YOUTH POLICY LAB
UNIVERSITY OF MICHIGAN

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Opportunities to Increase Participation in Michigan's Maternal Infant Health Program

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KEY FINDINGS:

1. Michigan's Maternal Infant Health Program (MIHP) currently enrolls less than 30% of all eligible individuals across the state. Among MIHP enrollees, only about 60% participate "fully," meaning they enrolled prenatally and received at least three home visits.

2. Increasing MIHP's take-up and retention can help more parents access vital prenatal and post-partum support.

3. Lack of awareness is a major barrier to MIHP enrollment. Various systems-level activities to promote awareness of home visiting could help ensure eligible beneficiaries know these services are available to them.

4. Many MIHP participants cited scheduling conflicts as a reason for ending MIHP early. Others said they did not sign up for MIHP because they did not want someone coming into their home. Incorporating additional flexibility into MIHP's model of service delivery – for example, by expanding the use of virtual visits, offering more flexible visiting hours, and encouraging home visitors to meet with individuals in locations outside of the home – may help overcome these barriers to enrollment and participation.

MICHIGAN'S MATERNAL INFANT HEALTH PROGRAM

Home visiting is an evidence-based strategy to promote the health and well-being of pregnant people, new parents, and babies.[1,2,3,4] The Maternal Infant Health Program (MIHP) is Michigan's largest evidence-based statewide home visiting program for Medicaid-eligible pregnant individuals and infants under one year old. Home visitors typically begin working with beneficiaries during their pregnancy and then continue to provide home visiting services through pregnancy, the postpartum period, and up to the infant's first birthday.

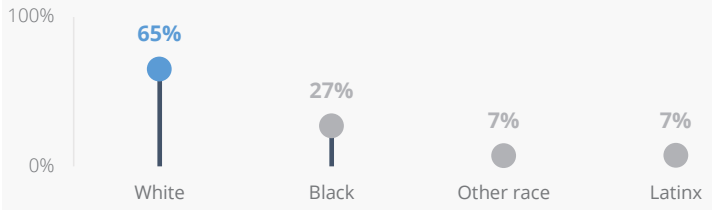
Quasi-experimental studies have found that individuals who enroll in MIHP before their third trimester and receive at least three home visits (i.e., "full" participation) have a 23% lower risk of low birth weight and a 26% lower risk of preterm birth, the primary drivers of infant mortality.[5] Yet MIHP enrolls less than 30% of all Medicaid-eligible pregnant people in the state. Increasing participation in the program could potentially help improve maternal and infant health for more Michiganders.

MIHP PARTICIPANT CHARACTERISTICS: MICHIGAN

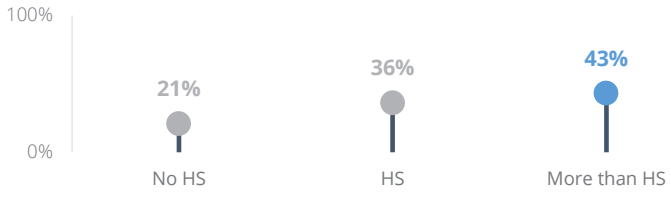
The Youth Policy Lab partnered with the Michigan Department of Health and Human Services (MDHHS) to analyze administrative data (vital records, Medicaid claims, and MIHP program data) from 2009-2016 and to survey MIHP-eligible individuals in Southeast Michigan (Macomb, Oakland, and Wayne counties) to better understand MIHP participation patterns and participant experiences.

From 2009 to 2016, there were 530,593 Medicaid-eligible infants born in the state of Michigan. Below, we explore characteristics of the pregnant Medicaid beneficiaries who were eligible for MIHP during this time.

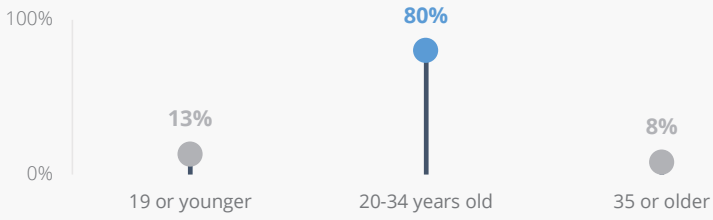
Who is eligible for MIHP?



A majority (65%) of **Medicaid-eligible pregnant individuals** who gave birth between 2009-2016 were **white.**



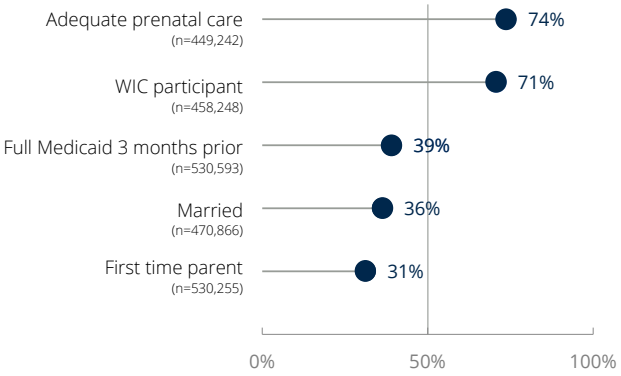
Most had at least a high school degree and many (43%) have some **education beyond high school.**



Pregnant individuals typically fell between the **ages of 20 and 34 years old,** but 13% were 19 years or younger and 8% were 35 years or older.

Nearly three in four (74%) pregnant beneficiaries **received adequate prenatal care**,[1] and 71% were **enrolled in WIC**, the Special Supplemental Nutrition Program for Women, Infants, and Children. 39% were **covered by Medicaid** during the three months before they got pregnant. 36% were **married** and 31% were **first time parents.**

Social Supports of Medicaid-eligible Women (2009-2016)

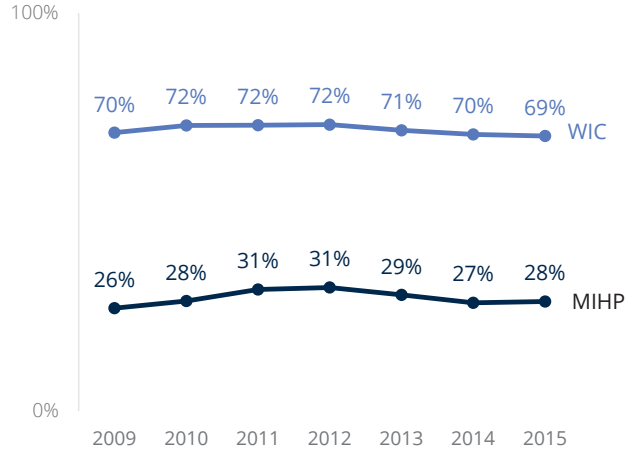


Who enrolls and participates in MIHP?

Participation in MIHP is low relative to similar social programs, such as WIC, and has remained low over time. Approximately 72% of pregnant Medicaid beneficiaries who gave birth between 2009 and 2015[2] were eligible but did not enroll in MIHP, while the remaining 28% (148,446 births) enrolled in MIHP. In contrast, only 29% of these same individuals did not enroll in WIC.

MIHP enrollment rates are substantially lower than **WIC enrollment rates.**

MIHP and WIC Enrollment Rates, 2009-2015



Not all of those who enroll in MIHP participate fully in the program. Across the state, approximately 58% of program enrollees were "full" participants, meaning they enrolled prenatally and had at least three home visits. The remaining 42% of participants were "partial" participants who had fewer than three home visits.

Key Predictors of Enrollment and Participation

A number of factors can influence individuals' likelihood of enrolling and participating in MIHP, including demographics, health conditions, and existing connections to social supports. Regression analyses of administrative data from 2009-2016 found a number of demographic and health-related factors that were associated with increased MIHP enrollment and participation. Below, we describe the characteristics that predicted MIHP enrollment and participation in our regression.

Demographic Factors

Pregnant beneficiaries who were already connected to social programs, such as Medicaid and WIC, were more likely to both initially enroll and participate fully in MIHP. In fact, WIC participation was the strongest predictor of both MIHP enrollment and full participation. In addition, pregnant beneficiaries who were Black, Latinx, young, or did not have a high school degree were more likely to enroll in MIHP. However, beneficiaries who were married, age 35 and older, or had a prior pregnancy were less likely to enroll.

Health-Related Factors

Encouragingly, individuals with certain pregnancy risk factors, such as diabetes, hypertension, obesity, and tobacco use during pregnancy, were more likely to enroll in MIHP. This is important because some of these health conditions are associated with negative maternal outcomes, such as miscarriage, gestational diabetes, and pre-eclampsia, and their infants are also at higher risk of experiencing poor birth outcomes.[6] Tobacco use during pregnancy is also associated with a number of poor outcomes, including restricted fetal growth and babies born small for their gestational age.[7]

1 Determined using the Kotelchuck Index, which comprises two elements: initiation of prenatal care and number of prenatal care visits between initiation and delivery. "Adequate" prenatal care is defined as receiving at least 80% of the expected number of prenatal care visits during pregnancy. For additional details, see: Kotelchuck, M. (1994). An evaluation of the Kessner Adequacy of Prenatal Care Index and a proposed Adequacy of Prenatal Care Utilization Index. American Journal of Public Health, 84(9): 1414-1420.

2 WIC enrollment data was not available for 2016 in our dataset.

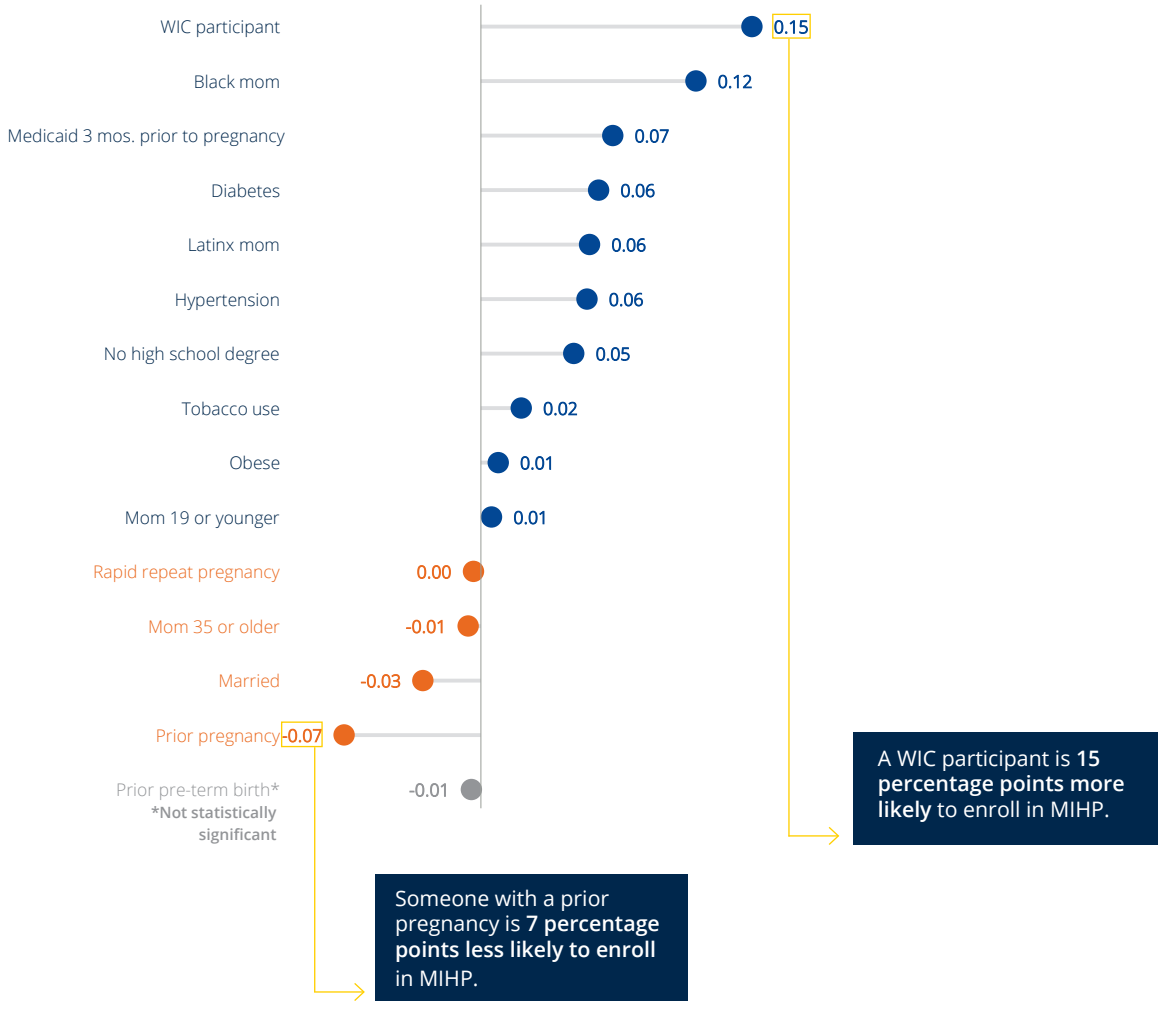
Even after controlling for prior pregnancy, individuals with a previous preterm birth were no more likely to enroll in MIHP than individuals with no history of preterm birth. Individuals with a rapid repeat pregnancy (i.e., a subsequent pregnancy within 18 months of a previous birth) were less likely to enroll. This is a potential opportunity for improvement, given that rapid repeat pregnancy is associated with low birth weight, preterm birth, and babies born small for their gestational age.[8]

Once enrolled, similar factors predict full participation:

- WIC participants were the most likely to be full participants in MIHP.
- Beneficiaries who were Black, Latinx, had diabetes, were obese, had less than a high school degree, were age 35 and older, and who used tobacco during pregnancy were all more likely to participate fully in the program.
- Beneficiaries with hypertension, a prior pregnancy, prior preterm birth, or rapid repeat pregnancy were less likely to participate fully.[3]

A variety of factors predict likelihood to enroll in MIHP.

Predictors of Enrolling in MIHP, Expressed in Percentage Points



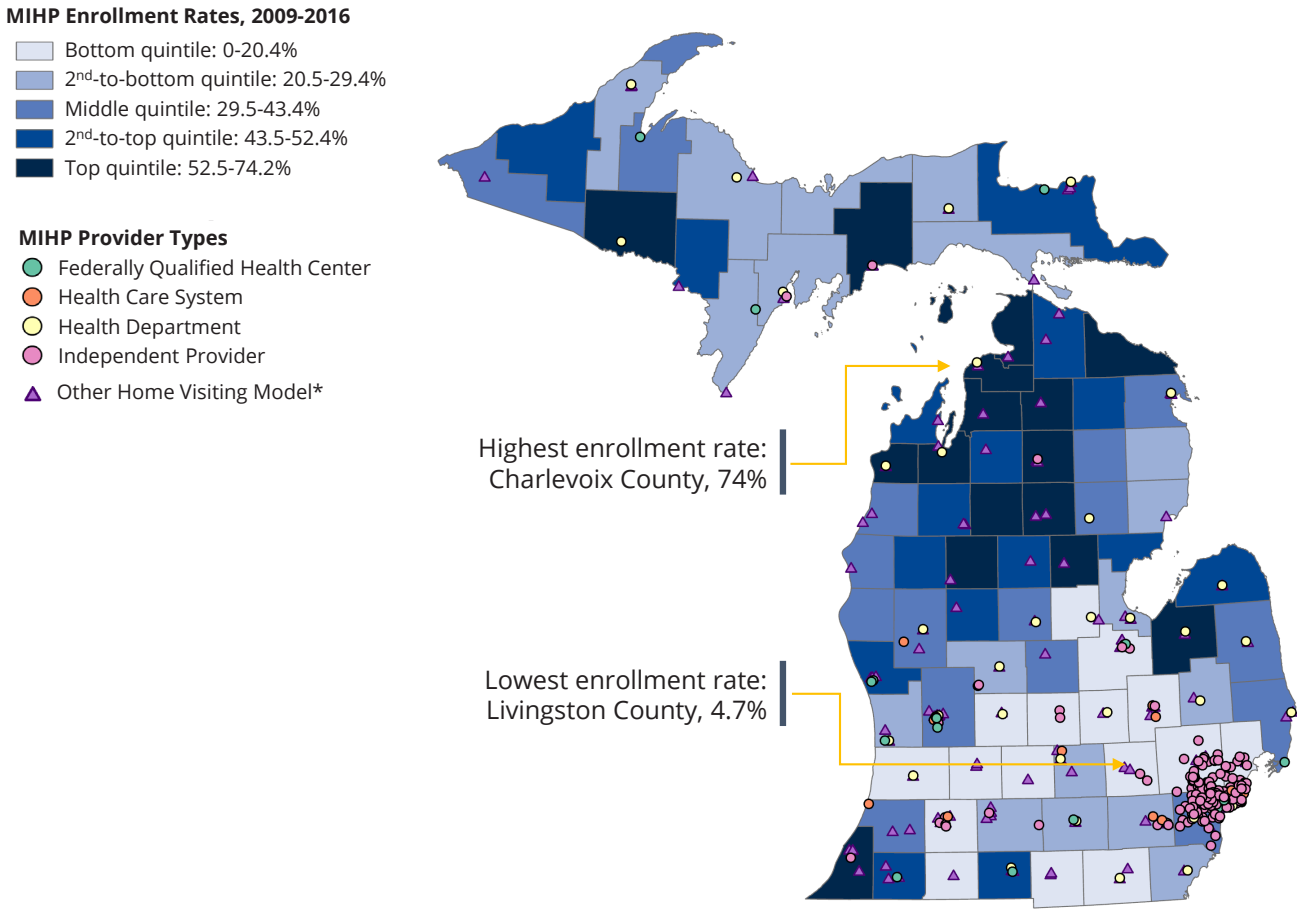
3 Regression models predicting enrollment and participation in MIHP control for infant's birth year and census tract of residence. Predictors are relative to a first time, white mom who is not married, has at least a high school degree, was not on Medicaid prior to the current pregnancy and has no other risk factors. Note that these characteristics were chosen as the baseline for enrollment predictors because they were representative of the largest group of individuals in our sample.

Geographic Variation

There is substantial variation in MIHP enrollment and participation across counties in Michigan. Counties in Northern Michigan tend to have higher overall enrollment rates than counties in the southern part of the state; the five counties with the highest enrollment rates (Charlevoix, Antrim, Emmet, Iron, and Otsego) are all located in the northern Lower Peninsula or the Upper Peninsula. We see similar variation in rates of full MIHP participation across counties in Michigan. In general, counties in the northern part of the state tend to have the highest rates of full participation.

Variations in enrollment and participation rates across counties may occur for a number of reasons. One possible reason is that providers in different parts of the state use various approaches to identify eligible beneficiaries and encourage them to enroll. For example, in Michigan's Prosperity Regions 2 and 3 (comprising 21 counties in the northern Lower Peninsula), there is a centralized home visiting intake system, known as Healthy Futures, that provides an initial point of contact to all new parents where families can learn about resources to keep their baby healthy and receive referrals to needed services, including home visiting. Another possible explanation for county-level differences in enrollment is availability of other maternal-infant home visiting programs in a given region. In some counties, there are other home visiting models – such as Nurse-Family Partnership, Healthy Families America, etc. – that may be serving some beneficiaries not served by MIHP.

MICHIGAN MIHP COUNTY ENROLLMENT RATES, BY QUINTILE, 2009-2016



*Non-MIHP models include Early Head Start-Home Based, Family Spirit, Healthy Families America, Infant Mental Health, Nurse-Family Partnership, Parents as Teachers, and Play and Learning Strategies – Infant. Each of these has a prenatal component, but eligibility and populations of focus vary across models.

Other Home Visiting Model listings are accurate as of Fiscal Year 2019. MIHP enrollment rates represent an average across calendar years 2009-2016; enrollment rates may have changed since that period.

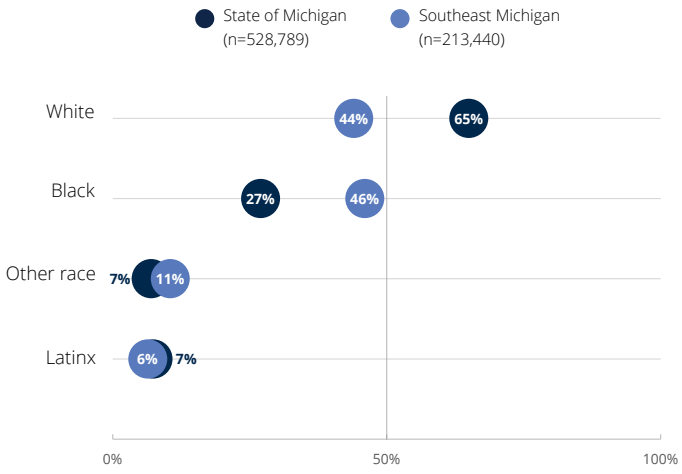
MIHP PARTICIPANT CHARACTERISTICS: SOUTHEAST MICHIGAN

The three-county region comprising metropolitan Detroit in the southeast part of Michigan – Macomb, Oakland, and Wayne counties – contains nearly 40% of the state's population. From 2009 to 2016, there were a total of 214,584 Medicaid-eligible infants born in one of these three counties, representing approximately 40% of all infants born in Michigan during this time period.

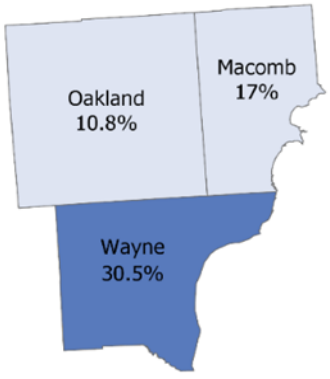
Across all three counties, approximately 24% of eligible beneficiaries enrolled in MIHP from 2009-2016. However, there is substantial variation in enrollment rates between these three counties. Wayne had the highest enrollment rate of the region with 30.5% of all eligible beneficiaries enrolled in the program, followed by Macomb at 17.0%, then Oakland at 10.8%.

MIHP-eligible individuals in Southeast Michigan have similar demographic characteristics compared to MIHP-eligible individuals statewide, and patterns of MIHP enrollment and participation are also similar to those of the state overall. The one major difference is the racial composition of this region compared to the rest of the state: Southeast Michigan had nearly identical shares of white and Black Medicaid beneficiaries, while statewide there were substantially more white Medicaid beneficiaries. This difference is primarily driven by Wayne County, where 56% of all pregnant Medicaid beneficiaries were Black. In Macomb and Oakland counties, the shares of Black Medicaid beneficiaries (24% and 30%, respectively) were closer to the statewide average (27%).

Southeast Michigan had lower shares of white pregnant Medicaid beneficiaries and higher shares of black pregnant Medicaid beneficiaries compared to **the state overall.**



MIHP Enrollment Rates, Southeast Michigan, 2009-2016



PARTICIPANT EXPERIENCES WITH MIHP

To better understand the experiences of individuals in Southeast Michigan who are eligible for MIHP, the Lab partnered with MDHHS to survey full MIHP participants (i.e., enrolled during pregnancy and had three or more home visits), partial MIHP participants (i.e., had fewer than three visits), and those who were eligible but did not enroll. (For full details on survey methods, see the Appendix.) Response rates are described below.

SURVEY RESPONSE RATES, BY PARTICIPANT CATEGORY			
Category	**# of Responses**	**# in Sample**	**Response Rate**
Full Participant	370	2,299	16.1%
Partial Participant	108	579	18.7%
Non-Participant	323	1,926	16.8%
Total	**801**	**4,804**	**16.7%**

Survey data was then merged with limited demographic data (race, ethnicity, and age). Responses broken down by participant category, race/ethnicity, and age are described in the Appendix.

Enrollment Barriers and Experiences

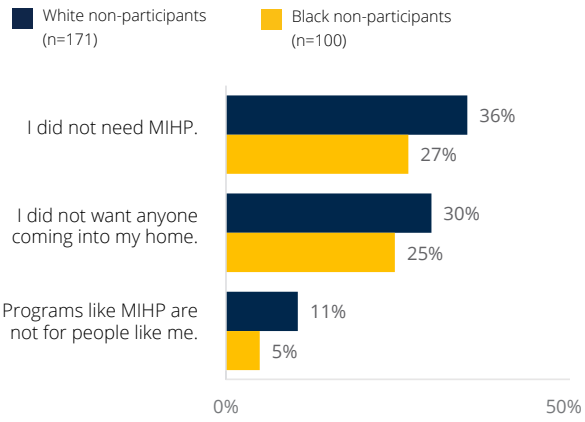
Non-Participants

Lack of awareness was the primary factor preventing MIHP-eligible individuals from enrolling. Approximately 70% of non-participants said that no one told them about MIHP during their pregnancy. Among the remaining 30%, many said they would have enrolled if they had received outreach at a different point in their pregnancy, with a slight preference for earlier outreach. 50% of non-participants said they did not enroll in MIHP because they had not heard about the program.

Nearly one-third (32%) of non-participants did not enroll because they did not want anyone coming into their home or they felt they did not need the services, and 9% said they did not enroll because "programs like MIHP are not for people like me." There were several statistically significant differences between Black and white non-participants who responded to these statements. Notably, a significantly higher share of white non-participants said that they did not need MIHP, they did not want anyone coming into their home, or programs like MIHP were not for people like them.

What were your reasons for not enrolling in MIHP?

Differences for all statements are statistically significant at the 1% level.

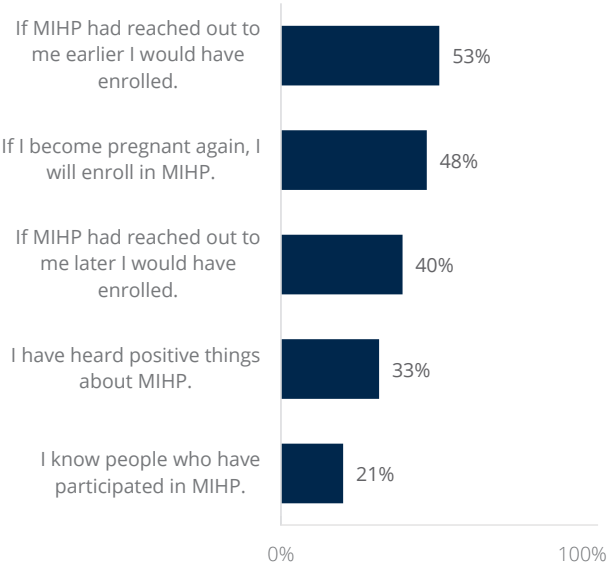


70%

of non-participants said they **were not told about MIHP** during their most recent pregnancy.

Encouragingly, many non-participants expressed positive sentiments about MIHP, even though they had not enrolled during pregnancy. About half of non-participants would enroll in MIHP if they become pregnant again, and one-third had heard good things about MIHP. Many non-participants also indicated that if MIHP had reached out during a different point in their pregnancy, they would have enrolled in the program.

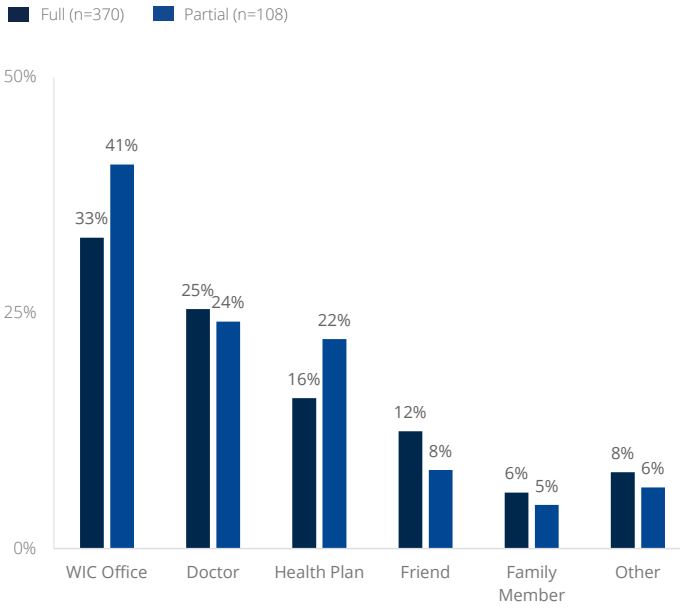
Non-participant sentiments about MIHP (n=310):



Participants

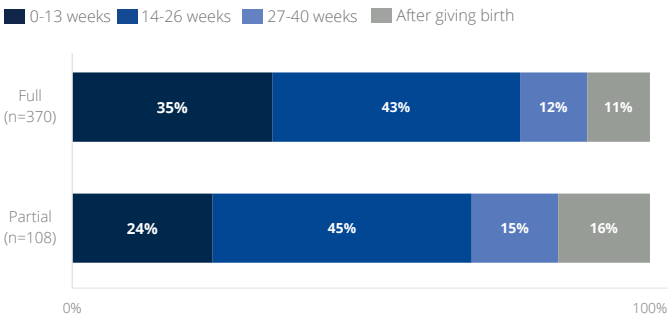
Most MIHP participants first heard of the program from a WIC office, doctor, or health plan. Full participants were more likely than partial participants to hear about the program from a friend, while partial participants were more likely to learn of the program through WIC or their health plan.

How did you first hear about MIHP?



Most participants enrolled in MIHP after their first trimester of pregnancy. Partial participants tended to enroll later than full participants.

When did you enroll in MIHP?

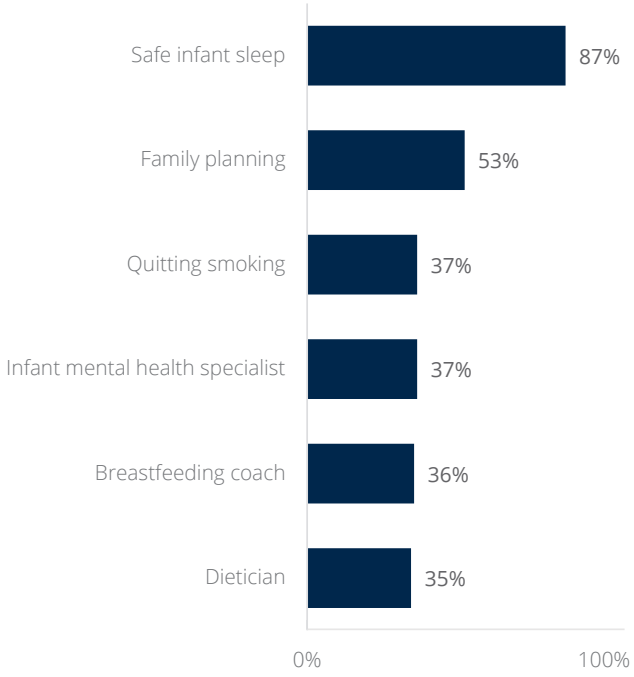


Experiences with MIHP

Outside of home visits, phone was the most common method used by MIHP participants to communicate with their home visitor. Encouragingly, 99% of all participants said that their home visitor spoke to them clearly in a language they understood. Participants were also asked to report the types of supports and information provided by their home visitor (options were not mutually exclusive, so participants could select more than one).

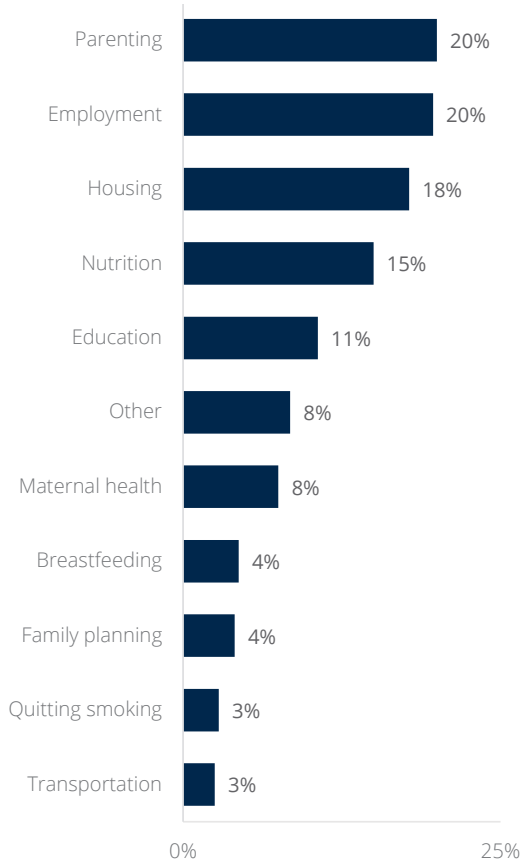
Nearly 9 in 10 participants received information on safe infant sleep, while smaller shares received information on family planning and quitting smoking. One in three were connected to an infant mental health specialist, breastfeeding coach, or dietitian.

Did your home visitor connect you with any of the following supports or provide information on any of the following topics? *(all participants, n=478)*



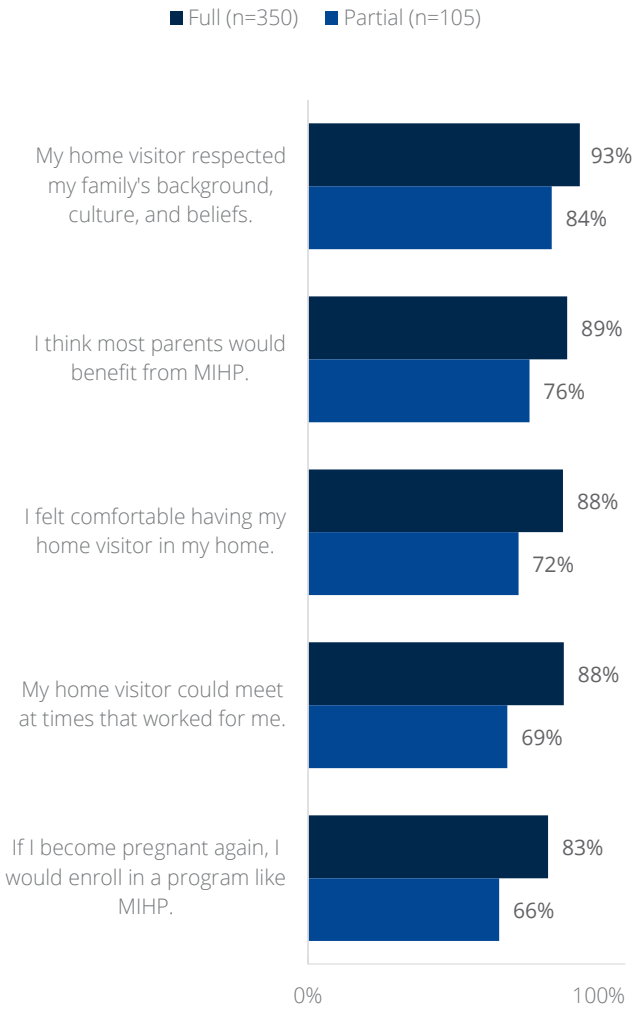
Approximately two-thirds of full participants (68%, or 251 respondents) and partial participants (64%, or 69 respondents) said that they discussed goals with their home visitor. In an open-field response, participants described the types of goals that were discussed. Many were related to social determinants of health; parenting, employment, and housing were the most commonly discussed.

What types of goals did you discuss with your home visitor? *(all participants who discussed goals, n=320)*



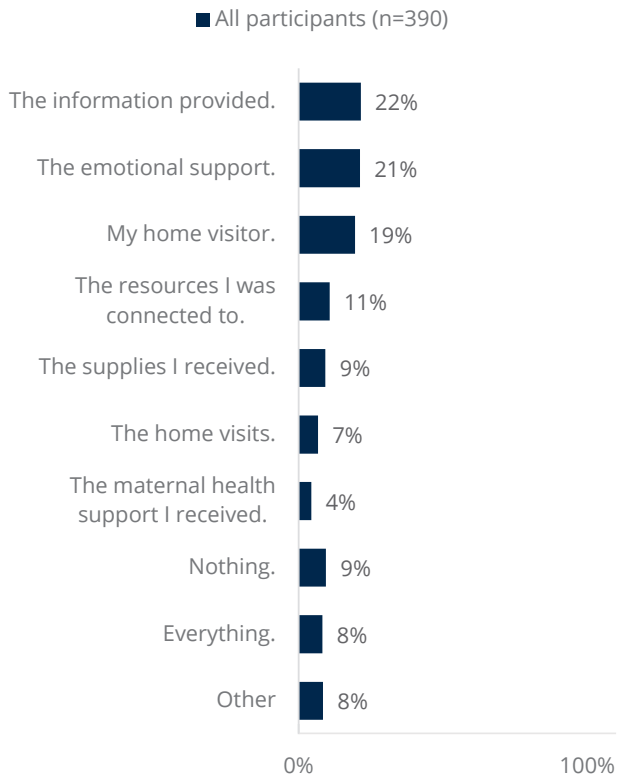
Satisfaction with MIHP

In general, MIHP participants were largely satisfied with the program, an indicator that the program is meeting the expectations of many participants. Satisfaction was higher among full participants than among partial participants. One of the largest gaps between the two groups was related to scheduling flexibility: while 88% of full participants said their home visitor could meet at times that were convenient for them, only 69% of partial participants said the same. There were no statistically significant differences in satisfaction across race/ethnicity categories.



Participants were also asked what they thought was the best part of MIHP. Among all participants, the most liked elements of MIHP were the information provided (22%), the emotional support (21%), and their home visitor (19%).

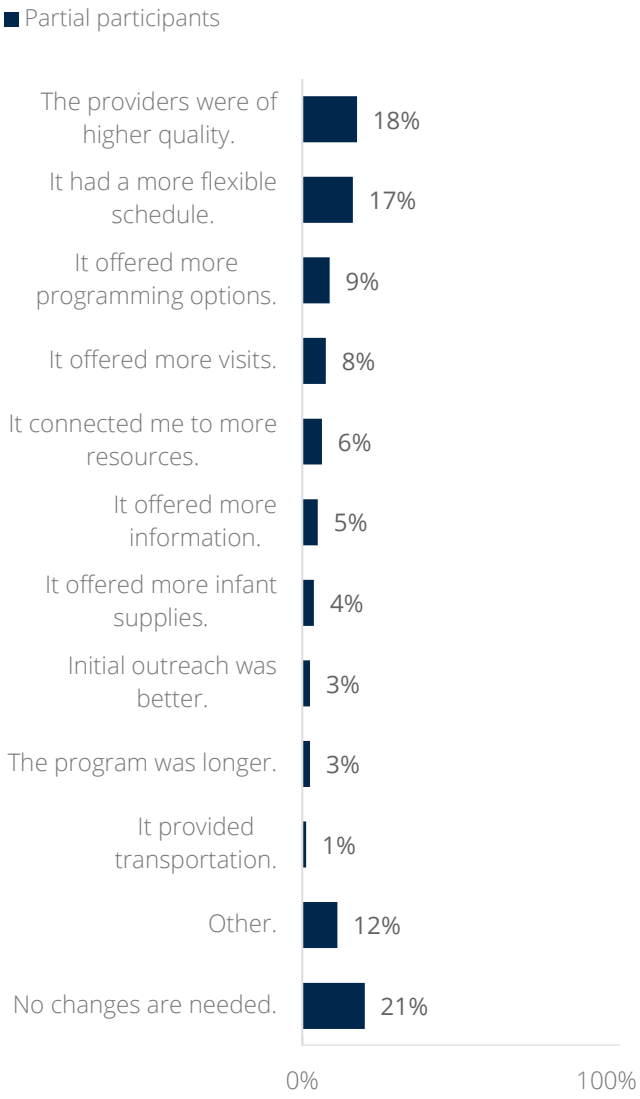
The best part of MIHP was...
(all participants, n=390)



Opportunities for Program Improvement

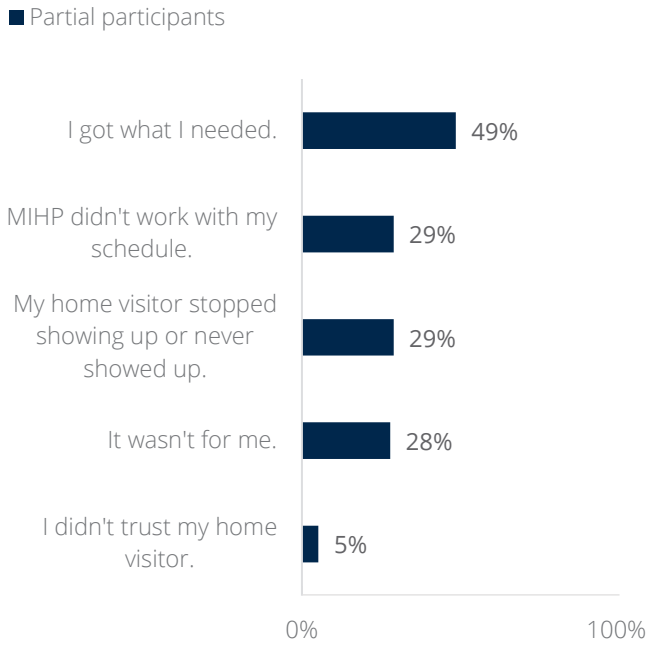
Partial participants shared suggestions to improve the program: 18% wanted the program to work on improving provider quality, and 17% wanted a more flexible visit schedule. 9% wanted more programming options, particularly opportunities to connect with other new parents.

MIHP would be better if...
(partial participants, n=78)



Partial participants were asked to share the reasons why they ended the program early, which also provides insights into opportunities for program improvement. Underscoring the findings above, nearly three in ten partial participants (29%) said they discontinued their participation because MIHP did not work with their schedule. Notably, 49% of partial participants said they discontinued their participation because they got what they needed from the program, suggesting they were not dissatisfied with the program.

I stopped getting home visits because...
(partial participants, n=96)



RECOMMENDATIONS

While MIHP is Michigan's largest evidence-based home visiting program, it is just one of many evidence-based home visiting programs available to families in the state. Other programs include Early Head Start-Home Based, Family Spirit, Healthy Families America, Infant Mental Health, Nurse-Family Partnership, Parents as Teachers, and Play and Learning Strategies-Infant. For this reason, it is important to think of home visiting in Michigan from a systems perspective and to think of MIHP as one model among a group of high-quality, research-validated models. The ultimate goal is to create an equitable, integrated home visiting system that provides Michigan families with the opportunity to choose the right program, at the right time, in the right place, with access to the right information to inform their choices and decisions.

The survey findings presented here provide a window into the experiences and perceptions of one set of individuals served by one program in one region of the state, and may not be fully representative of the experiences of all families receiving home visiting services in Michigan. Therefore, many of the findings that emerged from our survey are specific to MIHP. However, several broad themes that emerged are also applicable to the entire home visiting system in Michigan. We discuss each of these themes as they relate to both MIHP itself and the home visiting system overall.

Increasing Participation by Improving Awareness

Approximately 72% of all pregnant Medicaid beneficiaries who were eligible for MIHP from 2009-2016 did not enroll. Our survey found that many eligible beneficiaries are not aware of the MIHP program. Half of non-participants said that they did not enroll in MIHP because they had not heard of it, and 70% said that no one told them about MIHP during their most recent pregnancy. Improving awareness of the program among eligible individuals seems essential for improving take-up.

Recommendations for MIHP

Our recommendations in this area are primarily intended for the entire home visiting system, as system-wide efforts to increase awareness of home visiting overall will likely be more impactful than awareness-raising work for just one home visiting model. However, within MIHP itself, there may be opportunities to bolster provider agencies' ability to conduct community-based outreach to identify and recruit individuals who could benefit from MIHP.

MIHP certifies approximately 85 individual agencies to provide home visiting services across the state. Provider agencies include local health departments, health systems, federally-qualified health centers, and independent freestanding providers. MIHP allows substantial flexibility for provider agencies to recruit participants. This allows providers to tailor their practices to their community, but also leads to significant variation across providers.

MIHP could consider developing ongoing training and professional development opportunities to build MIHP providers' skills related to relationship-building, community outreach, and personal recruitment. The COVID-19 pandemic has disrupted the ability to conduct in-person outreach to identify and recruit eligible families. Building visibility and trust with community-based stakeholders is necessarily limited by this lack of in-person interaction. However, this may also be an opportunity to explore creative methods of outreach and engagement that do not rely on in-person contact.

> " **72% of all pregnant Medicaid beneficiaries who were eligible** for MIHP from 2009-2016 **did not enroll.** "

Recommendations for Michigan's home visiting system

While this survey was specific to MIHP, promoting awareness from a system-wide level can help ensure that all Michigan families understand the variety of the home visiting options available to them. There are a number of ways to accomplish this.

Explore centralized, coordinated, or collaborative intake for the entire home visiting system in Michigan. In a centralized intake system, one entity is typically charged with screening and providing information on home visiting to interested families, then coordinating a referral to the home visiting program chosen by the family. In a coordinated intake system, individual home visiting programs are often responsible for outreach and intake, but if they determine another model is more appropriate for a given family, then they will refer that family to another program. In a collaborative intake system, individual entities conduct outreach and intake, but all use standardized materials and procedures.[9] In each of these systems:

- Families can receive information about all of the available home visiting options for which they are eligible, and can choose the model that best works for them.
- Health care providers, WIC clinics, health plans, social service agencies, early childhood services, community-based organizations and collaborative bodies, and other stakeholders have a clear location to which they can refer individuals who may benefit from home visiting services. In addition, families seeking out home visiting services would have an easier way to find and access home visiting programs in their area.
- To the extent possible, these intake systems would build in mechanisms for warm handoffs and closed-loop referrals so that referrers can be confident that families will be contacted in a timely manner.

Several states, such as Illinois, Kansas, and New Jersey, have already implemented these types of systems. Though formal evaluations are needed to understand the impact of these systems, stakeholders in New Jersey have anecdotally reported their intake system improved coordination with health care providers, while Kansas reported their system connected families with both home visiting and other community services.[10] A 2014 issue brief found that Illinois' implementation of coordinated intake led communities to share best practices in home visiting recruitment and intake, and identify systems-level issues to be addressed by state agencies and funding sources.[11]

There are a number of potential challenges that should be considered from the outset of any planning process related to centralized/coordinated/collaborative intake. A review of best practices in other states should include exploration of how states approached challenges such as:

- Ensuring an equitable process to refer incoming families to different home visiting programs, so that models work collaboratively and not in competition with one another.
- Building a reliable system to track program capacity in a given geographic area in real time.
- Addressing differences in payment structures and policies for home visiting programs funded by different federal and state funding sources (e.g., MIHP is a covered benefit under Medicaid, while Michigan's other home visiting models receive funding from other sources).

In addition to reviewing existing programs and lessons learned from other states, several communities in Michigan have piloted projects to create centralized access for home visiting, and local partners involved in those efforts can share information regarding challenges, successes, and barriers.

Align and Promote Statewide Awareness-Building Activities. In the short-term, there are a number of entities currently in the process of planning or implementing statewide home visiting awareness campaigns, including one overseen by the Michigan Department of Education and another overseen by MDHHS. These entities should explore ways to align and coordinate efforts and could consider developing one overarching campaign covering programs at both departments. This coordinated effort could also work to develop standardized outreach materials to help improve awareness of home visiting among families, health and human services providers, and other community stakeholders. Specific activities could include:

- Develop standardized materials with and for families to learn about available home visiting program options, potentially building on the existing Home Visiting Program Finder.
- Develop standardized materials for health care providers and other common referral sources that explain home visiting program eligibility, services, and referral processes.
- Distribute those materials via state-level health care provider associations, such as the Michigan State Medical Society, Michigan Osteopathic Association, Michigan Academy of Family Physicians, Michigan Primary Care Association, the Michigan branch of the American College of Obstetricians and Gynecologists, the Michigan branch of the American Academy of Pediatrics, and others.
- Work with Regional Perinatal Quality Collaboratives (RPQCs), Great Start (i.e., early childhood) Collaboratives and Parent Coalitions, local home visiting leadership groups, and other local collaborative bodies to develop regional toolkits to promote the continuum of home visiting programs. This may be particularly beneficial given that some home visiting programs do not operate statewide, so the regional groups can develop strategies and materials that are relevant to their communities. A number of these groups are already exploring ways to increase awareness of and participation in home visiting in their regions.
- Encourage family engagement at different levels and touch points, including in health care provider offices during visits, during WIC appointments, in a hospital or birthing center before or after birth, and/or during post-partum visits.

A statewide awareness campaign and the development of standardized or region-based materials and toolkits will require significant resources to be successful. While stakeholders want to advance these efforts, they have faced constraints because there is currently a lack of sustainable funding.

Increased Flexibility

Our survey findings suggest that incorporating greater flexibility—particularly regarding scheduling and meeting location—may encourage more beneficiaries to enroll in MIHP and help families already enrolled participate for longer. Nearly three in ten partial participants said they ended the program early because their home visitor could not meet at times that were convenient for them, and several partial participants said they would have liked to meet outside of the home (which is already allowable under current MIHP policy). Nearly one-third of non-participants said they did not enroll because they did not want anyone coming into their home. This suggests opportunities to explore different modes of outreach and service delivery to meet the needs of families.

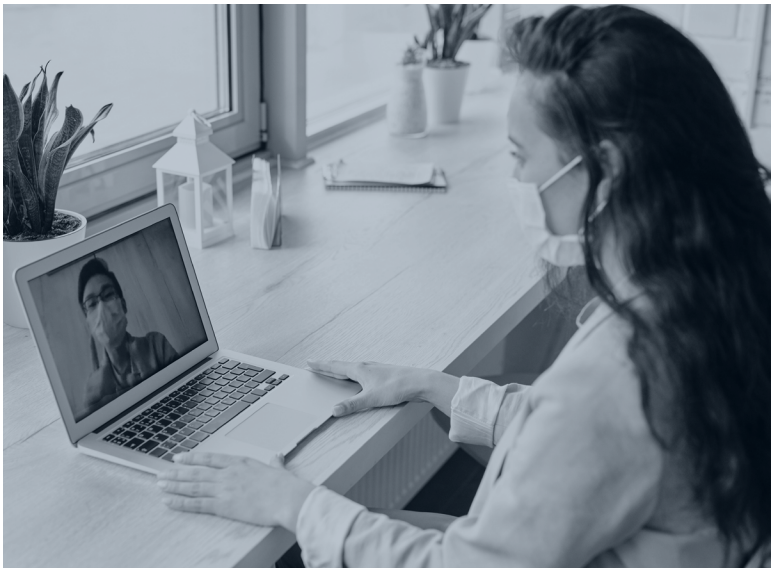
Recommendations for MIHP

MIHP should promote greater use of virtual home visits (including visits conducted via telephone or video) for families who would prefer not to have face-to-face contact with home visitors. This may be particularly helpful during initial contact and outreach, so that home visitors can build trust and rapport with a family before entering their home. While virtual visits may not be appropriate for all families, they can be a useful tool to help engage families who may be reluctant to have individuals they don't know entering their home.

This recommendation is particularly salient given the COVID-19 pandemic of 2020, which spurred many home visiting programs to move to an all-virtual-visit model. In April 2020 (approximately one month after the Stay Home, Stay Safe order was implemented), the Michigan Council for Maternal and Child Health conducted a survey of local home visiting programs across Michigan, including provider agencies for MIHP as well as other home visiting models. Of the 52 agencies that responded to the survey, 88% reported that they had transitioned to virtual visits and were counting or billing virtual encounters as a home visit. 17% of agencies said that they were not conducting billable virtual visits, but were still checking in with families. A majority of agencies also reported being able to reach between 75-100% of their typical caseload on a virtual basis.[12] This suggests that families are interested in and comfortable trying new home visiting methods, and it is worth exploring the possibility of maintaining these communication methods after the pandemic.

Currently, MIHP virtual visits are reimbursable by Medicaid under a temporary policy change issued at the beginning of the COVID-19 pandemic. While it is unclear how long this policy will remain in place, virtual visits should remain a Medicaid-reimbursable option for MIHP moving forward. This would require, at minimum, changes to Michigan's Medicaid provider manual (e.g., Medicaid currently requires a certain percentage of in-home infant MIHP visits) and possibly an amendment to the state plan (as well as CMS guidance regarding how they will address these types of requests).

Virtual visits should be considered an additional tool in the home visiting toolbox, rather than a permanent replacement for in-person, in-home visits. The ability to conduct visits remotely may be beneficial for many families, but there are important aspects of in-home visits that can impact the types of services and supports home visitors can provide. While in a person's home, a home visitor can witness interactions with others that live in that household, or observe and recommend changes to the home environment, particularly related to infant safety. Some of those observations can be made over phone/video, but others might require a presence in the home.



There are also equity issues related to the continuation of virtual visits. In order to access and use telehealth services, families need reliable, high-speed internet at home or sufficient cellular data; a laptop, tablet, or smartphone and any necessary software; and a private space to have a confidential conversation with a health care provider. For many families who are covered by Medicaid, these are substantial barriers to accessing telehealth services. According to a 2017 survey by the Kaiser Family Foundation, approximately three in ten adults on Medicaid reported never using a computer or never using the internet.[13] A 2019 study conducted by the Harvard T.H. Chan School of Public Health found that approximately one in five adults living in rural areas had difficulty accessing high-speed internet.[14] These barriers will need to be addressed so that any expansion in telehealth services does not exacerbate existing disparities related to access.

In the longer-term, MIHP should consider taking additional steps to help families feel more comfortable with having visitors in their homes. These steps could include developing messaging that MIHP providers can use to make families feel more comfortable and help build rapport and trust between the home visitor and the family.

Another opportunity for additional flexibility would be to provide a wider range of meeting times that might better fit families' schedules. As noted above, nearly 30% of partial MIHP participants surveyed said they ended the program early because it did not fit with their schedule. MIHP policy already allows families to meet with their home visitor outside of standard business hours or at a location outside of the home. However, our survey findings suggest that many families do not know this flexibility exists, or individual providers are not able to offer it.

Implementing flexible meeting times and locations may be challenging for some MIHP providers, particularly those with restrictions on evening and weekend work. Finding a suitably private meeting location may also present challenges. Still, offering the ability to connect with a home visitor outside of typical work hours or in a different location could help retain families in the program for longer so that they are able to reap the full benefits of MIHP. Additional policy and payment changes beyond what we describe here may be needed in order to promote this increased flexibility.

> "**MIHP would be better** if there was **easier scheduling.**"
>
> - Partial Participant

Recommendations for Michigan's home visiting system

Our recommendation to expand the availability of virtual visits applies not only to MIHP, but to other models in Michigan's home visiting system. A number of home visiting models were already using virtual visits prior to the COVID-19 pandemic, and others have adapted virtual visits in order to maintain continuity with families during the pandemic. Models that do not have virtual visit capabilities, or that have limited virtual visit options, should explore possibilities for expansion.

More broadly, Michigan's continuum of home visiting programs is designed to promote flexibility— programs target different populations, provide varying levels of intensity, and focus on unique goals. By helping families understand which programs are available to them, and helping them choose the home visiting program that works best for them, greater flexibility can be achieved at a systems level. However, promoting the entire continuum of home visiting services in Michigan will require better system integration. The state should consider identifying a central leadership role or authority to champion home visiting services administered across MDHHS and MDE.

Over time, Michigan's home visiting system has evolved into a complex set of programs and policies. There are several entities providing oversight and guidance over the entire continuum of home visiting programs, such as the Home Visiting Leadership Group and the Home Visiting Advisory Group. Of the home visiting services currently available in Michigan, MDHHS administers several, while another model is primarily administered by the Michigan Department of Education (MDE). Even within MDHHS, staff located in different divisions, administrations, and agencies administer different models and funding streams. These different administrative and financial structures naturally create fragmentation – and, in some cases, inefficiencies – in operations, oversight, and leadership.

There are numerous funding sources and reporting structures that require substantial staffing resources to coordinate. The result is a system of services that may be challenging for some families, referral partners, and community-based organizations to navigate. The State of Michigan should explore ways to make it easier for families to gain information and access to a comprehensive system of home visiting options. This might include, for example, conversations about consolidating all of Michigan's evidence-based home visiting programs together under one central leadership structure.

Further Research

Many of the themes discussed above are systems-focused, and as such, more research should explore the experiences and perceptions of a broader population of individuals. Future survey work could include:

- Statewide survey of all MIHP-eligible beneficiaries
- Survey of individuals eligible for or who participated in other home visiting programs in Michigan

These surveys could be conducted separately or in concert with one another. While it will be challenging to secure sufficient funding for large-scale surveys such as these, the findings would provide a more representative view of the experiences of all families who use home visiting services in Michigan, and could help refine these recommendations further.

Where feasible, findings from these surveys could be combined with additional analysis of administrative data across Michigan's home visiting system. This may be logistically challenging as data for various home visiting models is decentralized, but it would be worth exploring ways to combine program data for all eight of Michigan's evidence-based home visiting programs in order to facilitate additional system-wide analysis.

CONCLUSION

Integrating Michigan's home visiting programs into one coordinated system is daunting work. System improvement is complex, long-term, and requires sufficient leadership, staffing, and funding to achieve success. This work is made even more challenging as the state of Michigan faces severe budget shortfalls in the wake of the COVID-19 pandemic.

Because state dollars will be limited for the foreseeable future, it may make sense to leverage federal funding (e.g., through Medicaid matching funds or the Family First Prevention Services Act beginning in 2021) or private funding to support these efforts. Despite these challenges, it is critical for the state of Michigan to invest in building these systems to improve families' access to and use of home visiting services.

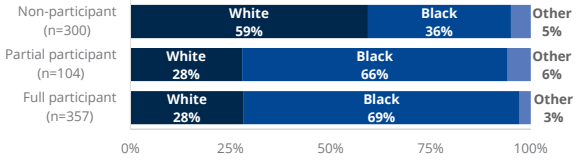
Appendix: Data and Methods

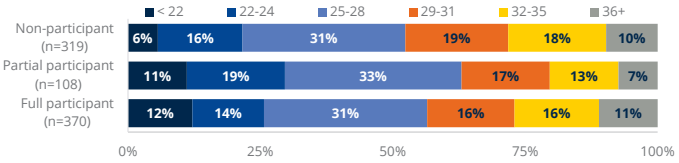
Data analyses used a dataset from MDHHS that linked MIHP program data, vital records data, and Medicaid claims data. The dataset includes 246,594 pregnant Medicaid beneficiaries and 530,593 Medicaid-eligible infants born in Michigan between 2009 and 2016. All descriptive statistics used in this brief are based on the number of unique births in Michigan during this time period.

For all geographic analyses, maternal beneficiaries were categorized based on their county of residence at the time of birth. In most cases, county of residence was determined from the Medicaid Data Warehouse. For individuals with missing county data, we imputed county of residence from vital records, and if that was also missing, determined county of residence from the census tract of residence at time of birth. There were a total of 651 observations for which we were unable to impute county of residence and 9 observations for which census tract information indicated out-of-state residence. We used mean imputation for other missing demographic variables.

Descriptive statistics in this report are based on individuals for whom data was available. Imputed data were used for regression models to identify predictors of MIHP enrollment and participation. Regression models controlled for infant birth year and census tract. Predictors are relative to a first-time, unmarried white mother with at least a high school degree, no Medicaid coverage prior to pregnancy, and no health-related risk factors. These characteristics were chosen as the baseline because they represent the largest group of individuals in our sample.

The Youth Policy Lab worked with the Office of Survey Research at Michigan State University to field the Southeast Michigan survey. Surveys were fielded from August 26, 2019 through February 13, 2020. Respondents were offered a $10 gift card as a reward for completing the survey. Toward the end of the data collection period, the study team agreed to increase the incentive amount to $20 in order to reach our targeted sample size. Survey data was merged with limited demographic data for respondents, including race, ethnicity, and age category. 40 respondents had missing race/ethnicity data and 4 respondents had missing age data. To protect confidentiality, race/ethnicity categories were collapsed into Black, White, and Other (i.e., Latinx, American Indian/Alaskan Native, Native Hawaiian/ Pacific Islander, and Other). Respondent age was also collapsed into categories.





ENDNOTES

1 Stoltzfus, E., & Lynch, K.E. (2009). Home visitation for families with young children. Washington, D.C.: Congressional Research Service. Available at: https://www.everycrsreport.com/files/20091023_R40705_9180cd7c853cfa09567961616dabaa2777187472.pdf

2 Avellar, S. A., & Supplee, L. H. (2013). Effectiveness of home visiting in improving child health and reducing child maltreatment. Pediatrics, 132(S2), S90-99.

3 Kendrick, D., Elkan, R., Hewitt, M., Dewey, M., Blair, M., Robinson, J., & Brummell, K. (2000). Does home visiting improve parenting and the quality of the home environment? A systematic review and meta analysis. Archives of Disease in Childhood, 82(6), 443-451.

4 Peacock, S., Konrad, S., Watson, E., Nickel, D., & Muhajarine, N. (2013). Effectiveness of home visiting programs on child outcomes: a systematic review. BMC Public Health, 13(1), 17.

5 Roman, L., Raffo, J. E., Zhu, Q., & Meghea, C. I. (2014). A statewide Medicaid enhanced prenatal care program: impact on birth outcomes. JAMA Pediatrics, 168(3), 220-227

6 Fitzsimons, K.J., Modder, J., & Greer, I.A. (2009). Obesity in pregnancy: risks and management. Obstetric Medicine, 2(2): 52-62.

7 Adams, E.K., Melvin, C.L., Raskind-Hood, C., et al. (2011). Infant delivery costs related to maternal smoking: an update. Nicotine & Tobacco Research, 13(8): 627-637.

8 Conde-Agudelo, A., Rosas-Bermúdez, A., & Kafury-Goeta, A.C. (2006). Birth spacing and risk of adverse perinatal outcomes: a meta-analysis. JAMA, 295(15): 1809-1823.

9 Allen, S., Coleman, S., Richardson, D., & Strader, K. (2016). Navigating the landscape of centralized intake: moving forward based on lessons learned. Plenary session, National Summit on Quality in Home Visiting Programs. Available at: https://www.theounce.org/sessions/navigating-landscape-centralized-intake-moving-forward-based-lessons-learned/

10 National Alliance of Home Visiting Models. (n.d.) C-intake: Lessons learned and recommendations. National Alliance of Home Visiting Models. Available at: https://adf60e6c-9ef1-4eb4-82c5-3b0927cfdfaf.filesusr.com/ugd/bc26e2_389831a76eaa41eaba7bb2b376a47816.pdf

11 Governor's Office of Early Childhood Development. (2014). Coordinated intake in Illinois: Lessons learned from MIECHV. Illinois Governor's Office of Early Childhood Development. Available at: https://www2.illinois.gov/sites/OECD/Pages/default.aspx

12 Michigan Council for Maternal and Child Health. (2020). Michigan home visiting and COVID-19: Impact survey. Lansing, MI: Michigan Council for Maternal and Child Health. Available at: https://myemail.constantcontact.com/Friday-Notes-May-22--2020.html?soid=1102179153453&aid=kdsi422u_8Q

13 Garfield, R., Rudowitz, R., Orgera, K., & Damico, A. (2019). Understanding the intersection of Medicaid and work: what does the data say? San Francisco, CA, and Washington, DC: Kaiser Family Foundation. Available at: https://www.kff.org/medicaid/issue-brief/understanding-the-intersection-of-medicaid-and-work-what-does-the-data-say/

14 NPR, Robert Wood Johnson Foundation, and Harvard T.H. Chan School of Public Health. (2019). Life in rural America – Part II. Cambridge, MA: Harvard University. Available at: https://cdn1.sph.harvard.edu/wp-content/uploads/sites/94/2019/06/NPR-RWJF-Harvard-Rural-2-Report_Final_May2019updated.pdf

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