Parenting Support for Families Impacted by Opioid Use Disorder during the COVID-19 Pandemic: Insights from Pennsylvania Home Visiting Pilot Programs

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Background

Investing in Home Visiting in Response to the Opioid Epidemic

The opioid crisis in the United States has had a disproportionate impact on adults of childbearing age. Young families have experienced wide-ranging loss, familial disruption, and adverse health and well-being. State and local governments have begun to enact systems-level public health responses targeting the needs of families. Evidence-based home visiting (EBHV) programming serves pregnant families and those with young children, often in under-resourced communities, and operates as one of the predominant public investments in maternal and child health.

EBHV programs, by design, rely on robust referral networks within their communities to support clients’ unique needs (Health Services and Resources Administration, 2020). These programs have served young families impacted by opioid use disorders (OUD), though most often not through targeted enrollment. Frequently, home visiting adaptations for special populations, including those with substance use concerns, are limited to additional staff trainings or curricular adaptations. Though training is an important first step, current home visiting adaptations have proven limited in addressing these needs, as home visitors often remain hesitant to engage around these difficult topics (Duggan et al., 2004; Tandon et al., 2005; Dauber et al., 2017).

The Intersection of the COVID-19 Pandemic, Prevention Services, and Individuals Impacted by OUD

Prevention-focused programming, like home visiting, is a critical tool for preserving family stability and well-being in the midst of crisis and/or sustained hardship. Yet economic or public health crises create risk for the stability of prevention programming within communities, which often operates with inadequate funding and tenuous political will for its prioritization. During the COVID-19 pandemic, these challenges were further exacerbated by the need for physical distancing policies that altered service operations. Widespread service disruptions across child welfare, public health, and community-based social services impacted many families.
The COVID-19 pandemic presents several challenges specific to individuals and families impacted by OUD. Beginning with clinical risk, individuals with OUD are at higher risk for complications from COVID-19 due to occurrences of respiratory sedation and compromised pulmonary function and lung capacity (Valkow, 2020). From an exposure lens, the co-occurrence of substance use disorders (SUD) with housing instability, homelessness, or incarceration exacerbates the risk of contracting COVID-19 as congregate settings (including shelters) have been sources of spreading events (Valkow, 2020). Beyond disproportionate risks of COVID-19 illness, the pandemic has been associated with other health and social risks for individuals and families experiencing OUD. Increases in overdoses and overdose fatalities have been observed during periods of mandated stay-at-home orders throughout the country (Rosenbaum et al., 2021; Mason et al., 2021). Similarly, increased severity of domestic violence has been reported in correspondence with shelter-in-place policies, the frequent comorbidity of domestic violence and SUD present a concern for high acuity needs for some families (Leslie & Wilson, 2020; Cafferky et al., 2018). Currently, the specific impacts of the pandemic on mothers and caregivers of young children with OUD are not fully articulated. Among the broader community, emerging data have shown that challenges accessing health care, childcare, housing, food, transportation, jobs, and mental health treatment have been exacerbated by the pandemic (U.S. Census Bureau, 2020).

Pennsylvania OUD Pilot Programs: Incorporating COVID-19 Into an Ongoing Evaluation of Implementation

In 2018, in response to the opioid crisis’s acute impact in Pennsylvania, the Governor’s Office invested in EBHV as a promising mechanism to support families in communities with a high burden of OUD. In Pennsylvania, six evidence-based models are supported by state dollars to support families experiencing economic or social disadvantage. Twenty EBHV pilot sites were selected for funding based on the varied strategies proposed to serve families impacted by SUD in a diversity of geographic settings and EBHV models. These pilots presented an opportunity for sites to take a more systems-based approach to addressing OUD with clients by expanding capacity to screen and refer and partnering with external organizations for consulting and collaboration.

The intention of these pilots was not to provide treatment or recovery services, but rather to provide parenting support and resources for home visiting-eligible families impacted by OUD. Most pilot programs aimed to recruit families impacted by the opioid epidemic in Pennsylvania, but some broadened their reach to clients impacted by additional types of substance use. In this article, all pilots are referred to as OUD pilots for simplicity, but context for additional SUD is provided when appropriate.

To evaluate the implementation of these pilots, a research-policy partnership conducted a one-year implementation evaluation to describe the varied systems-level approaches taken by each pilot site. Given the high degree of variation across pilot sites and the lack of existing evidence for how to adapt EBHV to serve families impacted by OUD, an evaluation design that focused on implementation factors instead of client outcomes was employed. Role-specific interviews, structured using the Consolidated Framework for Implementation Research domains, explored pilot goals, community setting, local infrastructure, and the implementation process. The evaluation included survey assessments at three time periods, the last of which coincided with the early months of the COVID-19 pandemic, June 2020.

This ongoing evaluation provided an opportunity to understand the implementation of prevention programming during two public health crises—the ongoing opioid epidemic and the COVID-19 pandemic. Pilots began in early 2019, with the final months coinciding with the start of the COVID-19 pandemic. Between March 17 and June 5, 2020, per state mandate, all home visiting agencies in Pennsylvania shifted to virtual visits. This altered the traditional setting in which EBHV occurs, resulting in sudden shifts to the delivery of pilot components and additional challenges faced by pilot-engaged families.
To capture the impacts of the pandemic on home visiting programs and clients, the final survey was adapted to include a COVID-19 addendum. This addendum assessed the impact of the pandemic on home visiting pilot programs supporting families impacted by OUD. This paper focuses on data resulting from the COVID-19 addendum, providing standalone survey data from program staff that address shifts in service provision and perceived client needs and program engagement.

**Methods**

**Context**

A research-policy partnership used a mixed-methods approach to evaluate the implementation of pilot programs designed to address substance use in EBHV in Pennsylvania. OUD pilot sites were based out of EBHV local implementing agencies spread across the commonwealth, half in urban and half in rural settings.

As part of a larger, ongoing implementation evaluation, this paper describes the results of an addendum to the final survey administered in June 2019, added to address changes to pilot implementation and client engagement due to the COVID-19 pandemic.

For the broader implementation evaluation, the research team developed a longitudinal survey to measure concepts of implementation across the sites at three time points—before launching the pilot (baseline), mid-implementation (8 months post), and at the end of the first year of implementation. The research team gave surveys to pilot-engaged staff, including home visitors, partner agencies, and a site-selected “champion” of the pilot work at each site. At the implementation midpoint, the study team visited 10 sites purposively sampled for geography, pilot components, and EBHV model and conducted 36 in-depth semi-structured interviews with 52 individuals, most of whom also completed the surveys.

The methods described in the following sections are intended to provide a broader context for the COVID-19 addendum survey sample and results provided in this paper.

**Overall Study Design and Procedures**

A set of longitudinal surveys was developed to include several existing scales and frameworks to assess context and relevant implementation concepts, such as local service coordination. The baseline pilot survey provided information on each site’s goals for the pilot programming, intended pilot components, and partnerships. Most survey questions were specific to the pilot work, while some were included to gather important contextual information about the site that may shape implementation efforts. The baseline and 12-month surveys included questions on hiring and staffing needs for implementation. The 8- and 12-month surveys had additional questions about planning, coordination, and barriers and facilitators to implementation developed from the findings from the baseline survey and qualitative interview data.

The three surveys were completed by the main contact identified by each site to represent their agencies’ perspectives about the pilot (i.e., Pilot Champion) and two to four pilot-engaged staff members.

<table>
<thead>
<tr>
<th>Survey</th>
<th>Participant(s)</th>
<th>Baseline</th>
<th>8 months</th>
<th>12 months</th>
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<tbody>
<tr>
<td>Baseline Pilot Survey</td>
<td>Pilot Champion</td>
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<tr>
<td>Community Collaboration Assessment</td>
<td>Pilot Champion and two to four additional key staff</td>
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<td>Organizational Readiness for Implementing Change (ORIC)</td>
<td>Pilot Champion</td>
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<td>Pilot Program Staff Training</td>
<td>Pilot Champion</td>
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<td>COVID Addendum</td>
<td>Pilot Champion</td>
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The five survey components were administered as follows: The second- and third-round surveys were intended to be administered exactly 6 and 12 months after the baseline survey. The second survey’s distribution was delayed to 8 months after baseline due to funding delays and associated staffing issues experienced at many sites. Dissemination of the third and last round of surveys was intended for March 2020. Due to the COVID-19 outbreak and stay-at-home order, the third surveys were delayed until early June.

**COVID Addendum Design and Procedures**

The final survey in June 2020 was amended to include a supplemental panel of COVID-19 contextual questions to document 1) any pandemic-related changes to pilot activities and 2) pandemic-related changes to client families and the community for each local home visiting agency. Prior to the start of the pandemic, sites varied in pilot activities, but almost all offered some in-home or one-on-one services (n = 17) and some center-based group component (n = 17). Alternative settings included drug and alcohol treatment facilities (n = 4) and prisons (n = 2). Clients ranged from those in active addiction to those in long-term recovery to grandparents or other kinship caregivers. This addendum was administered to pilot champions at each of the sites implementing these pilots (n = 20). Results from this addendum include data from the open response and categorical survey questions listed below.

**COVID-19 Addendum Questions**

- How has the COVID-19 stay-at-home order impacted families in treatment or recovery in your pilot? (open response)
- Please identify the particular issues that have been negatively impacted by COVID-19. (categorical response)
- How has the COVID-19 stay-at-home order impacted grandparents raising grandchildren or others present in multi-generational households in your pilot? (open response)
- How have pilot-enrolled families’ needs changed since the stay-at-home order began in PA? (open response)
- As stay-at-home is lifted, what challenges do anticipate will persist for families in treatment or recovery in your community? How do you plan to address any of these challenges in your programming? (open response)

**Analysis**

Categorical survey responses related to COVID-19 along with open-ended responses were imported into NVivo 12 as a dataset. For close-ended questions related to the impact of COVID-19, frequency counts were calculated from categorical responses across pilot sites. A content analysis was performed to analyze responses to open-ended survey questions. Participant responses were reviewed independently by two team members and, after discussing these data, a final list of codes was established and applied systematically to the data. The themes emerging from across participant responses are described below.

**Results**

The COVID-19 addendum survey was conducted as part of the third survey of pilot champions. Data discussed in this paper reflects the responses of the pilot champion at each site (n = 20). When asked to indicate whether particular issues were negatively impacted by COVID-19, the majority of pilot champions endorsed that the pandemic worsened clients’ experience with triggers related to stress, access to childcare and group support, and employment. About half of the 20 sites reported that child welfare visitation and access to counseling were complicated by COVID-19. Only a few sites indicated that clients’ access to medications were negatively impacted by the pandemic. Figure 1 illustrates perceived issues for OUD pilot-engaged clients that have been negatively impacted by COVID-19. The COVID-19 addendum survey was conducted as part of the third survey of pilot champions. Data discussed in this paper reflects the responses of the pilot champion at each site (n = 20). When asked to indicate whether particular issues were negatively impacted by COVID-19, the majority of pilot champions endorsed that the pandemic worsened clients’ experience with triggers related to stress, access to childcare and group support, and employment. About half of the 20 sites reported that child welfare visitation and access to counseling were complicated by COVID-19. Only a few sites indicated that clients’ access to medications were negatively impacted by the pandemic. Figure 1 illustrates perceived issues for OUD pilot-engaged clients that have been negatively impacted by COVID-19.
impacted by COVID-19, as reported by pilot champions. The following themes are the result of a content analysis applied to open-ended survey items related to COVID-19.

**Shifting to Virtual Settings**

Almost all of the sites made changes to their pilot programming in the final months related to the COVID-19 stay-at-home order. The most common changes were to parenting groups and recruitment strategies, as these in-person activities had to abruptly shift to virtual approaches in March 2020.

Multiple sites reported either cancelling group components entirely or figuring out new ways to hold groups via web meeting platforms. One site described adapting their recruitment strategy to fit within the new stay-at-home orders: “Our recruitment strategy has changed a bit since the stay-at-home order. We are no longer able to go to other social service agencies and speak about our program or share flyers about our program. We have now adjusted to our recruitment via email and virtually to continue to share information about our program with possible clients. We have an electronic copy of our referral form that we shared with multiple social service agencies we felt could benefit from having our agency’s information.”

Another site reported shifts to practice within the new guidelines: “We made changes to how we had to do class and in-home visits. We changed to have all our classes and in-home visits through Zoom calls, which worked out very well for us.”

In some instances, curricula were not set up to easily go virtual, so groups were cancelled until staff could update their strategies. This was especially true for group curricula like Parent Cafés that depend on in-person facilitation and interpersonal interaction. The sites that paused were waiting to be trained on any content or facilitation adaptations in order to offer the curricula virtually.

**Maintaining Client Engagement**

Pilot champions and home visitors reported varying impacts of COVID-19 on group program attendance and engagement. Some pilot champions described service interruptions and cancelations attributed to because families going into “crisis mode”: “Our attendance has been affected in the beginning of the stay-at home order due to many families being in crisis mode. After a few weeks it seems families began to adjust and maintain some order in their lives where we then were able to get back on track with attendance. We feel then [sic] needed that added support in the beginning, and still to this day during this stay-at home order. I feel being able to give that added support has helped us maintain our attendance throughout this pandemic.” They reported that, for the most part, this trend subsided as families and home visitors adjusted to this new normal. Others reported having more families engaged in virtual groups by eliminating common barriers to participation, including child care and transportation. As one site shared: “We had a huge turnout for class which was very surprising to us. We thought that it would be hard to get people to attend but we actually found it to be the opposite.”

As sites shifted to virtual home visits during the stay-at-home order, they reported difficulties engaging pilot families who did not have access to technology: “During the COVID-19 time we have not been able to see the families. We had to learn quickly how to do this virtually with the families. Many families did not have access to technology so that has also been a problem.” Lack of technology access did not fall along geographic lines, with both urban and rural areas reporting similar challenges.

Additionally, some home visitors shared that clients seemed reticent to participate in virtual groups because it was an uncomfortable and less secure way to discuss sensitive topics. As one champion shared: “The families I serve that are in treatment or recovery do not feel that it is a comfortable or safe way of communicating. The virtual connection has seemed to make some feel uncomfortable with what they are willing to say or talk about.”

Along the same lines, sites expressed that it was harder for families to build relationships and group connections virtually: “Many agencies are only completing services via the phone or virtually and to some of our families speaking with new people via the phone or virtually causes them great anxiety.”
champions reported that relationships with clients are built on trust, and those relationships have been disrupted by COVID-19 because their families are less trusting of virtual communications.

**External Stressors Among Clients with OUD**

During the stay-at-home order, sites reported an increase in external stressors for clients enrolled in the pilot, including unemployment, lack of child care, and suspension of parental visitation rights, which contributed greatly to already heightened levels of stress and anxiety.

A few sites reported that families experienced relapses during this time of increased stress, loss of routine, isolation, and uncertainty, made more difficult by fewer available recovery meetings in the community. For these reasons, many champions anticipated an increase in client relapses during and after the pandemic: “For those who were struggling still with the choice to get sober there were many struggles. No access to face-to-face meetings or support groups, unemployment, isolation and boredom, which has always been used as a trigger to use. Getting clean is a huge decision in life, having to make that and try and remain during such an uncertain time has been an immense undertaking and takes more effort than it already did in a normal setting.”

Many champions also feared that families would experience homelessness due to unemployment and associated financial hardship. They reported that many were already unable to pay rent, which could possibly lead to evictions and homelessness. As one champion described: “Due to lack of employment for some families they are now dealing with the inability to pay their rent or utilities. Many are getting unemployment, which is helping, but many lack the skills needed to budget the money appropriately. That seems to be a reoccurring challenge within the community. Also, many families were dealing with homelessness right before the stay-at-home order was put into place. So they do not have access to many apartments due to them not showing individuals due to the COVID-19.”

Further, champions reported that pilot-enrolled families who were involved in the child welfare system saw a sudden stop or shift to visitation rights for their children in out-of-home care. Others saw courts close and custody hearings postponed indefinitely, delaying reunification with their children. Sites shared that custody issues like these caused additional strain and uncertainty for their families struggling with substance use disorder, because “[m]any of the families did not have full custody of their children at the time of the stay-at-home order. Therefore, visitations were at zero for the entirety of the order and only some were granted video visitations.”

**Grandparents Parenting Grandchildren**

Grandparents with custody of grandchildren were hit particularly hard by the COVID-19 stay-at-home order, according to pilot sites. Over half of the sites had some grandparent clients enrolled in the pilot. Champions described grandparents who were serving as primary caregivers to their grandchildren as struggling with a sudden shift in parental visitation rights intertwined with the personal health risks of COVID-19 for older adults: “Grandparents in kinship care situations had to make decisions to not let the parents visit with children to eliminate risk to child and themselves being a high-risk population.”

Further, sites described how grandparents who relied on others to supervise children while they worked were suddenly without childcare or school supervision. This left many to care for grandchildren all day long and coordinate online schoolwork and activities. One champion shared that “grandparents are dealing with several issues with child care for grandchildren who are normally in the schools at daycare. Child care has been difficult as well because their normal daycare / babysitters are reluctant to watch the children because of the pandemic and they also have their own children at home.” Another site’s champion described how “[s]ome grandparents aren’t as in tune with technology and accessing online schoolwork was difficult for them.”

**Anticipating Post-COVID Challenges**

When asked what challenges pilot champions anticipated once the pandemic subsides and restrictions are lifted, responses ranged from increased client stressors to difficulties implementing typical
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home visiting programming.

Multiple champions described fears of clients’ economic situations as a result of the pandemic. One described how uncertain regaining employment was for their clients and how they aimed to address it: “Many may not be called back to work or may be laid off for an extended period... We will offer parenting support and resources for mental health, employment, etc.” Another described possible client housing challenges: “I fear that homelessness among our clients could possibly increase due to them getting caught up on their rent or having the ability to continue to pay the rent if they have lost their job.”

Another common concern was around client engagement when reverting back to in-person services: “Definitely we going to have some challenges because visits will performed virtual or telecommunication with [sic] are not the same as face to face.” Another champion noted that families might need time to be willing to attend group gatherings again and planned for how to continue to keep families connected: “I anticipate that individuals will be less likely to come to a group setting right away. I plan to just continue to keep in contact with them and continue to let them know the services are available.”

Lastly, many champions discussed anticipating challenges with home visitor and client safety as isolation guidelines are lifted and people begin to engage in person again. As one noted: “We feel very unsure when staff and patients will feel comfortable with home visiting. We will need to make sure we feel safe and have safe protective equipment available to us.” Another champion imagined various responses from clients and possible implications for health: “I think families will respond in a myriad of ways. Some will be so glad social distancing/stay at home restrictions have been lifted that they will ignore possible health risks. They will seek opportunities to socialize with some people that will increase the likelihood of relapse. Some will be fearful of exposure and continue to isolate themselves and children.”

Discussion

This study describes a perceived significant impact of mandated shelter-in-place orders issued during the COVID-19 pandemic on the delivery of evidence-based home visiting (EBHV) to families impacted by OUD. Safety measures imposed for the health and well-being of families and home visitors uprooted the traditional home visiting practice of meeting face-to-face in families’ homes, with downstream effects. While all home visiting clients were impacted, caregivers with OUD were uniquely affected by the new normal imposed by the pandemic.

The primary concerns raised by home visiting programs were caregiver stressors related to isolation and loss of routines, difficulty accessing services, loss of employment, and increased caregiving burdens. Home visiting agencies described instances of relapse that they attributed to these stressors and a fear of continued increases in relapse for caregivers in recovery during and after the pandemic. Grandparents raising grandchildren in the context of parental OUD were identified by home visitors as having layered challenges, with acute issues around childcare closures and technology access and proficiency.

For families with caregivers in treatment and recovery, service connectivity and coordination are essential functions of EBHV, as reported by home visitors and program administrators in this pilot evaluation. Prior to the pandemic, many pilot home visitors adapted their roles to assist with navigation of services and systems, including the child welfare system, drug court, incarceration, medication assisted treatment, and other therapies.

Implications

Supporting families with re-engagement in these systems and services following extended pandemic-related interruptions is likely to be a role home visiting programs are called upon to fill. Home visitors are among the few prevention professionals with roles embedded in communities that extend into homes with longitudinal family relationships and are uniquely positioned to understand the pulse of the changing needs of families with young children during crises. Importantly, these programs are also some of the very few to target and meaningfully engage grandparent caregivers.

Across a large network of programs operating across
a geographically diverse state, home visiting programs voiced a preparedness to find ways to address high acuity client needs that have been exacerbated by the pandemic. Needed adaptations moving forward may include expanded collaboration with external partners across social service and health sectors, targeted staffing roles for individuals with content expertise in SUD treatment and recovery, and/or additional training. Further, these results demonstrated sustained family efforts to engage in services during this time of elevated need, indicating the perceived value of this prevention service during a crisis period. The new flexibility of virtual or hybrid program delivery may expand home visiting’s reach to higher acuity clients beyond the pandemic, shaping the standard of care moving forward.

**Limitations**
These data are representative of a specific population of service providers from a subset of home visiting agencies in Pennsylvania. The methods used in this evaluation were not designed to be generalizable but may be useful in providing a snapshot of COVID-19’s impact on families of young children impacted by opioid and substance use.

**Conclusion**
Family-focused prevention programming is critically important to preserving family well-being and stability during what is likely to be an extended period of increased hardship, loss, and stress stemming from the pandemic. Shifts to virtual implementation methods have presented both challenges to adhering to evidence-based models and unanticipated benefits of increased engagement due to certain barriers being reduced. The pandemic has likely also intensified the needs of high acuity families, including those struggling with OUD. As we exit the pandemic, continued focus on these programs and their service delivery needs will be critical to promoting family well-being.

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