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Maternal Mental Health: A Crisis

In the United States, being Black and pregnant can be a death sentence. Because of racism against Black women and birthing people, they are between three and four times as likely as white people to die during pregnancy, delivery, or postpartum.

Pregnancy and the postpartum period are high risk times for women to develop perinatal and postnatal anxiety and mood disorders (PMADs), or to experience a worsening of pre-pregnancy mental health conditions.

Black women are more than twice as likely to suffer from PMADs than white women. Approximately 1 in 3 deaths within one year of giving birth were related to PMADs, and the majority of those deaths occurred after the standard 42-day postpartum window.

Maternal mental health, especially for Black women, is in crisis in the United States. Lack of access to timely, appropriate, coordinated mental health care is killing moms and birthing people. It is with this knowledge and the desire to make headway against the problem that the Perinatal Behavioral Health Initiative as we know it today was born.
Introduction

The Perinatal Behavioral Health Initiative (PBHI) began ten years ago when the Mental Health Board (MHB) asked Generate Health to, as a coalition, convene a network of providers to address mental health and substance use disorders among pregnant and parenting people. There were nine areas of concern from those focus groups. The three main areas of focus from those were that the St. Louis area needed:

- a comprehensive data system
- a coordination of resources to bolster the existing systems
- the creation and utilization of a one-stop-shop for maternal mental health

To be enrolled as a PBHI participant, a woman must have been pregnant at the time of enrollment and must reside within St. Louis City. Participants who were experiencing homelessness, but spent the night in the city, were also accepted.

To guide decision making and ensure accountability two groups were convened:

- Executive-level representatives from funded partners to help guide the direction of PBHI and discuss data and referral processes
- A general group of consumers and service providers from all PBHI partners to provide intersectional perspectives to focus groups and participate in trainings

In 2018, Generate Health adjusted to become an explicitly anti-racist and pro-Black health organization which permeated all initiative work.

While much has changed at Generate Health and in the world at large since 2012, PBHI’s mission outlined below remains the same.

- collecting data about perinatal behavioral health
- facilitating professional development for providers and community organizations
- connecting participants to relevant services

Timeline

2008: Generate Health leads “Mapping a Course for a Healthier Community for Women, Children and Their Families: An Agenda for Community Action,” laying the foundation for what we now know as PBHI.

2010: The Affordable Care Act is signed into law by President Barack Obama, shifting the maternal healthcare landscape and emphasizing the need for a “one-stop shop” for physical and mental health care.

2012: PBHI pilot begins with four partner organizations. At that time, it was called the Improving Mental Health of Pregnant and Postpartum Women Initiative.

2014: The now called Perinatal Resource Network (PRN) officially convenes with a new structure and function.

2016: Pilot ends, and the next phase of the project begins with 13 funded partners. A universal protocol is introduced. The project is renamed to Perinatal Behavioral Health Initiative.

2020: Due to the pandemic, PBHI is forced to evolve quickly to meet the needs of partners and participants as non-emergency medical care transitioned online and the mental health and maternal mortality crises intensified.

2022: The number of partners has grown and the reimagining of the future of PBHI is in progress.
PBHI Pilot

Initially the focus was primarily on depression screens:

<table>
<thead>
<tr>
<th>Consumers who sought help for depression:</th>
<th>During pregnancy</th>
<th>Postpartum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
<td>38%</td>
</tr>
</tbody>
</table>

July 1, 2013-June 30, 2015

7638 St. Louis City women screened

Of the 7,638 women screened, 22.5% screened positive which was higher than the national average of 8-19%.

At the end of the pilot, the following major learnings guided Phase II of the initiative. It was also decided that Generate Health would provide capacity building activities and supports, collaborative learning and quality improvement service delivery to create an integrated network of community services. Evaluation outcomes will measure a cross system approach to integrated service delivery, individual outcomes and quality improvement activities across multiple sectors.

Barriers

Many participants faced:
- unstable housing situations
- high levels of instability and stress from other environmental factors (food insecurity, lack of access to transportation, very low employment, etc.)

Without access to critical resources, such as reliable transportation and healthy/stable housing, it was difficult for the mothers to participate in clinical treatment.

Universal Protocol

Universal protocol developed on how pregnant women were screened. Reframing the approach from Maternal Mental Health (mild to moderate depression) to one of Perinatal Mood & Anxiety Disorders (PMAD). PMAD replaced the narrower definition of PPD-postpartum depression.

Referral Network

Providers were not well-connected to critical community support services and did not have the structure set up to follow-up with those referrals to ensure women get connected with those services. A major goal moving forward was to implement a network of trained providers within a collaborative partnership model with a focus on screening, assessment, and treatment and case management.

Case Management

Moving to a new model of care that includes a case management component to help patients meet their basic needs (housing, transportation, living wage jobs, food, childcare, etc.). Case management would focus on care coordination across a multidisciplinary team addressing the biopsychosocial aspects of women and children. As part of this model, case managers would follow-up with the patients to ensure they get to that initial appointment.
### Year 5 Highlights

This initial year utilizing an integrated referral network produced many successes.

<table>
<thead>
<tr>
<th>Key Indicator</th>
<th>Number of Women with Screenings/Concerns</th>
<th>Percentage of Women with Screenings/Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of women with concerns as identified by depression screenings</td>
<td>288</td>
<td>51%</td>
</tr>
<tr>
<td>No. of women with concerns as identified by anxiety screenings</td>
<td>43</td>
<td>8%</td>
</tr>
<tr>
<td>Number of women with concerns not captured by screening scores</td>
<td>198</td>
<td>35%</td>
</tr>
<tr>
<td>Total number of women referred to case management/ Total number of women with identified behavioral health concerns</td>
<td>502</td>
<td>89%</td>
</tr>
</tbody>
</table>

N=562 women with screening data entered into REDCap

The highest number of referrals (219) was made to mental health services. Other types with 100 or more referrals each include for education and health.
During FY2017, initiative partners increased their screening and referral activities as well as their participation in entering client data in the REDCap shared measurement system. This is also the first year additional screenings were tracked across organizations such as, anxiety, trauma, intimate partner violence and substance use.

**Year 5 to Year 10**

Since the implementation of Phase II, PBHI has worked to create a more robust network. In FY2018 the Screening, Brief Intervention and Treatment (SBIRT) model (see example below), an approach recommended by the Substance Abuse and Mental Health Services Administration (SAMHSA) for the identification of behavioral health concerns and treatment needs, was introduced. When applied to the St. Louis city population, this helped determine the initiative’s goals for the year. The following charts show the data highlights from FY2017-FY2022.

<table>
<thead>
<tr>
<th>SBIRT Model Component</th>
<th>Estimates based on the Population of St. Louis City Residents who Give Birth Each Year (Approximately 5,000 Women)</th>
<th>Population PBHI Expects to Serve</th>
</tr>
</thead>
<tbody>
<tr>
<td>The American College of Obstetricians and Gynecologists (ACOG) recommends 4 screenings (1 per trimester and 1 postpartum). The American Academy of Pediatrics (AAP) recommends maternal screenings during each well baby visit</td>
<td>Approximately 20,000 screenings (based on 4 screenings for the 5,000 estimated consumers who give birth) occur</td>
<td>2,488 screenings Estimate based on 4 screenings for the 622 predicted number of consumers who enroll in PBHI</td>
</tr>
</tbody>
</table>

**Zip Code Map**

Number of Consumers Served by Zip Code (2018-2022)
In FY2021, PBHI began reporting disaggregated data.

**Revising Criteria**

In the last couple of years under MHB funding, PBHI partners circled back to barriers affecting families (see page 3). After seeing the initiative’s continued success, there was a push to move the disparity needle more by looking at the family holistically instead of solely focusing on their screening results. This led to redefining what a successful outcome would be for each family.
**Wins**

**Trainings**

Provided for both providers and consumers that supports relationship building, sharing and shifting power to those impacted by the services, and capacity for changing systems as a collective. Includes workshops in racial equity, cultural humility, maternal mental health, storytelling, PMAD, motivational interviewing, trauma informed care, safe sleep practices and advocacy.

**Referral Network**

- Established a targeted, trained network of service providers for perinatal women and families.
- Organizations have built strong relationships with each other which has led to successful warm hand offs
- Continued commitment for over 10 years

**Community at the Table**

- Promoting awareness of public, private, and community organizations as well as perinatal behavioral health resources.
- Having consumers at the center of decisions that impact the community

**Transition to REDCap**

Moving to a common platform for all relevant PBHI data allowed for consistent data analysis over the years.

**Advocacy**

Supporting legislative and administrative advocacy on behalf of perinatal women and families.

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**Challenges**

**Partner Recruitment and Retention**

- Turnover in the frontline staff who work with PBHI consumers
- Time consuming to fill these open positions
- New hires require careful training in implementing the PBHI screening, case management, and service provision protocols.

**Building Consumer Trust**

Due to various factors (such as social stigma and a mistrust of medical/social service systems) it is possible consumers might not respond to follow up or defer receiving additional support. Building trust in the community is a lengthy and ongoing process.

**Consistent Data Input**

Consistent data collection and entry has been a challenge throughout the history of PBHI due to:

- Changes in partnerships
- Inter-agency process variations
- Already-high workload of social service professionals
- Insufficiently incentivizing funding,

**Funding**

For 10 years, PBHI was solely funded by MHB which limited the initiative to only serve the St. Louis City residents. This was an additional burden to PBHI partners who served larger areas than the city but could not enroll those clients in need. This also means if a consumer moved from the city to the county, we could no longer track them. As funding began winding down in 2020, PBHI was unable to fund as many partners for data collection as in 2016-2019.

**COVID-19**

The equity gap increased even more during the Covid-19 pandemic

- providers had to pivot and/or stop normal services
- entirely virtual for a time
- consumer barriers to virtual care

**Following Referrals**

The providers were careful to document referrals they made to clients but who should track whether or not clients followed up with the appointments made for them has not been determined.
What have we learned from 10 years of service?

**Expanding Reach**

As mentioned above, PBHI was only able to serve St. Louis City (see under Funding on pg. 7). While many women have been served over the years, the city is only a fraction of the size of St. Louis County. PBHI can reach so many more women once partners are allowed to fully utilize their reach. As of 2022, partners have begun inputting data in women across the region (see zip code map on pg. 5). Collecting this data provides a clearer picture of the maternal mental health landscape and will be useful to see the scope of work across the overall St. Louis region.

**Outcomes vs Outputs**

Since COVID-19, a major focus has been how to tell the true story of the PBHI network. We can get raw numbers and data, but there is more to the story than that. The community is more than just a positive or negative EPDS score. A big takeaway is to get behind the numbers. How can we show the difference that PBHI makes not only in assessments but the overall benefit to the families served?

**Elevate the Work**

How can this work be elevated to that state level? PBHI is an example of how a network can make a difference in communities. By figuring out what tables to sit at, our mission can be advocated for on a wider level.
Future of PBHI

PBHI is currently an initiative of the Bloom Network. Moving forward, it will continue to be a key piece of the Continuous Quality Care system that focuses on a wraparound, holistic approach to care for families in St. Louis.

Coordinated Referral and Intake System (CRIS)

Launched in October 2022, CRIS makes it possible for multiple agencies to share ownership of a referral process. The hope is this will expedite the entry of families into coordinated services as well as drive demand for those services. The now more streamlined approach since the pilot (see pg. 3) is designed to be an easily accessible, one stop shop.

Pregnancy-Associated Mortality Review (PAMR)

As PBHI enters a new era, partners gathered to reimagine the initiative based on the recent PAMR report.

- PBHI network is the owner of 3 recommendations
  - in person meetings, strategic plan, and SharePoint to share documents
- Co-owner of a better system for referrals
- Other owners for the work could be:
  - Missouri Hospital Association, healthcare providers, Alive & Well, PreventEd, community organizations, and IPV partners.
- A better system to track referrals is needed that includes warm handoffs from jails and prisons
- We are missing:
  - Doulas, schools, fathers, teachers, managed care providers, more community members, psychiatric care providers, and Medicaid providers
Thank you!

Thank you to our partners that have been with us since the pilot in 2012:
- Family Care Health Centers
- LifeWise
- Washington University Perinatal Behavioral Services

Thank you to all of our funded partners over the years:
- Affinia Health Care
- Bethany Christian Services
- FamilyForward
- Great Circle
- Infant Loss Resources
- Lutheran Family & Children Services
- Nurses for Newborns
- Project DEAMHI
- Queen of Peace Center
- SSM Danis Peds
- SSM Mom’s Line
- The Women’s Safe House

Thank you to all of our professional development trainers over the years! Special thanks to:
- Alive & Well
- Belinda James from Project DEAMHI
- Crossroads
- Forward through Ferguson
- Heartland
- Infant Loss Resources
- Lori Winkler from Cardinal Glennon
- Sparlin

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