through the use of telehealth technology. *Journal of Child and Family Studies*, 29(1), 44–53.
- Home Visiting Applied Research Collaborative. (2018). Introduction to precision home visiting. Child Trends and James Bell Associates. <https://www.hvresearch.org/precision-home-visiting/introduction-to-precision-home-visiting/>