Hamilton County Ohio Equity Institute
Annual Report 2021

EVERY BABY MATTERS

OEI

OHIO INSTITUTE FOR EQUITY IN BIRTH OUTCOMES

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And the women and families of Hamilton County

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1. Introduction

About OEI 2.0

The Ohio Equity Institute (OEI) is a statewide program, funded by the Ohio Department of Health (ODH) and implemented locally by Hamilton County Public Health (HCPH). Created in 2012, OEI uses population data to prioritize areas for outreach in nine urban Ohio counties with the highest infant mortality rates and largest racial/ethnic health disparities. OEI 2.0 launched on October 1, 2018, implemented a revised structure to ensure that the program addresses the biggest drivers of infant mortality and directly serves the populations most vulnerable to poor birth outcomes such as prematurity and low birthweight.

The grant employs downstream and upstream strategies. In the downstream approach, Neighborhood Navigators work within 23 priority ZIP codes to identify a portion of the county's Black prenatal population and connect them to needed clinical and social services. The upstream component uses the data collected by the Neighborhood Navigators to facilitate the development, adoption, or improvement of policies and/or practices as it relates to the social determinants of health (SDOH). Together these two approaches aim to contribute to the reduction of preterm birth and low birthweight birth rates and ultimately infant mortality in Hamilton County.

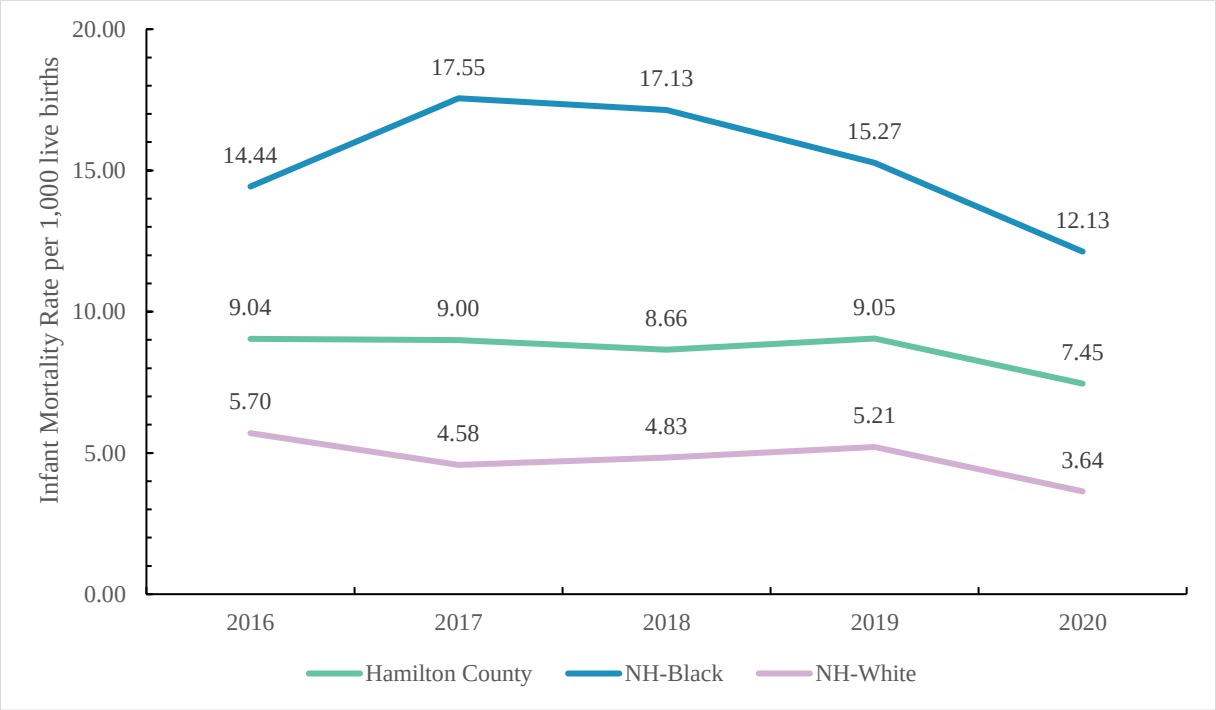
2. Community Context

The Ohio Equity Institute plays a pivotal role in ensuring that the needs of women in Hamilton County who are most at risk for infant mortality are met. The program recognizes how integral combating infant mortality is for both mom and baby, and the community it serves. The presence of OEI in Hamilton County has been long-standing, and over the course of seven consecutive grant years has worked continuously to improve and address the needs of Hamilton County as it relates to poor birth outcomes and infant mortality. Another important aspect of the program are the relationships built with partnering organizations, which has proven to be an essential piece for identification efforts. In FY21 the HCPH OEI built upon its previous pilot program year and strengthened its partnership with the University of Cincinnati (UC) Health. These strategies have strengthened the presence of OEI in Hamilton County and serve as examples for how OEI can continue to advance its efforts while prioritizing the needs of Hamilton County in years to come.

Infant Mortality, Preterm Birth, and Low Birthweight in Hamilton County

In more recent years Hamilton County has experienced subtle improvements in birth outcomes, most notably with infant mortality. The following figures demonstrate the state of infant mortality, preterm, and low birthweight births in Hamilton County from the years 2016 to 2020. During this period the overall infant mortality rate (Figure 1) decreased an average of 4.3% per year, having the greatest decrease occur between 2019 to 2020, with 19 fewer infant deaths. In 2020, babies born to non-Hispanic (NH) Black women were three times as likely to die before the age of one (12.13 deaths per 1,000 live births) compared to babies born to non-Hispanic White women (3.64 deaths per 1,000 live births). Even though the overall infant mortality rate has improved, the county is still challenged with racial and ethnic disparities when it comes to infant deaths.

Figure 1. Infant Mortality Rate in Hamilton County by Race/Ethnicity, 2016-2020



Preterm births (babies born before 37 weeks gestation) and low birthweight births (babies weighing less than 2500 grams) are risk factors for infant mortality. The Hamilton County preterm (Figure 2) and low birthweight birth rates (Figure 3) have not changed dramatically; with an average increase of 0.5% and 0.4% per year, respectively. From 2019 to 2020, the preterm birth rate for both NH-Blacks (13.36 % vs 14.69%) and NH-Whites (9.00% vs 9.05%) increased. The 2020 NH-Black (15.30%) and NH-White (7.15%) low birthweight rates, were higher than they were at any time between 2016 to 2020. Across all measures, disparities in birth outcomes are more pronounced for infants born to NH-Black women compared to their White counterparts. When compared to the county overall, Black women, still, are more likely to experience the death of an infant or have a premature birth and/or low birthweight birth.

Figure 2. Preterm Birth Rate in Hamilton County by Race/Ethnicity, 2016-2020

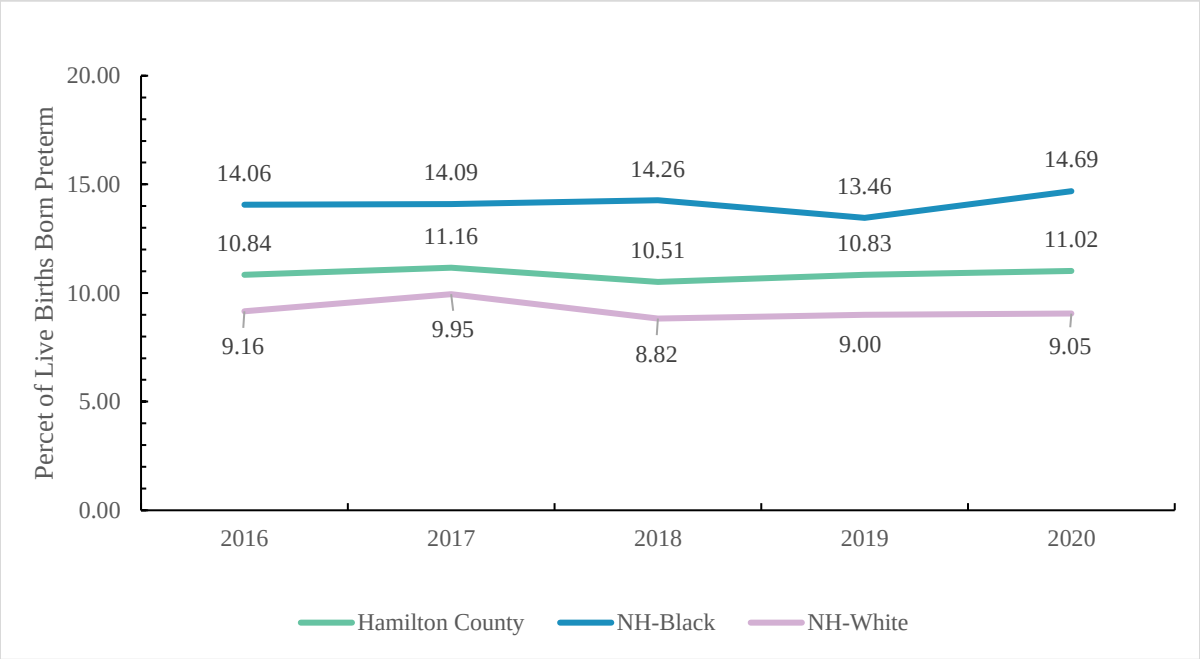
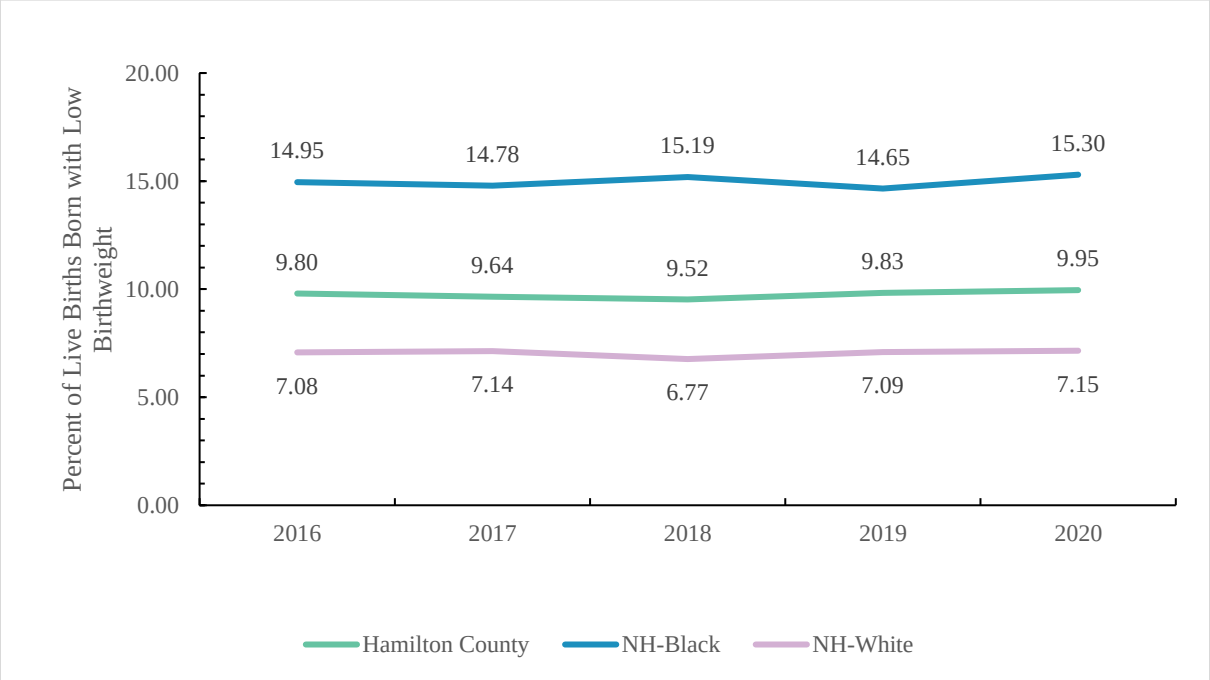


Figure 3. Low Birthweight Birth Rate in Hamilton County by Race/Ethnicity, 2016-2020



Disaggregating the data by race and ethnicity is one way of identifying groups most impacted by poor birth outcomes. Another way is by looking at the distribution of risks across communities in Hamilton County. The following figures demonstrate the geographic distribution of infant mortality (Figure 4), preterm (Figure 5), and low birthweight births (Figure 6) by ZIP code in Hamilton County. As can be seen the impact of birth outcomes is not equally distributed when looking at all three figures. In fact, ZIP codes with high rates of infant mortality, preterm and low birthweight births are also seen. This data may further support community efforts that aim to improve infant mortality through initiatives in reducing preterm and low birthweight births.

Figure 4. Infant Mortality Rate in Hamilton County by ZIP code, 2016-2020

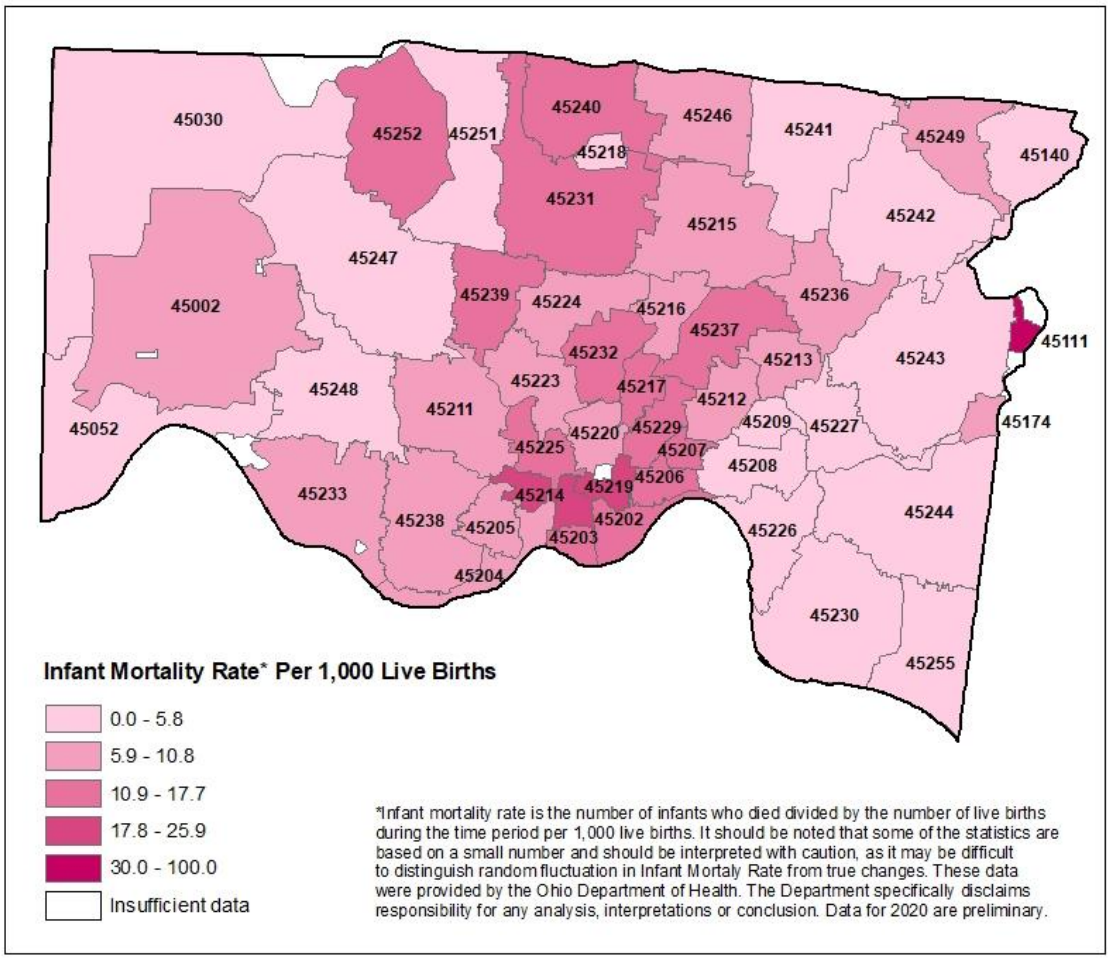


Figure 5. Preterm Birth Rate in Hamilton County by ZIP code, 2016-2020

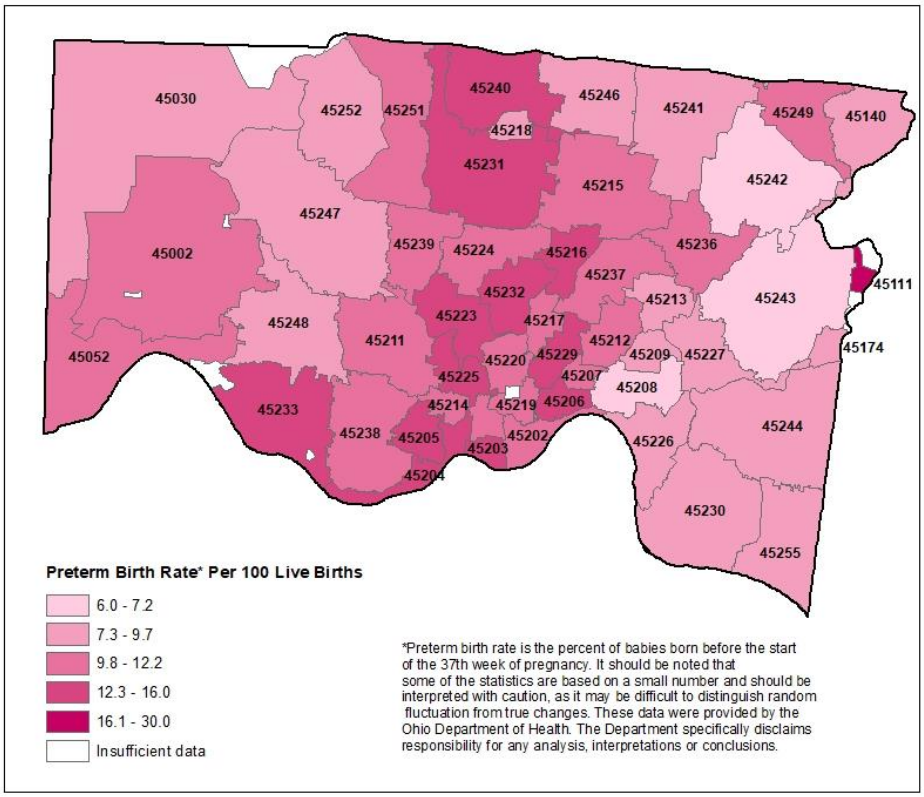
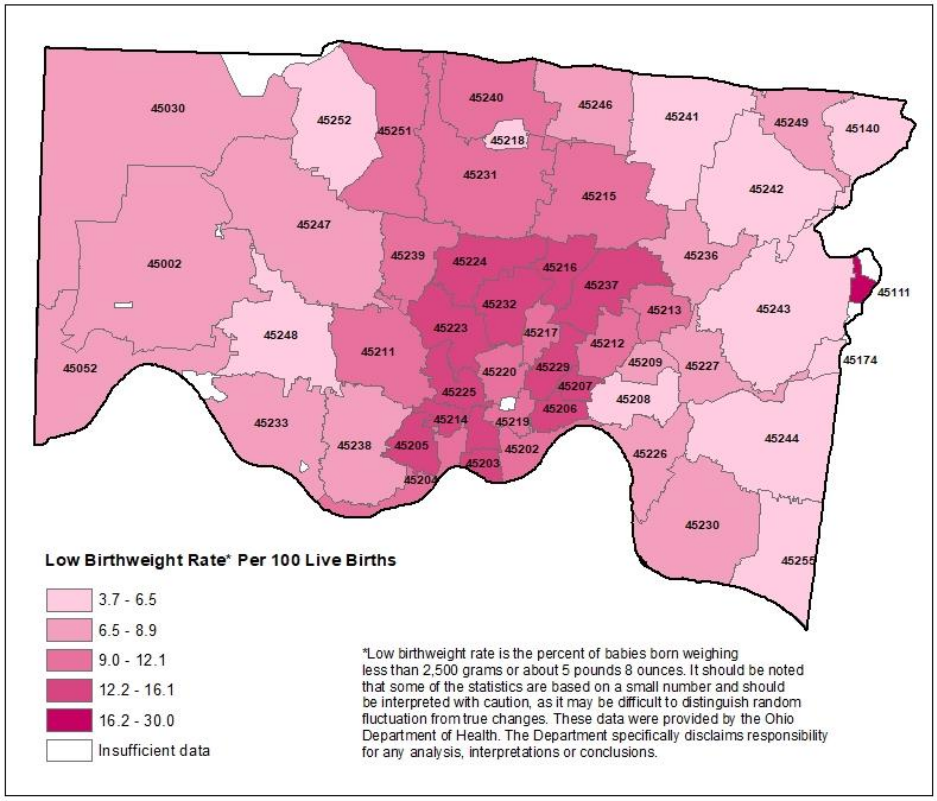


Figure 6. Low Birthweight Rate in Hamilton County by ZIP code, 2016-2020



3. Community Outreach and Engagement

Outreach Strategies

The services provided by HCPH team of Neighborhood Navigators comprise the downstream component of OEI 2.0. The Neighborhood Navigator is responsible for identifying and connecting eligible women to clinical and social services. The HCPH team includes three Neighborhood Navigators to implement the downstream strategy. Two of the Neighborhood Navigators are employed by HCPH, and through our partnership with UC Health, one Neighborhood Navigator is integrated into the UC Health system. Neighborhood Navigators use several different strategies to find pregnant women including canvassing within the hotspot ZIP codes, promoting the OEI navigation line and QR code, tabling at community events, hosting pregnancy-related events, using social media, and obtaining referrals from partner agencies. The HCPH team has been working in the community for the past 3 years to build OEI brand recognition and establish the reliability of services through strategic partnerships and community building.

Hot cards (Figure 7), which are postcard-sized marketing materials that include the OEI navigation line, were disseminated to reach pregnant women in the community. This strategy seeks to fill gaps in existing traditional outreach networks by reaching women where they live, work, shop, and socialize. Within stores, hot cards were strategically placed in aisles that contained items pregnant women may need (e.g., pregnancy tests, baby items, prenatal vitamins, etc.). The navigation line allows for women who find the hot cards to conveniently provide their contact information to connect them to a Neighborhood Navigator.

Figure 7. OEI Hot card

Evolution of Navigation Strategies from OE20 to OE21

New this year, after seeing a surge in the prominence of QR codes due to the pandemic, the HCPH team implemented the use of a QR code on the hot cards in place of the previously used text line. As with the text line, this gives women an alternative to calling and leaving a voicemail, allowing for them to submit their contact information to the HCPH team through a QR code linked survey.

When women call into the navigation line and leave a voicemail or submit the QR code survey with their preferred contact information, they will receive a return call from a Neighborhood Navigator within 24-48 hours to collect

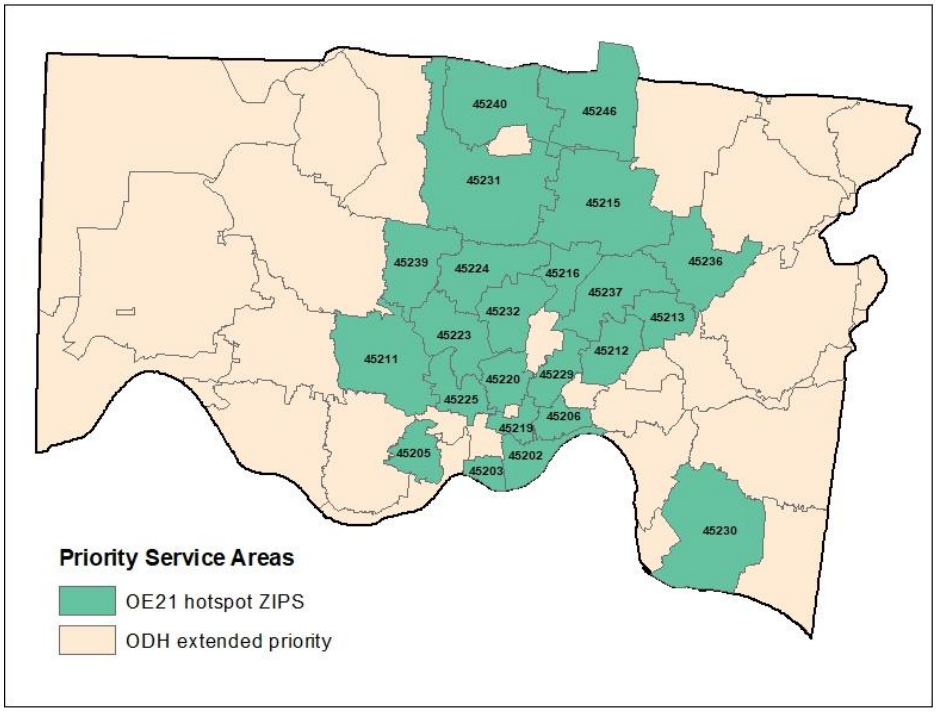
additional information to determine their eligibility for OEI services. If a woman is found eligible for the program, an intake session is then scheduled, offered either in person, or virtually. A woman is considered 'served' through the OEI program when the Neighborhood Navigator has successfully completed the intake and when three follow-up attempts have been made.

The goal through this process is to identify risk factors and needs, provide referrals, and follow-up to determine whether referrals were accessed and utilized successfully. If referrals were not accessed by the women served, Neighborhood Navigators attempt to learn from the women why the referral was not accessed (i.e., referring agency didn't follow-up; contact information was wrong; follow-up from referral agency was not timely etc.) or whether it was helpful or not. The Neighborhood Navigator integrated into the UC Health system, works solely within that setting, and therefore uses a non-traditional form of outreach to identify women. Similarly, the Neighborhood Navigator is responsible for identifying the needs of women, facilitating the referral process, and determining usage of referrals.

Strategies for Connecting with the Black Prenatal Population

Outreach activities for neighborhood navigation took place in selected communities where women most in need of OEI services, specifically Black pregnant women, could be identified and subsequently served. These communities, otherwise known as hotspot ZIP codes, were determined to be high priority communities based on an adapted methodology from the Association of the Maternal and Child Health Programs Concentrated Disadvantage indicator. Hotspot ZIP codes were selected based on the proportion of Black births, the NH-Black and NH-White preterm birth and low birthweight rates, and preterm and low birthweight disparity ratios. Across all Hamilton County ZIP codes, 23 were considered hotspots based on having poorer birth outcomes and/or large Black-White disparities; in turn, these were deemed as high priority communities for the place-based coordination of the Neighborhood Navigators. The following map (Figure 8) displays the whole of Hamilton County as an area for identifying eligible women, though hotspot ZIP codes were prioritized for the coordination of neighborhood navigation activities due to the state of poorer birth outcomes and disparities within those communities.

Figure 8. Outreach Prioritization Map, Hamilton County



Highlight of Community Partners

There are numerous infant vitality efforts throughout Hamilton County; the main efforts are listed below. Through the work of OEI 2.0 HCPH has learned that Hamilton County is a resource-rich, system-poor county, meaning there are numerous resources and agencies working on infant vitality but the coordination among those agencies is limited.

Cradle Cincinnati serves as the collective impact agency for addressing infant vitality within Hamilton County and is a key partner for the goals and objectives outlined in this proposal. Cradle Cincinnati was launched in June of 2013 with a bold vision: that every child born in Hamilton County will live to see his or her first birthday. Cradle Cincinnati has a team of community health workers, social workers, and nurse case managers that connects women with the services they need – from housing assistance and depression screenings to breastfeeding support and access to cribs and diapers – and fills systems gaps that families encounter.

Every Child Succeeds offers a home visitation program to optimize child health and development for low-income families. Professional home visitors work closely with pregnant women and new mothers to develop parenting skills, improve maternal and child health, create stimulating and nurturing home environments, and connect families with other community supports.

Healthy Moms & Babes is an outreach ministry whose mission is to increase infant survival as well as foster the health of women, children, and families. Ensuring that women and children have access to needed services through the use of mobile units and home visits. Focusing on the individual, Healthy Moms & Babes commits to helping the community's most vulnerable women achieve successful pregnancies, thriving babies, enhanced parenting skills, expanded understanding of personal health and progress toward self-sufficiency.

Health Care Access Now serves as a Certified Pathways Community HUB for the Cincinnati area, offering maternal and child health care coordination. Each woman is paired with a Community Health Worker who provides important education about breastfeeding, safe sleep, and assists with smoking cessation resources. Community Health Workers will locate resources to find or maintain safe housing, obtain healthy food, and make appointments for medical, dental, and behavioral health care

HCPH works to leverage successes, lessons learned, and models from existing infant vitality efforts within Hamilton County in the implementation of OEI 2.0 goals and objectives. The work of OEI in Hamilton County would not be successful without the many community partnerships HCPH has developed. Below is a highlight of the community partnerships that have been the most beneficial to HCPH successfully implementing OEI 2.0 program goals within Hamilton County.

- The many branches of the Public Library of Cincinnati and Hamilton County are places that local families gather and have allowed the Neighborhood Navigators to connect with potential women and host BUMP events.
- The Christ Hospital's prenatal services refer their pregnant clients who need additional services to the Neighborhood Navigators to help them find the appropriate resources.
- The Women's Center of Forest Park is a Pregnancy Resource Center that provides free pregnancy testing and ultrasounds. They refer clients to Neighborhood Navigators and distribute OEI hot cards to qualified pregnant women.
- The UC Health partnership with a contracted Navigator to screen women that present at the emergency department or other clinical service within the UC Health system who are pregnant and are not currently

connected to services. This year the partnership expanded into UC Health's community clinics which also make referrals and distribute hot cards.

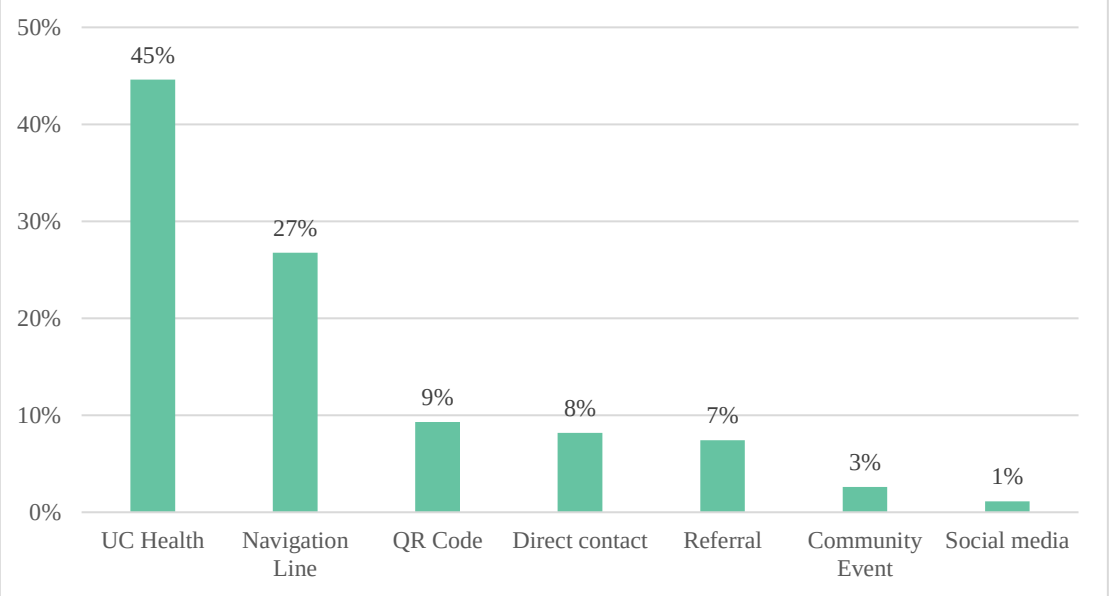
4. Neighborhood Navigation Data

Recruitment of Women into Program

Throughout the recruitment process, Neighborhood Navigators document information about participant outreach strategies, contact information, screening, follow-up attempts, and enrollment in a central database known as the recruitment source. This data, including additional qualitative fields allows us to monitor the impact of neighborhood navigation by identifying strategies and community areas where women first come in contact with OEI. The figure below provides an overview of the different outreach avenues through which women were recruited.

Similar, to the previous grant year, most of the women identified presented to the UC health system for care (45%), followed by women who called into the OEI navigation line (27%). Though data captured throughout the recruitment process revealed that most of the women calling into the navigation line had come across a hot card through a social media post. Therefore, the means by which women were recruited through social media (1%) is much greater than what was captured in the recruitment database. Other means of outreach included the QR code (9%), direct contact (8%), referrals (7%), and community events (3%). While these avenues account for a much smaller proportion of women they remain important in identifying women who otherwise would have not been found using traditional strategies or in a traditional setting.

Figure 9. Recruitment of Women by Outreach Avenue (N=269)



At the point of recruitment, all women were considered as being potentially eligible for OEI services but had not yet been screened. The figure below demonstrates the status of women after being recruited and at which follow-up attempts were made to determine eligibility. Women with statuses deemed as 'unable to contact' (19%), could not be reached at any point during the three follow-up attempts either through phone, text, or in person. Those who were deemed 'lost-to-contact' (8%), were unique in that they were reached and to some degree engaged but were never screened for services. All but one of the women identified through a community event, most identified through a

referral (75%), and more than half of the women who called into the navigation line (54%) were women who were lost-to-contact or who could not be contacted at all. Conversely, all the women identified either through UC health or direct contact were screened. Furthermore, these two avenues were the most effective in ensuring that the women screened were eligible too. As can be seen in figure 11, majority (97%) of the women screened met the eligibility criteria for OEI services.

Figure 10. Status of Women Recruited (N=269)

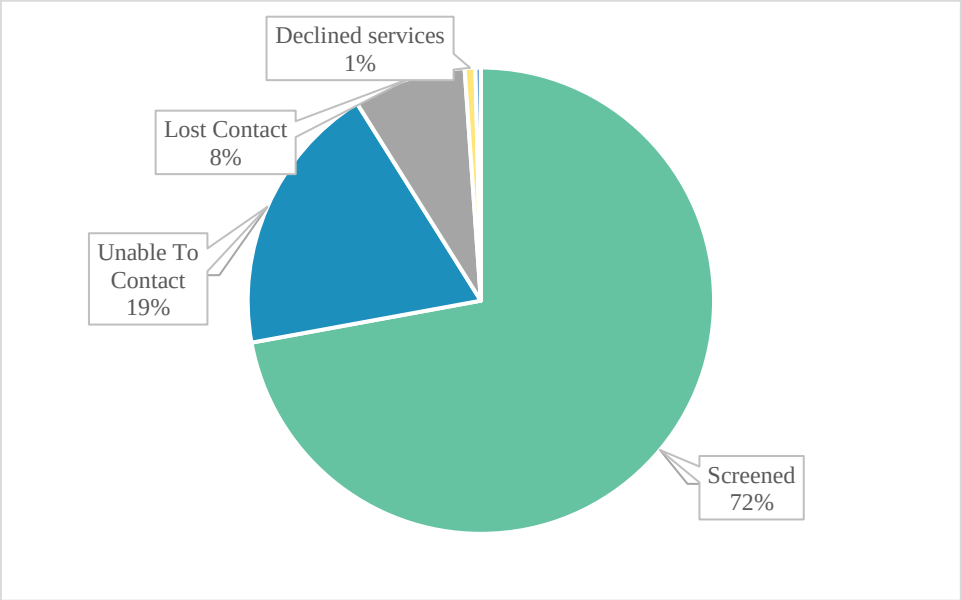
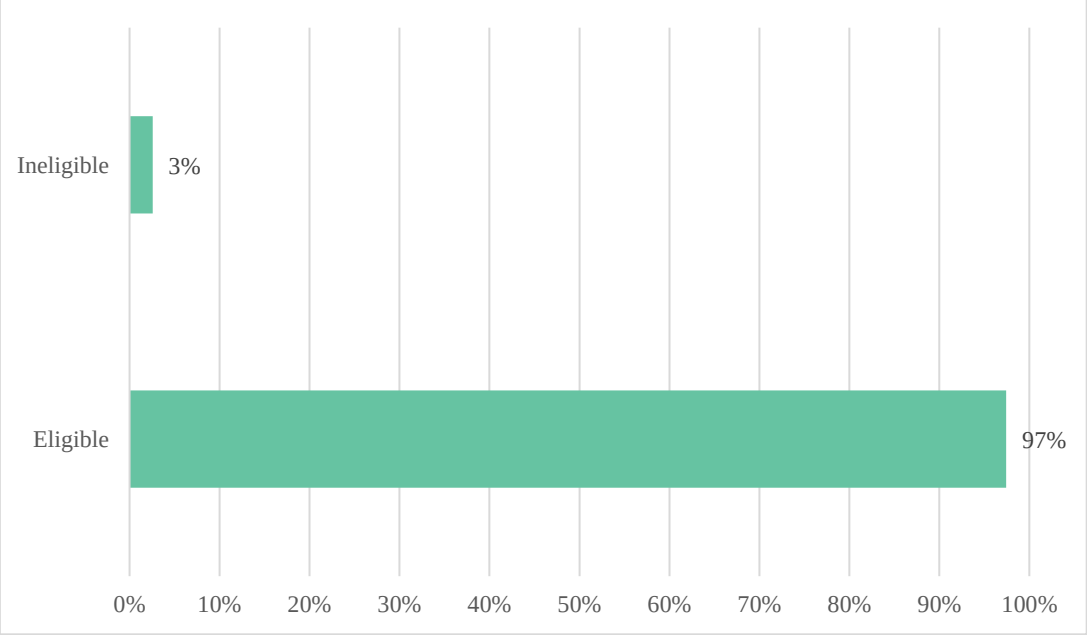


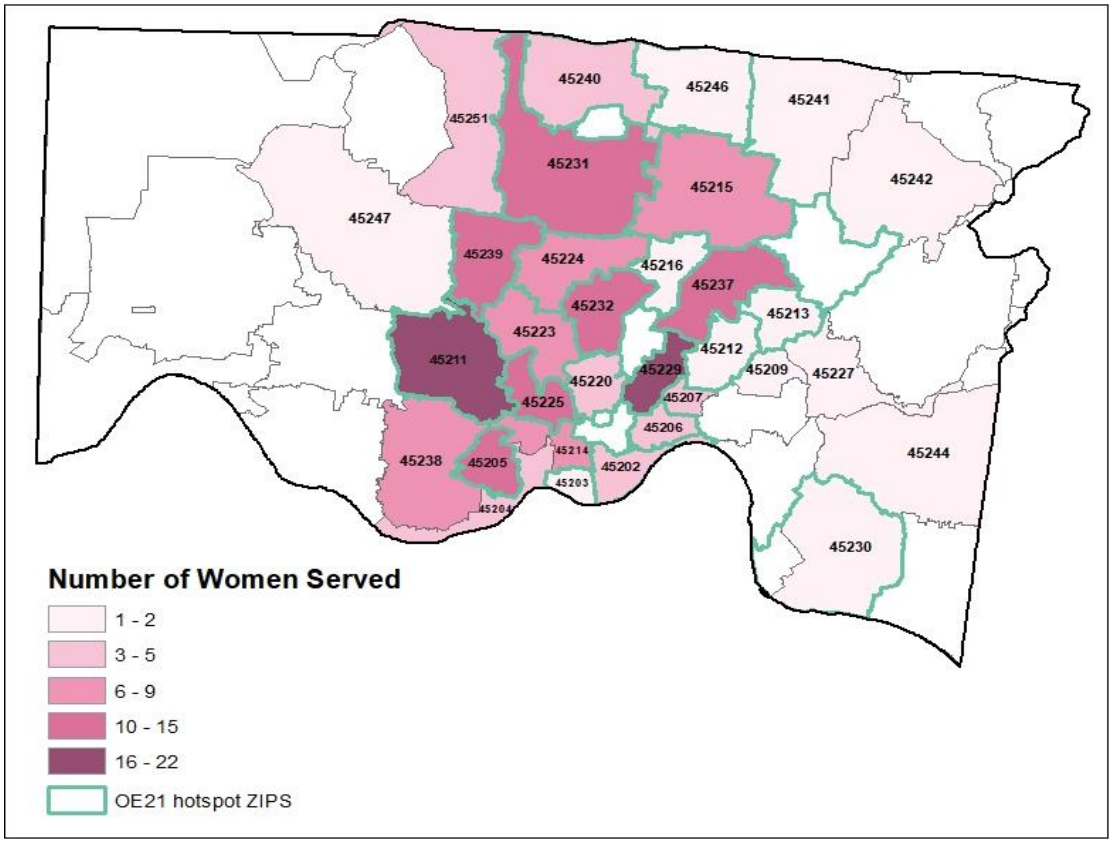
Figure 11. Eligibility Status of Women Screened (N=194)



Breakdown of Women Served

At the start of the grant year, a target goal of 823 was set in terms of the minimum number of women to serve. As a result of the grant being extended into an additional quarter this number was later increased to 1029. Overall, a total of 202 women were served; putting our team behind in reaching our target goal and overall performance compared to the number of women served in the previous grant year (204 vs 202). Despite these challenges, chosen outreach strategies proved to be successful in identifying and serving Black prenatal women in the hotspot ZIP codes. Figure 12 demonstrates the distribution of women served across Hamilton County ZIP codes and highlights those that fell within the priority service areas. As can be seen, majority of the women served (77%) resided within the hotspot ZIP codes where navigation canvassing took place - formerly defined as areas with the greatest proportion of Black births and having the poorest birth outcomes for NH-Black women and/or large Black-White disparities.

Figure 12. Distribution of Women Served in Hamilton County (N=202)



Demographic and Maternal Characteristics

Responses from the intake (Table 1) showed that 87% of the women were NH-Black - exceeding the target goal of 75%. A smaller proportion were NH-White (11%), 1% were Hispanic, and 1% were unknown. The mean age was 25 years, with 8% less than 18 years of age. This year we saw an increase in the number of teen moms that were served. Most of the women had up to or less than thirteen years of education (76%), and majority of the women (87%) reported Medicaid as their form of insurance. Among women reporting barriers to prenatal care (22%), eighty-nine percent reported transportation as interfering with access to prenatal care (see Figure 13). Despite the reported barriers to prenatal care, 97% had received prenatal care. Most women (41%) were likely to experience low levels of stress, with majority (58%) reporting pregnancy as a stressor, followed by housing (23%), parenting (22%), and day-to-day

activities and work together accounted for 41% (see Figure 14). On average women reported two risk factors, with the most prevalent risk factor being a diagnosed medical condition (26%), followed by unstable housing (16%), tobacco use (13%), and depression or other mental health concern (13%) (Figure 15).

Table 1. Maternal Characteristics of Women Served, OE21 (N=202)

Maternal Characteristics	Count	Percent
	N	%
Race/Ethnicity		
non-Hispanic Black	175	87%
non-Hispanic White	22	11%
Other	1	0%
Hispanic	2	1%
Unknown	2	1%
Age		
Less than 18 years	17	8%
18-24 years	95	47%
25-34 years	78	39%
35 and older	12	6%
Education		
Less than high school	76	38%
High school diploma or equivalent (GED)	77	38%
Some college, no degree	36	18%
Associate degree	6	3%
Bachelor's degree	7	3%
Insurance		
Private	14	7%
Medicaid	176	87%
None	12	6%
Prenatal care		
Yes	196	97%
No	6	3%
Reported barriers to prenatal care		
Yes	45	22%
No	157	78%
Stress levels		
Low	83	41%
Moderate	60	30%
High	59	29%

Certainly, the demographic make-up of the women served based on the distribution of age, educational attainment, and insurance status, reflects the population with the greatest risks for poor birth outcomes. Though data gathered on other factors that affect the prenatal period, such as barriers (Figure 13), stressors (Figure 14), and risk factors (Figure 15), remain important in understanding the population of women and certainly helped the Neighborhood Navigators in identifying the individual needs of those women.

Figure 13. Identified Barriers to Prenatal Care among Women Served (N=45)

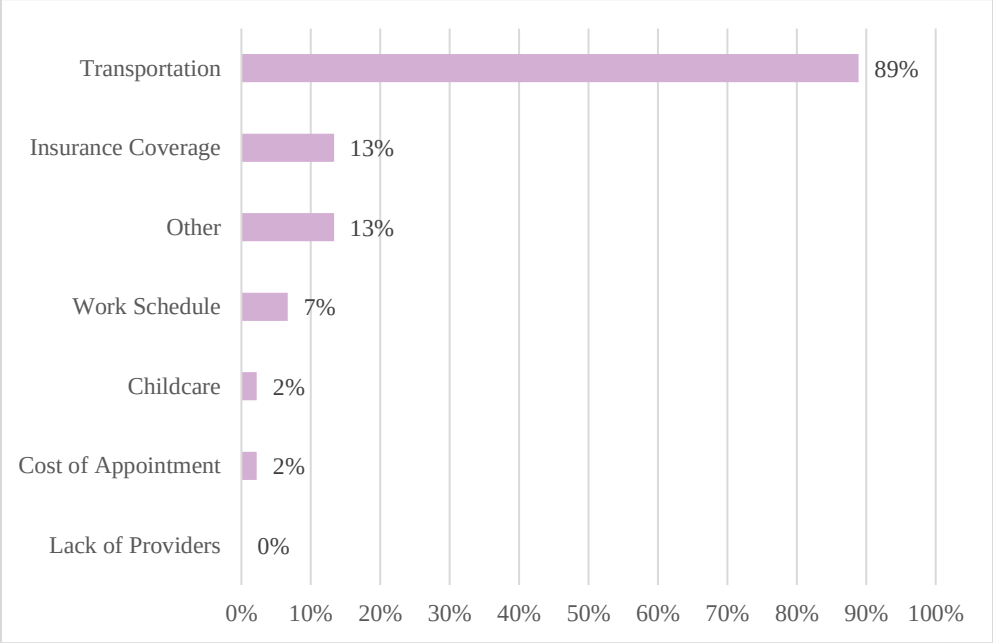


Figure 14. Reported Stressors among Women Served (N=202)

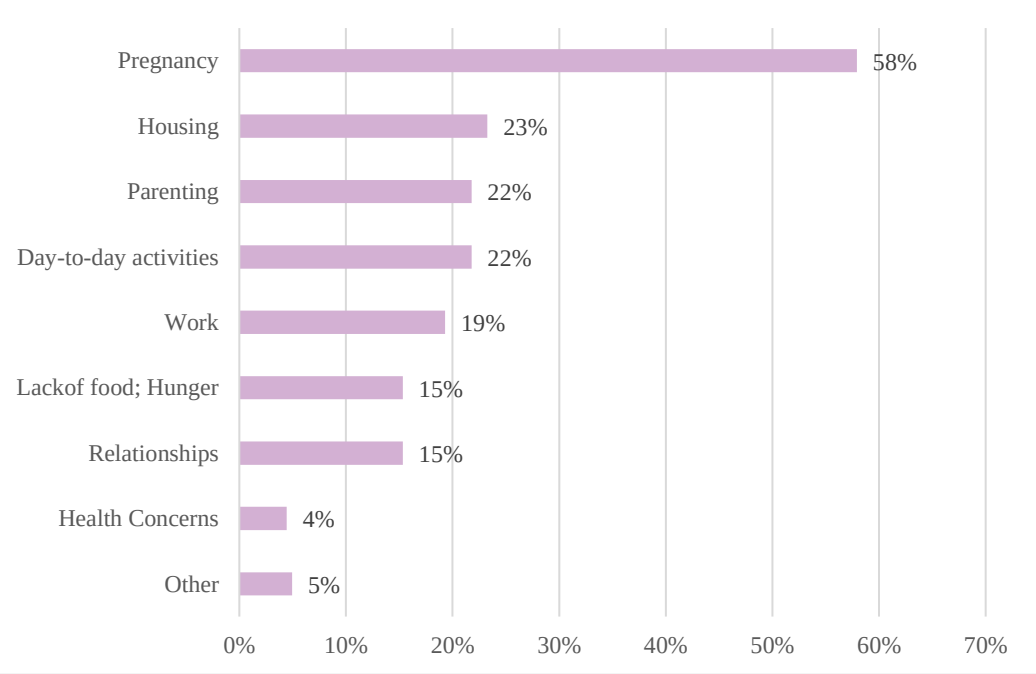
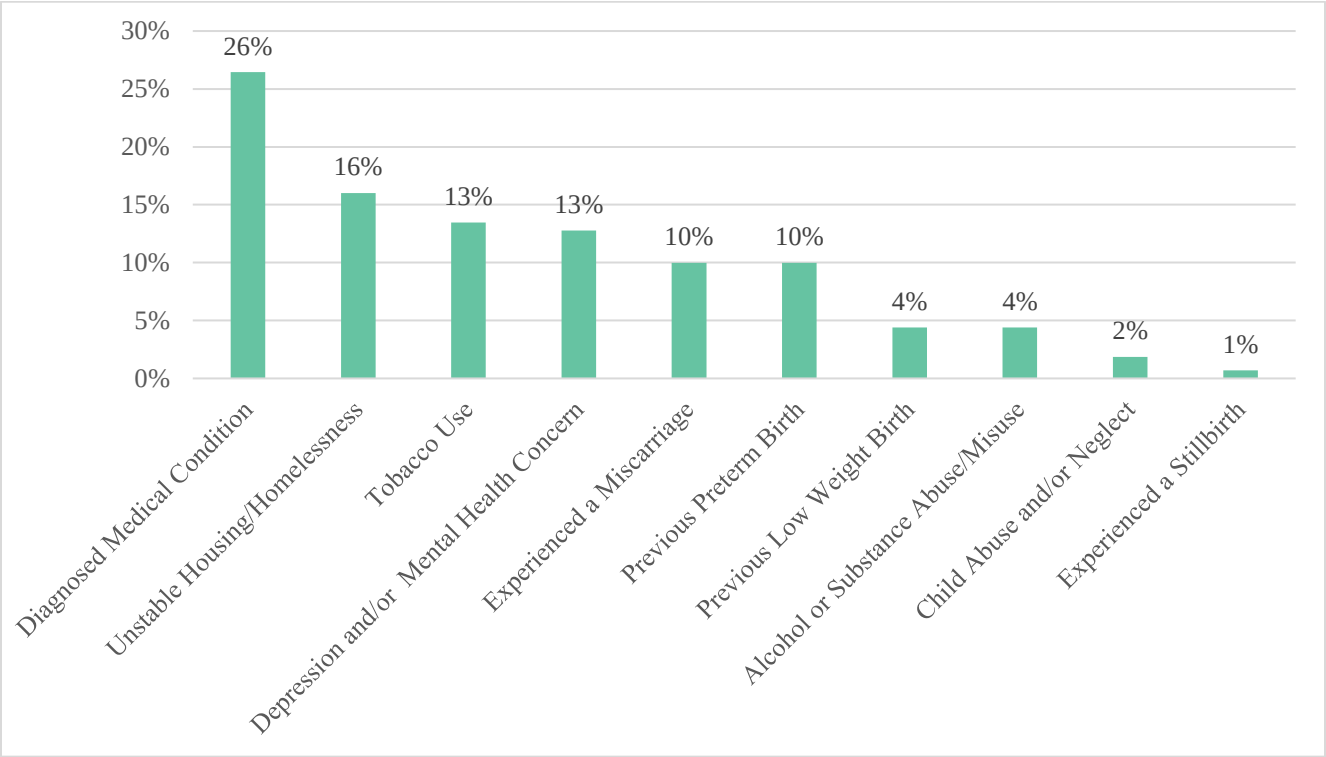


Figure 15. Reported Risks Factors (N=431)

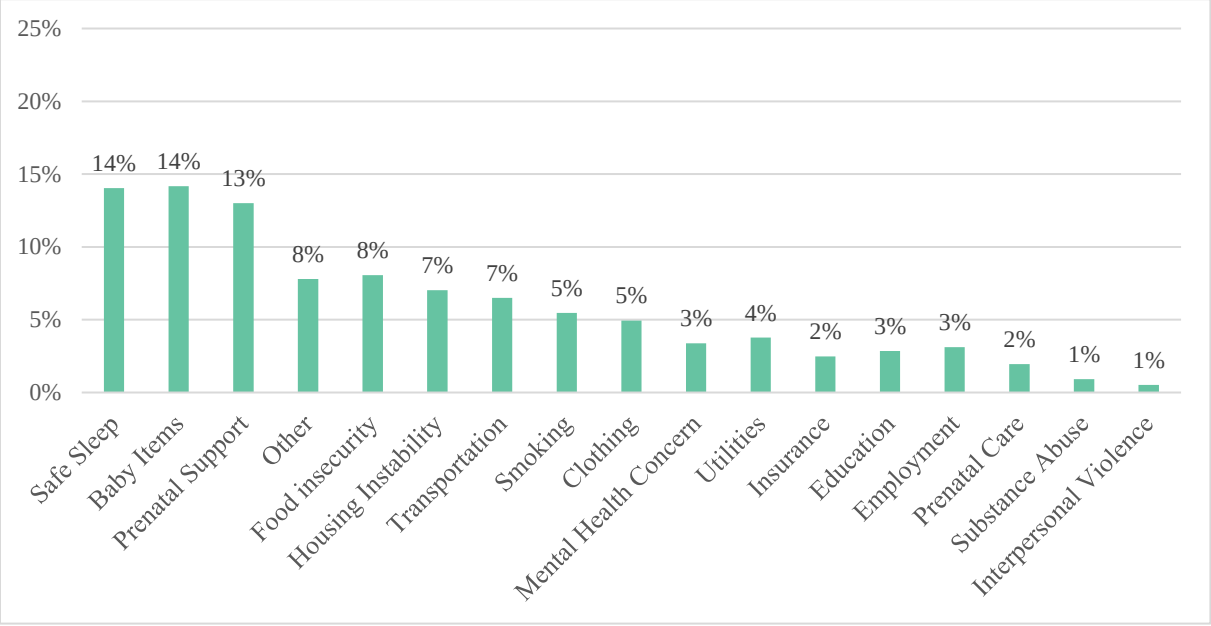


Service Needs among Women Served

The figure below demonstrates the frequency for the specific needs identified across the women served (Figure 16), with the most prevalent service needs being safe sleep (14%) and baby items (14%), followed by prenatal support (13%). Across the different service needs, most of them (99%) were met with an appropriate referral and some were utilized more frequently than others. Figure 17 demonstrates the relative count for referrals offered and utilized for each service need. Referrals for needs that were more commonly identified, such as baby items and safe sleep, did not equally get utilized to the extent that they were offered and needed. Conversely, referrals for prenatal care, prenatal support, food insecurity, and those falling under 'other' were utilized more frequently. Overall, based on the limited data that was reported the referral utilization rate was low, with women utilizing only 32% of all the referrals offered. Due to a low rate of responses in the Navigator's follow-up attempts it was difficult to obtain data on referral utilization for many/most cases of women served. Furthermore, this data suggests that there may be greater success with some resources that could be tied to the ease of using and/or the process, including other barriers that the HCPH team continues to better understand.

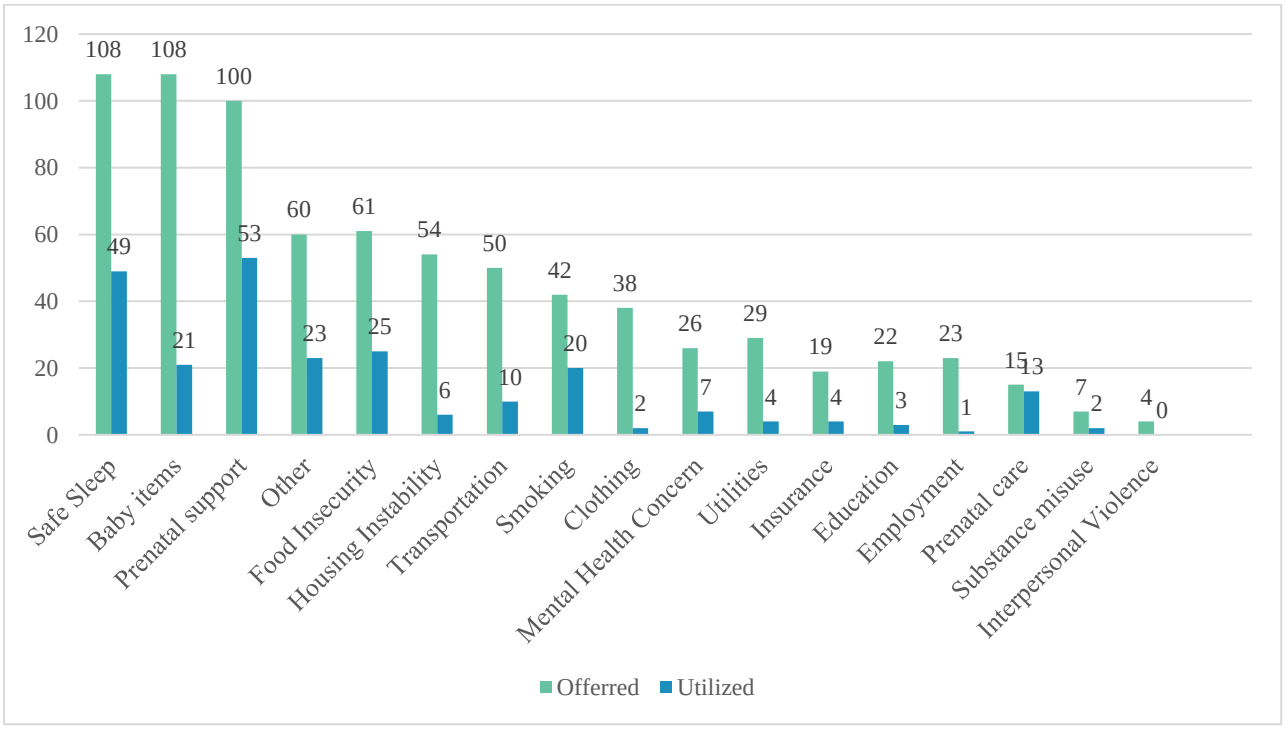
Data on referral utilization for women identified and served under the UC Health Navigator, was captured more frequently due to there being in-person visits as opposed to only phone follow-up attempts and had a referral utilization of 45%. It's possible that women served under UC Health were more greatly impacted by OEI services. Overall, Neighborhood Navigators were able to facilitate the connection and increase access to community resources and services for women served. For an overview of the different referrals provided please refer to the appendix.

Figure 16. Service Needs Identified (N=769)



*Service needs falling under 'other' include breastfeeding/ childbirth education, childcare, parenting, and doula services

Figure 17. Referrals Offered (N=766) and Utilized (N=243)



Feedback Survey

One way in which the HCPH team attempted to gather more robust and informative data regarding referral utilization is through the distribution of a survey. Collectively, the team developed the questions that would be included in the survey and sent to the individual women. The purpose of the survey was to serve as an alternative method (outside of the follow-up attempts) to contact women who otherwise could not be reached at the different follow-up attempts and where data regarding referral utilization was not collected.

The survey was sent to all women with a complete third follow-up as documented in REDCap and who opted in to receiving the survey. Additionally, the '*preferred contact method'* field served as a metric for determining whether the survey would be sent via SMS or email. Using the Qualtrics platform, the Epidemiologist created and distributed the survey, titled 'OEI Feedback'. Women were asked to share their feedback about the different resources and services that were offered; whether they found the services to be helpful; and if they experienced any challenges with utilizing any of the referrals offered. To see a complete overview of the survey questionnaire please refer to the appendix.

From May up until the end of the grant year a total of 97 surveys were distributed, and 10 respondents had completed the survey. While the data was limited to draw any real conclusions, what the HCPH team found to be helpful was that the survey filled in gaps where data was missing, and responses were reflective of the women's experience and interpretation of resources being helpful or not. The hope is to adopt an alternative process where the approach for determining referral utilization is more standardized and uniform across Neighborhood Navigators.

5. Stories From the Field

Social Determinants of Health Assessment

The social determinant of health (SDOH) assessment is an additional form developed by the HCPH team as part of the screening tool process. The purpose of the tool is to capture data on factors surrounding the period of pregnancy as it relates to social determinants of health. Data collected from this tool has been informative and has evolved over the course of OEI 2.0 to help the HCPH team better understand the unique experiences and needs of women served.

In conjunction with the resolution passed by Hamilton County in declaring racism as a public health problem, it was important that our team acknowledge the ways in which racism and discrimination appears in the healthcare setting; specifically, racism and discrimination as a contributing factor in maternal and infant health outcomes. In 2020, racism was nationally recognized and declared as a public health crisis, and in turn there has been an influx of research on implicit bias in the healthcare setting and efforts to increase anti-bias training among health care personnel (HCP) - that of which our SDOH team has taken strides to support. In response to this heightened awareness, changes to the SDOH tool were made to include questions around racism and discrimination in the health care setting. The reason for incorporating these questions were twofold: 1), to create a space that would encourage conversations about one's experiences of racism and discrimination, and 2), to collect and analyze data that may support efforts through which training of HCP is prioritized.

Insights gathered from thematic analysis of data from the previous grant year (OE20) were, too, taken into consideration when making changes to the SDOH assessment. This included changes to question wording from open to close ended, and response options to be more reflective based on what was learned about the needs of women served in OE20. Additionally, the questions around racism and discrimination were adapted from the *Listening to Mothers Survey* – a statewide population survey of women's childbearing experiences. Meetings were held and

feedback from all team members were considered before launching the new tool. Key findings from the SDOH assessment are summarized below.

Social Support

Figures 18 and 19 display the responses to questions around social support. Most women reported receiving support from either a family member or friend (38%) or significant other (38%) (Figure 18). Across other areas of support, more women reported support from a doula or trained labor assistant (7%), compared to only 6% who reported receiving support from either a doctor or nursing staff combined. Some women felt as though that had *not* received any type of supportive care throughout the term of their pregnancy (38%). In terms of the different resource's women would have wanted (Figure 19), 35% reported breastfeeding support, followed by a doula and/or midwife (26%), information on pregnancy (18%), and contraceptive services (13%). Forty percent of women reported having all the resources they need.

Figure 18. Who if anyone has provided you with supportive care throughout the term of your pregnancy? (N=187)

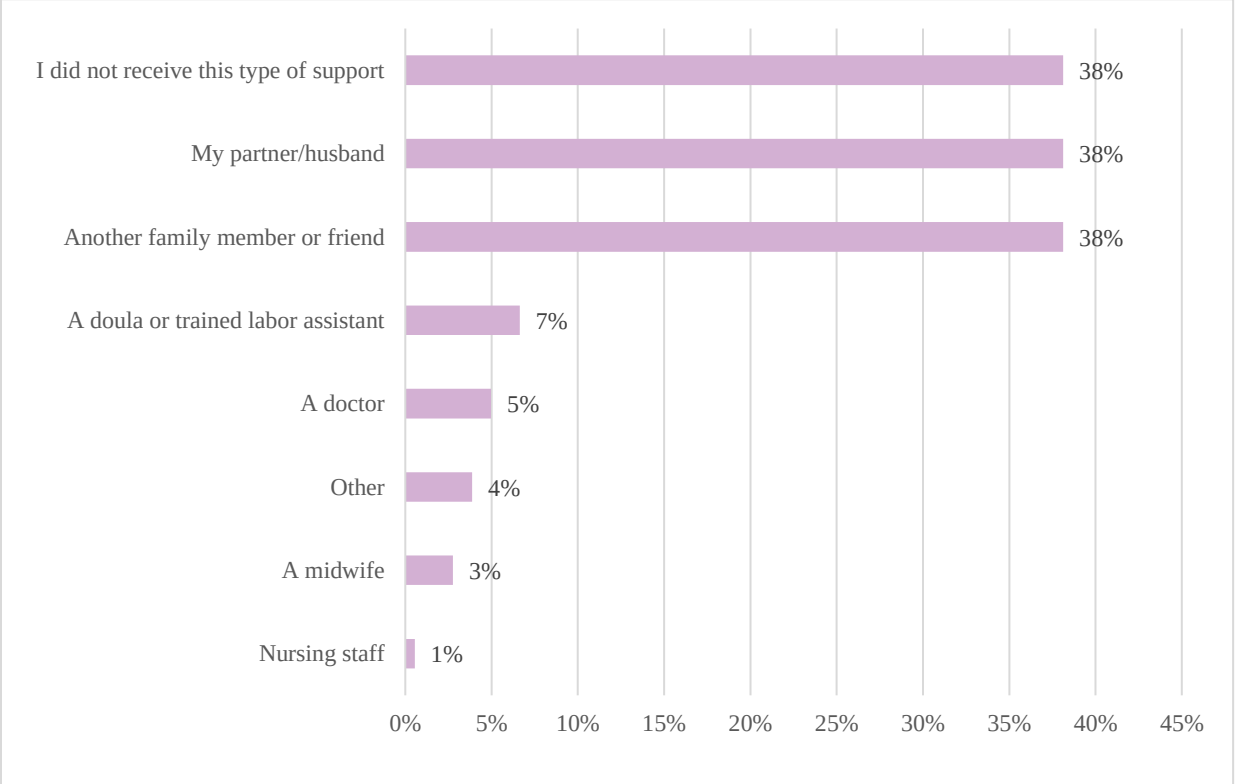
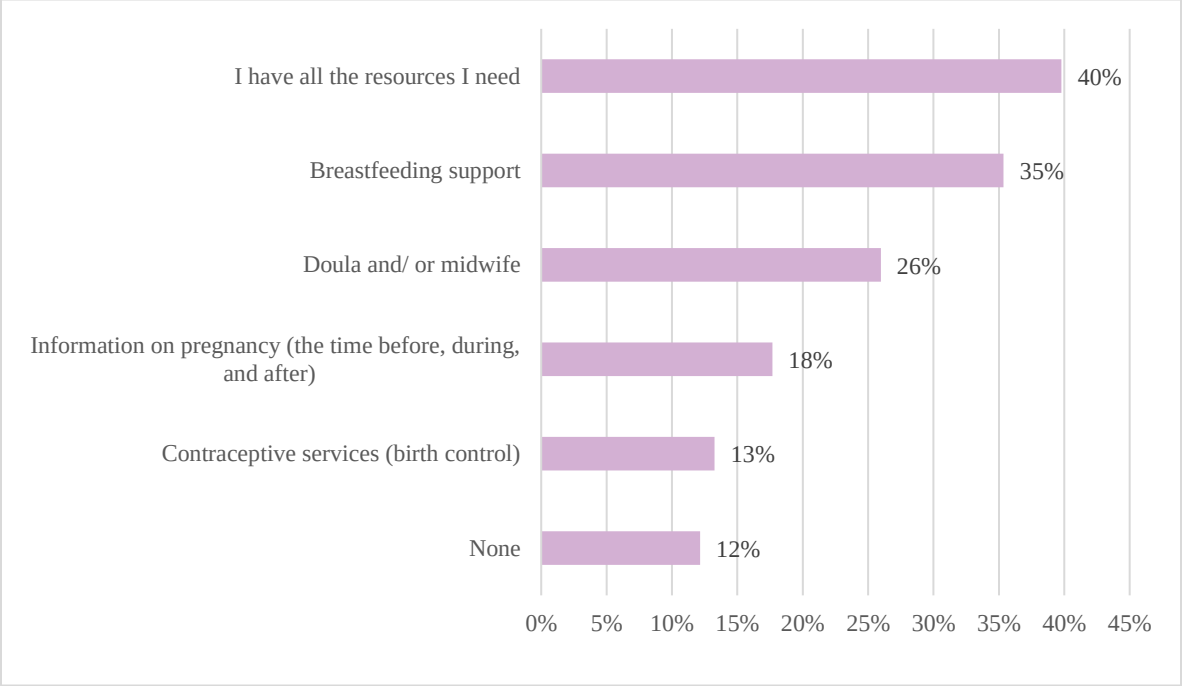


Figure 19. Which of the following resources do you wish you had more support with either before or throughout your pregnancy? (N=187)



Data collected on social support was consistent with what the team had previously learned about women served in OE20, with familial support or a friend as having a strong presence throughout one's pregnancy. Additionally, women indicated a need for family planning resources (contraceptive services and information on pregnancy), breastfeeding support, and a doula/midwife. Efforts to support Black women and families should focus on ensuring that families have the resources to plan and prepare for future pregnancies and increase access to doula and midwifery services.

Experiences of Racism and Discrimination

Women were asked about experiences of racism and discrimination as it related to their race, ethnicity, cultural background, or language; health insurance status/ situation; and a difference in opinion regarding the right care for self or baby. Across all categories majority of women reported *no* when asked if they had been treated poorly. For those who reported yes (5%, race, ethnicity, cultural background, and language; 6%, difference in opinion regarding care; 2%, health insurance status /situation) they were asked to explain the details of those experiences. The following are responses that were shared with and documented by the Neighborhood Navigators. They were later paraphrased and/or quoted to highlight important themes:

Treated poorly because of health insurance status

> *Mom feels she was not offered iron transfusion due to her Medicaid. She had to advocate for herself for her care team to ask insurance to give her the transfusions.*

Treated poorly because of race/ethnicity/cultural

> *"I have gotten bad vibes from white doctors. I have an African American woman as an OBGYN and I specifically go to her because she doesn't make me feel like I am ever being judged or discriminated against."*

> *"I first scheduled care with [hospital A], and when I went to my appointment, I was very sick, they just put me and my boyfriend in the room and waiting for hours, I asked how long until the doctor and did not get any response from the people working there. Once the doctor came in he noticed my boyfriend and made an inappropriate comment stating "oh, so I guess there will be a father involved"..... I then asked him [the doctor] about something for my sickness and he stated he would get it but stated this is not McDonalds so it will not be that fast. I did report this and requested my records be sent to [hospital B]"*

Treated poorly because of difference in opinion regarding care

> *"They [healthcare providers] wanted to give her [baby] formula and I wanted to breastfeed. They were trying to do things that I said no to.....They didn't take me as an expert of babies health."*

> *"When I was at the doctor last week, I told my doctor that I didn't want Vax and was told it was an immature decision. Was told I was smart to be my age and race. Told her not to disrespect me like that, I'm smart in general!"*

The responses shared and presented in this report underscore the different forms of mistreatment at the point of care and highlight the need for strategies to eliminate these acts; specifically, those that improve provider-patient dynamics through a model that centers the values of the patient; addresses discriminatory attitudes and microaggressions through implicit bias training among HCP; and efforts that diversify hospital staff in recognizing the importance and benefits of racial concordance in provider-patient care.

Across the racism and discrimination measures the frequency of shared experiences was fewer than what our team had anticipated, such that only a small proportion of women reported being treated poorly at the point of care. In this area we believe that there may be some underreporting and that a few things could explain this. One, being that the measure of discrimination and racism on the bases of race, insurance status, and other areas can be difficult to measure objectively such that perceived racism and discrimination is subjective across individuals. Secondly, self-reported discrimination measures only reflect what the women can identify, recall, and or are willing to report. Finally, the context in which these questions were asked must be considered. One of the limitations being the role of the UC Health Navigator as a healthcare provider, in addition to being in a medical setting. For these reasons it's likely that women would be more reluctant to share experiences around poor treatment in the healthcare setting. Furthermore, women identified through UC health are overly represented in the number of women served and would contribute more to the underreporting around the measures of racism and discrimination.

<u>Field Observations</u>

To capture data from the field, observations from Neighborhood Navigators were documented which further contributed to conversations and better understanding around navigation efforts. The following demonstrate some of the observations that were shared and recurring themes while in the field:

Neighborhood Navigators were instrumental in engaging and building relationships with the community as well as increasing awareness around OEI.

> *"Attended a support group for moms who have miscarried and connected with some community members and moms at [organization]."*

- Field Observation, October 2020

"Connected with a prenatal yoga teacher at [organization] and told her a little bit about what we do in hopes of sharing it with potential moms."

- Field Observation, November 2020

"The One Stop Resource event was a success. It was so great to be surrounded by people and telling them what we do and the different ways we can support them. It was excited and I missed it so much!"

- Field Observation, May 2020

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Additionally, they were flexible in overcoming obstacles and found great gratitude in serving the women that they encountered.

"Did some online canvassing in a popular girl's group on Facebook and made a few interactions with moms interested in services. None followed through with contact to complete an intake even after I followed up with them. I did send the hot card virtually in case they become interested again."

- Field Observation, January 2020

"Discovered a language barrier with one mama. Her first language is Nepali. When we did her intake her husband was able to assist with questions, but the barrier showed more when mom went to make contact with organizations. I did not have much to offer for assistance with translation except to call or go in organizations versus trying to utilize any online platforms so that she could receive in person assistance."

- Field Observation, December 2020

"Client shared her story: since receiving resources from OEI she has enrolled into school, got a job and is close to moving out of a shelter. Client was so thankful for all the resources and constant communication she received."

- Field Observation, May 2020

Success Story

Over the course of OEI 2.0 there have been many successes, both small and big, that have created opportunities for our team to connect with women in the Hamilton County area. Below highlights one of those success that has made a substantial difference in our ability to serve women:

During OE20, a need was identified to better serve pregnant women who are not connected to services and assess risk factors that are tied to the different social determinants of health. An opportunity was presented to partner with a major health system in Hamilton County. The HCPH team contracted with UC Health to have a navigator acting as the link between the Emergency Department and Hoxworth OB/GYN Center for pregnant women. In this role, the navigator reviews all pregnancy cases that present in the Emergency Department and helps enroll pregnant women in OEI services and prenatal care. The partnership with UC Health has been a major contribution to our overall OEI work and has enhanced the level of care and resources available to women at UC Health. Data from this year and the previous grant year speak to the overall success of this partnership in increasing the number of women identified and directly served through UC Health navigation services. Since the inclusion of the UC Navigator our team has increased the number of women served by more than 100%, and with more complete data has led to better insights of referrals being utilized and the impact of navigation services through the UC Health

Avenue. Furthermore, women served through UC Health have expressed great gratitude for the care and attention brought to their needs during their prenatal appointments. We can only hope that the integration of navigation services during routine doctor visits strengthens the level of care they receive and helps to reduce stress during and after their pregnancy; thereby limiting the number of systems one must encounter to address medical and social needs. We are continuing to expand this partnership to serve women in their community health clinics across the county.

6. SDOH Policy and Practice Change

Structure of Hamilton County SDOH Team

The Hamilton County local SDOH team was formed out of a partnership with Cradle Cincinnati to develop and promote new laws and policies at the local, state, and federal level that will help improve birth outcomes and reduce infant deaths.

The Cradle Cincinnati Policy Committee convenes experts in policy development and implementation, maternal and infant health, and health systems in Hamilton County. The Policy Committee/SDOH team has representatives from healthcare and nonprofit agencies with a stake in infant mortality in the region. The team has representatives from Cradle Cincinnati, HCPH, Health Care Access Now, March of Dimes, Rosemary's Babies, United Way, Christ Hospital, Every Child Succeeds, The Health Collaborative, University of Cincinnati, Cincinnati Children's Hospital, UC Health, Care Source, Bethesda Ideas Investments Innovation (bi3), and Tri Health. Other key stakeholders on the committee include a school board member, Ohio state legislator, and a city councilmember chief of staff.

OE19 Policy/Practice Change

Policy recommendations from state government and the Health Policy Institute of Ohio, as well as both quantitative and narrative data from women served by Cradle Cincinnati and OEI identifying housing insecurity or substandard housing as their number one stressor, informed the SDOH Policy Team to focus on helping pregnant women with rental assistance. The Greater Cincinnati region is 40,000 units short of affordable housing for extremely poor families. Households that do not receive rental assistance are at the highest risk of experiencing housing-related challenges such as difficulty paying for other necessities, eviction, or feeling forced to live in a dangerous environment.

Accessing federal rental assistance involves applying through a local public housing authority (CMHA). Because the demand for rental assistance is greater than the supply of federal subsidies, Public Housing Authorities (PHA) such as CMHA typically maintain waitlists that can be very long and, in some cases, are closed for periods of time. In 2016, the average number of months eligible households waited before receiving a Housing Choice Voucher (HCV) in Cincinnati was 27. Resultantly, the SDOH team advocated for a policy/practice change of making pregnancy a priority population to receive a CMHA Housing Choice Voucher to bypass this waiting list.

The SDOH team was able to build on an existing partnership between CHMA and Strategies to End Homelessness (STEH) for STEH to set aside 50 of their housing choice vouchers specifically for pregnant women to ensure that pregnant women experiencing (or close to experiencing) homelessness have adequate housing throughout, and after, their pregnancy. Cradle Cincinnati and OEI were able to identify potential women who could benefit from this partnership. All involved partner organizations were committed to recommending women who would receive the maximum benefit from the referral (early in pregnancy) and who are ensured to be able to be successful once placed.

Cradle Cincinnati CHWs worked with identified pregnant clients to complete the required STEH HCV paperwork to ensure all documentation was filled accurately and confirm the client's eligibility before submitting. Once they were determined eligible, they were placed on the HCV wait list with a preference that raised them to the top of the waitlist. Once approved, the women received a federal HCV through CMHA. The voucher could then be used for any unit that meets HUD standards with agreement from the landlord. The first 50 vouchers were utilized in the first 8 months after implementation of this policy, and the program was able to be extended. All clients referred through February of 2020 received a Housing Choice Voucher. Then, at the start of the COVID pandemic, the HCV program was put on hold as CMHA faced financial constraints. However, by the fall they were able to resume taking women off the waiting list. Since adoption in 2019, 125 referrals have been made, with 109 going on to receive their Housing Choice Voucher. All of the women served through this program have been black pregnant women.

OE20 Policy Implementation

In 2020, we as a community saw the rampant inequities come to light more prominently through a disproportionate burden of COVID-19 illness and death in Black communities, as well as the rise in increasingly unignorable cases of continued police brutality against people of color. These events clearly demonstrated the long history of systemic racism and its long-lasting effects on our Black citizens. Because of this, it became essential this year to work with our local officials to declare racism as a public health crisis. Structural and systemic racism in our society is responsible for inequities across many facets of the lives in the women served by OEI – education, employment, health care access, housing, policing, and so many more, which in turn greatly impacts their health and wellbeing. This is what drives the OEI work in improving the social determinants of health, eliminating disparities in infant and maternal mortality as well as supporting children and families of color who have a right to live and obtain a better quality of life.

Informed by data from both Cradle Cincinnati and HCPH, the team worked with both City of Cincinnati Council members and Hamilton County Commissioners to pass resolutions acknowledging and expressing commitment to address racism as a public health crisis. As a direct result of this, HCPH created a DEI Coordinator position to have a full-time person dedicated to addressing health equity and inclusion within HCPH and to ensure the equity lens was included in all services offered by HCPH.

In partnership with Avant Consulting Group, four trainings were held this year for staff, two sessions on Uncovering and Mitigating Implicit bias, and two sessions on Exploring Your Identities to Promote an Inclusive Workplace & Workforce. These trainings were successful, however HCPH began working to develop in-house training to be more sustainable and specific to our work. The in-house health equity training will be offered to all HCPH staff by the Health Equity Coaches.

Additionally, HCPH restructured the Performance Management System to call out that equity and quality improvement were values that encompassed the entire system and should be incorporated in all aspects of HCPH. A Health Equity Quality Improvement (QI) Workgroup was part of the original Performance Management System. The Health Equity QI Workgroup identified training opportunities to ensure all staff considered the health equity lens when developing and implementing programs, completed an agency assessment and identify goals to enhance the culture of health equity within HCPH.

During the restructure, the Health Equity QI Workgroup was revamped to create a Health Equity Leadership Program that provides support and leadership to all aspects of performance management at HCPH. The Health Equity Leadership Program is a three-tiered program that aims to build staff knowledge and understanding around equity (including racial equity) and an opportunity for interested staff to become a Health Equity Coach for the agency. Health Equity Coaches will answer staff questions related to health equity, collaborate with Performance Management

System leadership to implement equity-related initiatives and explore how initiatives may impact staff; lead conversations with staff using an equity-lens; advocate for the use of an equity-lens among staff and partners; and collaborate with QI Coaches to ensure process improvement principles and methodologies are a part of health equity initiatives, where appropriate.

The Health Equity Coaches will also be responsible for providing the introduction health equity training to all HCPH staff. Training topics include defining health equity, diversity, inclusion, and health disparities; explaining the difference between equity and equality; and understanding social determinants of health and how the work of HCPH can address/impact them. This training will be required of all staff within HCPH as outline in the Workforce Development Plan and will help to ensure all staff understand the role they play in helping to address inequities within Hamilton County.

OE21 Policy Adoption

Paid Family Leave has been on the policy committee's objectives since its inception. There is strong evidence that family leave can reduce infant death and illness, and lower mothers' risk of health complications after childbirth. Unfortunately, without access to paid leave, many families are forced to choose between the paycheck they need and the time they need to provide care to their new baby, as well as look after their own health. With the U.S. lacking a national paid family leave policy, one in four mothers are forced to return to work less than 10 days after giving birth. This disproportionately impacts women of color and low-income families. Studies show around 90% of people have access to unpaid leave. While the Family and Medical Leave Act (FMLA) provides many working Americans up to 12 weeks of job-protected leave, FMLA is unpaid. National surveys indicate that parents frequently do not take unpaid FMLA leave, because they cannot afford it.

The Cradle Policy Manager and OEI Project Coordinator first met with Hamilton County Commissioner Denise Driehaus in February of 2020 to advocate for a paid family leave policy for Hamilton County employees. They were very interested, however COVID put pause on further talks on it until the fall. In September the team followed up and was asked to write a policy brief explaining the need, particularly explaining why the current FMLA and PTO policies are not sufficient. In October of 2020, the Board of County Commissioners approved President Driehaus' recommendation for paid leave to be included in the BOCC policy agenda. The next step was for the administration to develop an HR policy and present it to the board. In February of 2021, Driehaus's chief of staff asked for us to have an additional meeting with the County Administrator and HR Director to discuss the need for this policy.

In June, the Board of County Commissioners held a vote on the paid parental leave policy our team put forth and the vote passed unanimously. The policy allows for 8 weeks of paid leave after the birth or adoption of a baby and applies to both mothers and fathers. The Board of Health also voted to approve the policy for Public Health employees at their July Board meeting. The Project Coordinator gave several media interviews to promote the policy and get the word out about its benefits both for maternal and child health and employee retention. Now that the county has set a standard for others to follow, the team hopes to use this momentum to meet with other major employers in the Cincinnati area that do not have a paid family leave policy,

7. Birth Outcomes of Women Served during OE19 and OE20

Over the course of two grant years (OE19 and OE20) the HCPH team has served 298 pregnant women. Our hope is that by connecting women to social and clinical services it may help to eliminate any barriers encountered throughout one's pregnancy and ultimately support a healthy birth outcome. Our team sought to answer the question of whether women receiving OEI services had a healthy birth outcome based on gestational age and birth weight. The purpose of

this analysis was to characterize birth outcomes for women who received OEI services and make comparisons to women in Hamilton County with a live birth and not receiving OEI services.

Methods

Study Design

This study consisted of a cohort of women with a matched control group. The group of interest included women who were enrolled and served during the first (Oct 2018 – Sept 2019) and second year (Oct 2019 – Sept 2020) of OEI 2.0; 94 and 204 participants, respectively. The control group were women in Hamilton County with a live birth and who had given birth during the same years, but not receiving OEI services. The outcomes of interest were preterm and low birth weight births.

Data sources

The data for this analysis was obtained from REDCap. The Epidemiologist extracted data into a spreadsheet that included the data records of 298 women enrolled in OEI services. Using the Link Plus software, all 298 records were linked to records on the 2019-2021 Birth Occurrence files downloaded from the secure Ohio Public Health Information Warehouse. Records were linked based on first and last name, date of birth, ethnicity, and race. After reviewing the linkage reports of matched pairs and accounting for records that were matched but could not be deemed as a true match, based on date of enrollment in OEI services (captured as *date of initial contact* in REDCap) and the delivery date of the live birth, it could be inferred that those matches were for pregnancies that were *not* served under OEI. To rule out the possibility of the outcome death, records in which a match could not be found when linked to the birth data were matched to the mortality and fetal files. Overall, this resulted in a total of 259 matches, and 30 records from the REDCap data that could not be linked to records on either the birth, mortality, or fetal files.

Study Population

The women included in this study consisted of women served during OE19 and OE20, and who had delivered a live birth between the years of 2019 – 2021. Women served at the time were pregnant and had an income of 200% of the federal poverty level. Matched sampling was utilized to create a control group consisting of women in Hamilton County with a live birth between 2019-2021. To control for income level, the pool of potential matches was further restricted to women with Medicaid as their primary from of insurance as reported on the birth certificate. Using one control for each case, women were matched based on education, age, and race categories, and an equal proportion of matches were selected based on the year of the live birth. The resulting analytic study included 257 matched pairs.

Outcomes

The outcomes of interest were preterm birth (PTB) and low birth weight (LBW). Preterm birth was measured using the reported gestational age on the birth certificate; a birth was considered preterm if the gestational age was less than 37 weeks. Low birth weight was measured using the reported birth weight in grams on the birth certificate; an infant was considered LBW if the birth weight was less than 2500 grams.

Results

Table 2 shows descriptive information for the study population. Across the three demographic variables (race, age, and education) the two groups were equally comparable. In this study, 87.9% of the women were NH-Black, 11.3% were NH-White, and less than 1% identified as Hispanic. Majority of the women (64.6%) were between the ages of 20-29 years at the time of birth, 14% were less than or 19 years of age, and 5.5% fell within the oldest age group, 35 years or older. Compared to the control group, women served were more likely to be single (93.8% v 88.7%) and recipients of WIC (71.2% v 59.5%), indicating the vulnerability of this population. During pregnancy, 13% of the

control group, compared to 9.7% of the women served reported smoking - a known risk factor for low birthweight and preterm births. Nearly all of women served (96.1%) and in the control group (97.3%), were receiving prenatal care. Even though more women in the control group reported smoking during pregnancy, women served under OEI had a greater percentage of low birth weight (13.6%) and preterm births (12.8%) when compared to the control group (9% and 8.2%, respectively).

Table 2. Maternal and Infant characteristics of Women Served (n=257) and Control Group (n=257)

Maternal Characteristics	Women Served	Control Group
	N (%)	N (%)
Race/Ethnicity		
non-Hispanic Black	226 (87.9)	226 (87.9)
non-Hispanic White	29 (11.3)	29 (11.3)
Hispanic	2 (0.8)	2 (0.8)
Age		
≤ 19 years	36 (14.0)	36 (14.0)
20-24 years	89 (34.6)	89 (34.6)
25-29 years	77 (30.0)	77 (30.0)
20-34 years	41 (16.0)	41 (16.0)
≥35 years and older	14 (5.5)	14 (5.5)
Education		
Less than high school/ no diploma	42 (16.3)	42 (16.3)
High school graduate or GED	111 (43.2)	111 (43.2)
Some college, no degree	76 (29.6)	76 (29.6)
Associate degree	13 (5.1)	13 (5.1)
Bachelor's degree	10 (3.9)	10 (3.9)
Master's degree	3 (1.2)	3 (1.2)
Marital Status		
Single	241 (93.8)	228 (88.7)
Married	16 (6.2)	29 (11.3)
WIC Recipient (yes)	183 (71.2)	153 (59.5)
Smoked anytime during pregnancy (yes)	25 (9.7)	33 (12.8)
Prenatal care (yes)	247 (96.1)	250 (97.3)
Infant Characteristics		
Preterm birth (<37 wk)	33 (12.8)	21 (8.2)
Low birth weight (<2500 g)	36 (13.6)	23 (9.0)

Discussion

As proposed, this study provided information on birth outcomes and other characteristics associated with preterm and low birthweight births for the study population. Our data indicated that the control group consisting of women in Hamilton County were similar to women served under OEI. We found that majority of the women received prenatal care and more than half of the women in both groups were receiving WIC services. As expected, women served were more likely to be recipients of WIC. Due to these women initially seeking OEI services, there was a better understanding and willingness to participate in services that are geared towards helping and improving their conditions. The data also highlighted that the women served were less likely to smoke during pregnancy when compared to women in Hamilton County. However, a greater proportion of the women served had preterm and low birth weight births.

This work is subject to limitations that offer helpful direction for improvement of OEI. First, the time allotted for navigation services is relatively short (21 days), such that any observed difference in birth outcomes to women of similar economic and social status would be limited. Furthermore, the trimester of pregnancy that women are enrolled in OEI services (25.4%, first trimester; 40.2%, second trimester; 34.4%, third trimester), coupled with their engagement in navigation services (response to follow-ups and referral utilization) are two critical components for observing any type of impact from OEI. Lastly, it is unknown if the control group accessed any additional services or resources that would explain better birth outcomes within this group. Despite the findings presented in this study women served under OEI benefited from their experience at varying degrees. Further research and analyses that would consider other factors are needed to examine and understand whether any association exists between enrollment in OEI services and immediate birth outcomes.

8. Future OEI Work

To address the challenges and limitations of OEI services, the HCPH team is looking into possible next steps to improve the quality of the program. As mentioned previously, #% of women who call or text into the Navigation Line requesting OEI services are subsequently unable to be contacted. This could potentially be due to the sometimes 24-72 hour delay in responding to the voicemail messages, due to timing and availability. Therefore, the HCPH team will look into the possibility of creating a live line that can be answered by the Navigators in real time, with the goal of decreasing the number of calls lost to contact. Other quality improvement efforts include changes made to the recruitment source tool in order to better categorize and accurately document outreach strategies, such as social media.

Additionally, as mentioned, the HCPH team has continually struggled with obtaining responses from women during the three required follow-ups to determine resource utilization. Due to a low rate of responses in the Navigator's follow-up attempts, it is difficult to obtain data on referral utilization for the majority cases of women served and has led to a low rate of known resource utilization. In OE21, the OEI team piloted a follow-up survey to streamline and standardize the process, however it did not show a significant improvement to the number of responses. The HCPH team will continue to explore ways to encourage and incentivize follow-up responses.

Finally, data collected on barriers experienced is key to understanding the needs of women served, and in providing information to inform the upstream strategies of the OEI grant. As highlighted previously, among women reporting barriers to prenatal care, transportation was the highest identified barrier by far, with % reporting transportation as interfering with access to prenatal care. Medicaid is required by law to cover rides for eligible individuals to and from

the doctor's office, the hospital, or another medical office for Medicaid-approved care, including prenatal care appointments. This coverage, called "non-emergency medical transportation" (NEMT) is often provided by third party vendors such as Uber or Lyft. However, patients report that they are frequently frustrated by NEMT services, with rides arriving late, often not showing up, or refusing their address because of the neighborhood they live in. To add to that, there are currently no policies in place to monitor and evaluate its effectiveness in providing NEMT services.

One of the goals of the Cradle Cincinnati Policy Committee is to improve NEMT practices. This would be achieved through a robust plan that monitors and enforces managed care plan compliance with NEMT requirements. Performance outcomes would be established for each vendor (such as average wait times and no show rates), and vendors would be required to track these outcomes in real time and report their performance to Medicaid on a regular basis. The ability to establish and track performance outcomes for its NEMT vendors, would allow Medicaid to more closely monitor and ensure the effectiveness of its NEMT services, lessening the barrier of transportation for women attending prenatal care appointments. The Cradle Cincinnati Policy Committee will continue to advocate for this policy as well as other policies to help each infant in Hamilton County reach its first birthday.

9. Appendix

Community Resources and Services

A Sound Mind Counseling	2	Holistic Health Practitioners of Cincinnati	1	Serenity therapy services	1
All Moms Empowered to Nurse (AMEN)	32	Healthy Moms and Babies	1	Sowing Seeds in Omi Doula Services	2
Anna Louise Inn	3	Interfaith hospitality Network	1	St. Vincent De Paul	15
Addiction Services Council	1	Life Forward Pregnancy Care of Cincinnati	17	Sweet Cheeks Diaper Bank	4
Baby Basics	6	Lighthouse Youth Services	1	UC Health Tobacco Treatment Specialist	22
Blaq Birth Circle		Lydia's House	1	UC Health Social Worker	39
Back on Track Clothing Assistance (Freestore Foodbank)	15	Me and She Doula	1	UC Health Clothing Bank	6
BOOBS	15	Medicaid	1	UC Health Financial Assistance	3
Bethany House Services	5	Mason food pantries	1	UC Health Case Manager	4
Caresource Babies First Program	7	Mother to Baby	1	UC Health Drug and Rehab Program	1
CCHMC	11	Metro	1	UC Health Lactation Specialists	6
Cradle Cincinnati	65	Moms Quit for Two	2	United Way of Greater Cincinnati – 211	8
Cribs for Kids 211	76	Ohio Means Jobs of Cincinnati & Hamilton County	7	Urban league for employment	1
Community Action Agency	15	Old St.Mary's Pregnancy center	12	UC Health Food Pantry	28
City Link	4	Over-the-Rhine Community Housing	1	UC Health Community Health Worker	27
Cincinnati Works	2	Once Upon a Child	1	Villages at Roll Hill	2
Cincinnati Metropolitan Housing Authority (CMHA)	12	Ohio Works	3	Valley interfaith services	4
Changing Gears	3	Our Daily Bread	4	Wayebridge Counseling	2
Churches Active in Northside	1	PIPP	1	WIC	66
Cincinnati Public Schools	3	Poppy's Therapeutic Corner	3	Women Helping Women	2
Dohn Keeping Teen Moms in School Program	7	Postpartum Support International	2	Talbert House	4
Duke Energy	1	Pregnancy Center (East &West)	19	The Maternal Matrix	4
Every Child Succeeds	35	Pregnancy Loves Company	1	The Midwives at Mercy West	1
Education Matters	2	Queens Village	4	The Salvation Army	1

Elizabeth's New Life Center	1	Quit Culture	1	Transportation Assistance Program/Line (CareSource, Buckeye, Paramount, Molina)	16
Fatherhood Collaborative of Hamilton County	2	Help Me Grow	1	Step Up to Quality Healthcare	1
Greater Cincinnati Behavioral Health Services	2	Rosemary's Babies	10	Strategies to End Homelessness	1
Hamilton County Dept. of Job and Family Services	28	Reach Out Pregnancy Center	2	Housing Opportunities Made Equal	1

OEI Feedback Survey

Start of Block: introduction

The Ohio Equity Institute wants to know about your experience with resources or services offered to you by a Neighborhood Navigator. This will help us to understand which resources were helpful to you and which resources may have been less helpful, and if you had any difficulty accessing resources. We appreciate your feedback on how our partner services can better support you with your pregnancy.

The survey should take you about 2-5 minutes to complete. We look forward to your responses.

Before getting started, please confirm your contact information and date of birth.

---

1 Is your Name, ${m://FirstName} ${m://LastName} ?

- ○ Yes
- ○ No

1.1 What is your Name ?

- First: _____
- Last: _____

---

2 Is your Phone Number, ${e://Field/PhoneNumber}?

- Yes
- No

2.1 What is your Phone Number ?

_____

---

2 Is your Email Address, ${e://Field/Email} ?

- Yes
- No

2.1 What is your Email Address ?

_____

---

3 Is your Date of Birth, ${e://Field/DOB}?

- Yes
- No

3.1 What is your Date of Birth ?

_____

Start of Block: Resources

The next set of questions will collect information about your experience with any resources or services.

4 The following resources were offered to you by a Neighborhood Navigator. Please select from below which of those resources you attempted to use.

- [ ] ${e://Field/Risk1}
- [ ] ${e://Field/Risk2}
- [ ] ${e://Field/Risk3}
- [ ] ${e://Field/Risk4}
- [ ] ${e://Field/Risk5}
- [ ] ${e://Field/Risk6}
- [ ] ${e://Field/Risk7}
- [ ] ${e://Field/Risk8}
- [ ] ${e://Field/Risk9}
- [ ] ${e://Field/Risk10}
- [ ] ${e://Field/Risk11}
- [ ] ${e://Field/Risk12}
- [ ] ${e://Field/Risk13}
- [ ] ${e://Field/Risk14}
- [ ] ${e://Field/Risk15}
- [ ] ${e://Field/Risk16}
- [ ] ${e://Field/Risk17} _____

☐ ⊗I did not attempt to use any resources

Start of Block: Resource Experience

5 You selected ${lm://Field/1}, was this resource helpful ?

○ Yes

○ No

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6 Did you experience any of these situations when attempting to use this resource? Select all that apply.

☐ I was not eligible for services

☐ The referral source did not respond to my calls or inquiries

☐ I'm too far along in my pregnancy

☐ I'm too busy

☐ I'm not motivated

☐ I was placed on a waitlist

☐ I haven't felt like contacting this resource

☐ I was able to successfully use this resource

☐ Other _____

☐ ⊗None of these apply

End of Block: Resource Experience

OE21 Logic Model

Inputs	Activities	Outputs	Goals
Staff/Partners ▪ Hamilton County Public Health ▪ OEI Project Coordinator ▪ OEI Epidemiologist ▪ Neighborhood Navigators ▪ Cincinnati Health Department ▪ Cradle Cincinnati Connections ▪ Cradle Cincinnati ▪ Managed Health Care Plans ▪ Hospitals ▪ Social service agencies ▪ Community partners **Money** ▪ OEI 2.0 Grant Funds **Materials** ▪ Resource guide for hotspot ZIP codes ▪ Data collection materials (e.g. qualtrics license, tablets, data plan, etc.) ▪ ODH Assessment Tool ▪ ODH data collection platform ▪ Incentives for identified pregnant women ▪ Educational materials	▪ Update hotspot ZIP codes ▪ Identify and assess 823 eligible pregnant women and their needed services within hotspot ZIP codes ▪ Target unserved and predominantly Black/African American pregnant women ▪ Connect identified pregnant women to needed services and other resources ▪ Follow- up with women at least three times within 21 days of referral ▪ Meet with partners and community agencies to learn about resources available to community members ▪ Keep comprehensive resource guide for neighborhood navigators updated to share with engaged pregnant women ▪ Document feedback from women about referrals utilization to include in resource portfolio ▪ Meet with community agencies and partners to share feedback/experiences of women with referrals utilization. ▪ Host and attend events to build relationship with community and identify eligible women ▪ Execute contract with UC Health for navigation services ▪ Provide training/onboarding of UC Health staff on REDCap and OEI tools ▪ Keep hot cards and other marketing materials updated to promote OEI navigation services ▪ Create Hamilton County OEI Webpage to promote OEI work ▪ Identify partner agencies for collaboration and participate in ongoing partner meetings to promote OEI work ▪ Review update SDOH data indicators that contribute to poor birth outcomes and SDOH needs identified by Neighborhood Navigators ▪ Update SDOH Team action plan ▪ Implement/adopt SDOH policy or practice ▪ Participate in FIMR Case Review Team (CRT) and Community Action Team (CAT) meetings ▪ Facilitate data sharing with other infant vitality efforts in Hamilton County ▪ Submit monthly, quarterly, and annual reports to the Ohio Department of Health (ODH) ▪ Conduct ongoing program review,, outcome evaluation, and quality improvement ▪ Meet monthly with OEI team to review program and share data updates ▪ Create opportunities to disseminate navigation and SDOH data findings with SDOH team and other partners	▪ Narrative describing strategy for prioritizing service outreach ▪ Comprehensive resource portfolio for Hamilton County ▪ Number of eligible women identified in Hamilton County ▪ Number of screening assessments completed by neighborhood navigators ▪ Number of pregnant women referred to comprehensive clinical care and other needed services ▪ SDOH baseline data of identified pregnant women ▪ Number of SDOH needs identified during assessment process ▪ Number of SDOH needs met with an appropriate connection or referral. ▪ Percent of pregnant women whose needs were addressed by an appropriate connection or referral ▪ Average number of contacts Neighborhood Navigators make per served pregnant women ▪ Average number of referrals or connections per served pregnant women ▪ Number of referrals utilized by eligible pregnant women ▪ Number of meetings with partners and/or community agencies ▪ Documentation of events hosted or attended ▪ Number of meetings with UC Health to discuss about contract deliverable progress ▪ Documentation of finished electronic mediums ▪ Developed Hamilton County OEI webpage ▪ Number of identified partners for possible collaboration ▪ SDOH Team meeting minutes ▪ Documentation of data reviewed by SDOH Team ▪ Updated SDOH Team action plan ▪ Number of SDOH policies/practices identified by SDOH Team as a need within Hamilton County ▪ Number of policies or practices identified by the SDOH Team that were implemented/adopted ▪ Number of women and families impacted by implemented SDOH related policy or practice(s) ▪ FIMR CRT and CAT meeting minutes ▪ Number of data sharing agreements with other Hamilton County agencies working on infant vitality efforts. ▪ Monthly, quarterly, and annual reports submitted ▪ Results of ongoing program review, evaluation and quality improvement shared with key partners ▪ Disseminated data reports with SDOH team and other partners	**Short-Term Goals** ▪ By 11/10/2020, the Epidemiologist will submit a narrative describing strategy for prioritizing service outreach. ▪ By 1/10/2021 - 9/30/2021, a resource portfolio reviewed and updated on a quarterly basis to assure accuracy of resources. ▪ By 1/10/2021 – 9/30/2021, Project Coordinator will work with OEI Staff to collect qualitative data to share with policy committee on a quarterly basis to drive policy. **Intermediate Goals** ▪ By 4/10/2021, the OEI team will review and make edits to the SDOH Action Plan and SDOH Team Charter. ▪ By 9/30/2021, the Neighborhood Navigators will host or attend 6 events in Hamilton County to help identify eligible pregnant women and promote OEI work ▪ By 9/30/2021, Project Coordinator will utilize two electronic mediums to increase awareness of the Hamilton County OEI initiatives. **Long-Term Goals** ▪ By 9/30/2021, the Neighborhood Navigators will identify and engage at least 823 unique pregnant women within Hamilton County and connect them to comprehensive clinical care and other needed services. ▪ By 9/30/2021, the project coordinator will manage navigation services partnership with UC Health. ▪ By 9/30/2021, the policy committee will implement FY20 adopted SDOH-related policy or practice and adopt new SDOH-related policy or practice. ▪ By 9/30/2021, the Project Coordinator will submit 12 monthly and 4 quarterly reports and attend 10 FIMR CRT and CAT meetings. ▪ By 9/30/2021, the Epidemiologist will complete annual data report and provide needed support to FIMR team. ▪ By 9/30/2021, contribute to the reduction of the preterm birth and low birthweight birth rate in Hamilton County.