Maryland's Maternal Infant and Early Childhood Home Visiting Program Statewide Needs Assessment Update

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I. INTRODUCTION

Maryland's updated needs assessment provides a comprehensive, statewide update to the 2010 needs assessment of the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program in the State of Maryland as required by Social Security Act, Title V, § 511(c) (42 U.S.C. § 711(c)).1 Section 50601 of the Bipartisan Budget Act of 2018 (Pub. L. 115-123) (BBA). The MIECHV statewide needs assessment is a critical and foundational resource to assist in recognizing and understanding how to best meet the diverse needs of families with young children living in Maryland, especially those at greatest risk for poor outcomes. While this report focuses on MIECHV-funded programs in the state, the analysis includes all known evidence-based home visiting programs, including those funded by sources other than MIECHV. The goals of the updated needs assessment are:

- To identify at-risk communities and their needs;
- To understand the reach of home visiting programs statewide and within each jurisdiction;
- To assess the capacity of home visiting programs to meet state and local needs;
- To determine any gaps in programming and services;
- To better understand and tailor state resources to specific communities, jurisdictions, and programs;
- To identify opportunities for collaboration with state and local partners to establish linkages and referrals to other community resources and supports that strengthen early childhood systems; and
- To provide an advocacy tool for stakeholders throughout the state.

The Maryland MIECHV (MD-MIECHV) team has worked on updating the 2010 needs assessment since 2015. This work included partnering with other state agencies to gather preliminary information, working with epidemiologists on mapping all indicators of risk, preparing a bid for an organization to gather stakeholder input, conducting a literature review, and preparing the update for submission. In December of 2019, The Maryland Department of Health (MDH) provided a grant to the Mid-Atlantic Equity Consortium (MAEC), Inc. to complete a systematic needs assessment update. The needs assessment consists of the following components:

1. A document review that examines the findings from current and previous needs assessments related to home visiting programs for expecting families and those with young children in Maryland.
2. Data analysis of health-related indicators to determine at-risk communities
3. The surveying of key statewide stakeholders, including families, home visitors, and other community-based organizations who work with or support home visiting programs.
4. Focus groups with home visitors and other community members who work with home visiting programs and interviews with families across the state, including rural, urban, Spanish speaking, and tribal families.
5. Summarizing the needs assessment findings and engaging stakeholders in developing recommendations based on the findings.

This report synthesizes information gathered from stakeholders, data and analysis of health indicators, literature review findings, and GIS mapping to develop a comprehensive response to Maryland's home visiting needs assessment.

STEERING COMMITTEE

The MD-MIECHV team convened a steering committee to help guide the needs assessment process to ensure coordination and collaboration between its needs assessment and other needs assessments in Maryland. These assessments include the Preschool Development Grant, Birth-Five (PDG B-5 Grant), Title V MCH Block grant, Head Start, and the Child Abuse Prevention and Treatment Act (CAPTA). This committee's purpose was to receive feedback and guidance from key stakeholders working with the prenatal to age 5 population in Maryland during various needs assessment stages. The steering committee comprises key stakeholders from state agencies including MDH, the Maryland State Department of Education (MSDE), and the Maryland Department of Human Services (DHS) as well as researchers (including representatives from Johns Hopkins University and the University of Maryland), and key state organizations working with home visiting programs (including the Maryland Family Network). This group provided feedback on the needs assessment's key aspects, including developing data collection instruments and its collection process. The steering committee was also invited to review the needs assessment findings and provide recommendations based on these findings.

DATA COLLECTION METHODS

Document review and literature review: MAEC Inc., with support from MDH, reviewed 147[1] documents related to families, women, and children birth through 5, including information gathered about Maryland's home visiting programs from previous needs assessments, strategic plans, research studies, policy reports, and evaluations. Additionally, various organizations' progress reports were examined including those from MDH, MSDE, and DHS. Reviewing local, state, and national documents identified critical issues facing Maryland's home visiting programs, specific needs of families facing adversity in the state, and best practices to strengthen home visiting. A literature review was written that served as the basis for this report.

These documents were compiled in a Mendeley reference management database and systematically reviewed. The documents gathered the following information: geographic area covered, target population addressed, policies/programs covered, critical issues identified, key findings, and recommendations to address the needs of the targeted population. MAEC synthesized information gathered from this review into a draft literature review that was shared with MD–MIECHV and other stakeholders. Key findings from the literature review were later integrated into this final report document.

On May 19, 2020, key findings from this review were shared with stakeholders who form part of Maryland's Home Visiting Consortium, and feedback was gathered. The literature review[2] findings were also shared with 17 key stakeholders in the state, who ranked them in order of importance. These rankings included input from the MD-MIECHV team, the Maryland Department of Health, Maternal and Child Health Bureau Director, the Title V Director, state partners from MSDE's Division of Early Intervention Services and the Department of Human Services, a consultant from Prince George's County, as well as program managers and supervisors in MIECHV-funded programs.

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[1] The reference section of this report includes only documents cited and not all 147 that were reviewed during the literature review process.

[2] Qualitative findings from focus groups and interviews and findings from the stakeholder survey were not ranked by these 17 stakeholders.

Review of at-risk jurisdictions indicators: MAEC used several approaches to determine "at-risk" communities in accordance with the guidance provided by the Health Resources and Service Administration (HRSA) for statewide needs assessments. The approaches include the simplified method using data provided by HRSA; the independent method (Maryland's independent method); the average percentage of elevated indicators per jurisdiction; analysis of the percentage of elevated indicators per jurisdiction using a box and whiskers plot; and analysis of the percentage of elevated indicators per jurisdiction using heat maps. All seven tables required HRSA and labeled, N*eeds Assessment Data Summary* are included in Appendix A. Appendix B includes complete at-risk analyses and justification for choosing the independent method and includes an overview of the methodology, description of indicators, raw and standardized indicator data, at-risk domains per jurisdiction, and jurisdictions identified as at-risk per the method of analysis.

For this needs assessment, Maryland presents an independent method. The more robust independent method includes more indicators in the analysis and uses data at a more granular level (for most indicators, the census tract) and aggregates it to the jurisdiction level. That said, this method is similar to the simplified method, and the algorithm for choosing at-risk counties is the same as in the simplified method. The method also identifies all the counties identified by the simplified method, and many of the similar counties identified by the other analyses conducted. Section II of this report further explains this method and findings from the analysis.

Stakeholder Survey: MAEC, in partnership with the MD-MIECHV team, developed a stakeholder survey administered electronically via Survey Monkey and offered in paper form upon request. MAEC created three surveys, one specific to each group, to collect perspectives of the following constituent groups: parents, home visitors, and community members (see Appendix C for survey forms). The parent survey was also available in Spanish and all surveys could be translated into other languages if necessary. Participants self-identified as one of these constituent groups and those who identified as both a parent and another group were asked to fill the survey out as a parent. The MD-MIECHV Needs Assessment Steering Committee was asked to provide feedback on the survey before it was administered. Based on their feedback, the wording of the parent survey was simplified to ensure comprehension. Survey questions asked about access, quality, and scope of home visiting and other services and stakeholder needs. Participants answered questions on a four-point Likert scale (Strongly Agree, Agree, Disagree, Strongly Disagree). They could also indicate "I don't know" for all Likert scale questions. Similar questions were asked of all three stakeholder groups to allow for comparisons across groups. Based on feedback, wording was simplified on the parent survey to increase accessibility to all families regardless of their reading level.

The survey was distributed electronically to home visiting providers and stakeholders that work with children ages birth to 5. The stakeholders included the Early Childhood Advisory Council, Judy Center coordinators, the Maryland Family Network, the Maryland Home Visiting Consortium, and other child-serving organizations. The survey was open from June 1, 2020 through July 20, 2020. Overall, 897 responses were submitted: 352 from parents (331 in English, 21 in Spanish), 311 from home visitors, and 234 from community members (see Appendix D for demographic information about each stakeholder group). After the survey was closed, there was a review of the results and a collapse of Likert scale questions from four to two categories ("strongly agree" and "agree" collapsed to "agree" and "strongly disagree" and "disagree" collapsed to "disagree") to facilitate interpretation of the findings. The jurisdiction data was collapsed into six regions. These same regional groupings were used throughout the

analyses conducted as a part of this needs assessment to help determine regional differences, as well as a statewide overarching summary.

For tests of statistically significant differences between groups, MAEC researchers relied on t-test and one-way analysis of variance (ANOVAs). T-tests distinguished the differences in means for the two groups. Post-hoc tests using the F statistic determined statistically significant differences between groups (see Appendix E for the N, mean, standard deviation, and % of people answering "I don't know" to all questions by stakeholder groups).

Focus Groups and Interviews: This needs assessment conducted eight focus groups: four with home visitors, three with community members (one was with representatives from a health organization that works with Maryland's Native American families), one with the MD-MIECHV team, as well as 18 parent interviews. Table A demonstrates the breakdown of focus group and interview representation by the six geographical regions.

Focus groups were conducted virtually using the Zoom meeting platform. Participants volunteered for the focus groups through a special registration form available at the end of the stakeholder survey. Recruitment of Spanish speaking parents and Native American parents through special links helped target these specific demographics. Evaluators reviewed the registration to ensure representation of participants from across all regions of Maryland and then contacted participants on a first-come/first-serve basis. In total, 18 home visitors, 21 community members, and 18 parents participated in the focus groups and interviews. The interviews and focus groups elicited perspectives and feedback on access, quality, substance use treatment capacity, and coordination and collaboration (see Appendix F for the focus group protocol).

Table A. Focus Group and Interview Representation by Geography and Role

Region	Jurisdictions	Community Member	Home Visitor	Parent/ Caregiver	Grand Total
Western Maryland	Allegany, Frederick, Garrett, and Washington Counties	2	2	1	**5**
National Capital	Montgomery, and Prince George's Counties	2	5	5	**12**
Baltimore City	Baltimore City	3	5	1	**9**
Baltimore Metro	Anne Arundel, Baltimore, Carroll, Cecil, Harford, and Howard Counties	4	3	7	**14**
Eastern Shore	Caroline, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties	2	3	2	**7**
Southern Maryland	Charles, Calvert, and St. Mary's Counties	1	—	2	**3**
Statewide[3]		7	—	—	**7**
Grand Total		**21**	**18**	**18**	**57**

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[3] Statewide includes stakeholders who work for organizations or agencies that service the entire state.

All focus groups were audio-recorded and transcribed—and deductive and inductive reasoning processes used for transcript analysis. Deductive techniques included a priori topics (access, capacity, quality, collaboration and coordination, substance use) to categorize comments made by participants in the focus group to current findings from the literature review. Regarding inductive techniques, three coders identified recurring themes across the transcripts. They examined the extent to which they identified across constituents (parents, home visitors, and community members) and Maryland locales. Included in the final report are additional themes and issues that emerged, especially around strengths and areas for improvement in Maryland's home visiting landscape.

SPECIAL CONSIDERATIONS

COVID-19: Much of the data collection occurred during 2020 and was affected by restrictions on in-person meetings and gatherings. To ensure the needs assessment stayed on target, all interviews, focus groups, and stakeholder meetings were held virtually. Additionally, while the survey was available in paper format, if requested, it was disseminated through virtual means only, which could have potentially limited the number of responses.

In the redevelopment of the focus groups and stakeholder meetings to a virtual format, modified interview and focus group protocols were developed to address the impact of COVID-19 on families with young children and the delivery of home visiting services (see Appendix F). Findings from interviews and focus groups indicated that families did not want to or did not know how to use video conferencing platforms such as Zoom or FaceTime, which reduced home visitors' ability to see the home environment and observe interactions among family members. Home visitors and families also reported a lack of access to technology that would facilitate a virtual visit, which posed an additional barrier for families to participate in home visiting during this time. Home visitors reported that social distancing efforts had hindered recruitment efforts, and they need more practical support on how to do home visits virtually. All parents interviewed who indicated they participated in home visiting discussed challenges with virtual visits, such as concern over the validity of evaluations or visits feeling less personal than they did when visits were in-person. While there were challenges with virtual visits, parents also stated they appreciated receiving virtual home visits. Community members communicated seeing an increase in intimate partner violence (IPV) and families [with a primary language other than English] requesting visits placed on-hold until their previous in-person interpreter is available virtually. Community members noted a benefit to conducting virtual home visits because virtual visits better accommodated a family's schedule, decreasing travel time for the home visitors thereby increasing an opportunity to reach more families. As a result, programs felt more flexible in meeting family schedules.

Researchers attempted to account for the impact of COVID-19 in data collection and the reporting of results, due to the unprecedented global crisis at the time of the needs assessment. Therefore, certain findings and attitudes of stakeholders towards home visiting were possibly affected by COVID-19 and the changes made to the delivery of home visiting programs.

II. IDENTIFYING COMMUNITIES WITH CONCENTRATIONS OF RISK

Maryland developed a list of at-risk jurisdictions[4] using Maryland's independent method. The Maryland independent method used a combination of HRSA's indicators and additional indicators identified by stakeholders in 2015 to identify areas that are considered at-risk. Maryland used HRSA's indicators and identified (through an extensive process with stakeholders conducted in 2015) additional indicators that influenced home visiting programs and families. Maryland independently gathered data for each indicator rather than using the data provided directly by HRSA to ensure all indicators represented a similar time frame. Data gathered for all indicators were the most granular level available, rather than at the jurisdiction level, and aggregated to the jurisdiction level to account for the significant inequities and pockets of severe poverty in almost every jurisdiction.

DATA INDICATORS AND DOMAINS USED IN IDENTIFYING AT-RISK COMMUNITIES

In 2015 Maryland began updating the needs assessment by engaging over 100 stakeholders at the state and local levels representing a wide array of agencies in an iterative process of survey, feedback, analysis, and response to the analysis. These stakeholders included administrators, managers, supervisors/coordinators of home visiting programs, state and local health department program directors, educators, nurses, and caseworkers, administrators from other government agencies specializing in housing, child welfare and safety, social work, substance use, mental health, employment training, education, and universities and research organizations. Methods for gathering data also included a Delphi panel and in-depth interviews with stakeholders and leadership. The preliminary 2015 update began with the 15 indicators Maryland used in the 2010 needs assessment and expanded that list with 22 potential indicators identified through interviews, document reviews, and stakeholder priorities. Incorporating stakeholder feedback, assured all child serving MD agencies and stakeholders had a voice in the weight and importance of the indicators used. In total, 37 indicators of risk were considered to assess community needs. The indicators aligned with MIECHV domains, benchmarks, objectives, state priorities, and potential data sources for each compiled and examined indicator. This process ensured that indicators used to identify at-risk jurisdictions were internally defined by Maryland's stakeholders and therefore are reflective of priorities and goals specific to the state's home visiting programs.

In accordance with HRSA guidance, all seven tables required for this needs assessment are in Appendix A Needs Assessment Data Summary Tables. Summaries of these tables are incorporated into the narrative. Appendix A, Table 2 includes a grouping of each indicator by domain, a definition for each indicator, a summary of how the selected indicators align with the statutory definition of at-risk communities, and information about the data, including sources for the data and links to those sources when available, any relevant source notes. The final analysis includes a total of 23 indicators.

below represents a summary of the larger indicator and source table for Maryland's 2020 needs assessment. Appendix A, Table 3, includes statewide descriptive statistics of each indicator, including the mean, standard error, median, mode, standard deviation, sample variance, range, minimum, maximum, and sum. HRSA's five domains remain aligned with Maryland's indicators.

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[4] Maryland is comprised of 24 jurisdictions (23 counties and Baltimore City), and for the purpose of this report the word "jurisdiction" will be used to represent the city and all 23 counties

Table B. Indicators and Sources Used in Maryland's 2020 Needs Assessment

Domain	Name of indicators included	Indicator Source
Maternal and Newborn Health: Twelve indicators regarding the health of the mother and child during the perinatal period.	Preterm Birth*	MDH, Vital Statistics Administration (VSA)
	Low Birth Weight*	MDH, VSA
	Very Preterm and Very Low Birth Weight	MDH, VSA
	Infant Mortality Rate*	MDH, VSA
	Prenatal Care Began in 3rd Trimester or None at all	MDH, VSA
	Maternal Educational Attainment	MDH, VSA
	Inadequate Gestational Weight Gain	MDH, VSA
	Maternal Tobacco Use	MDH, VSA
	Under 20 Years Old Birth Rate	Births: MDH, VSA, Population: US Census Bureau
	Pregnancy-Associated Hypertension Hospitalization Rate	Health Services Cost Review Commission (HSCRC) Inpatient Files
Maternal and Newborn Health: Twelve indicators regarding the health of the mother and child during the perinatal period.	Gestational Diabetes Hospitalization Rate	HSCRC Inpatient Files
	Substance Use Treatment Rate*	Substance Use: State of Maryland, Department of Health-BHA, Statewide Maryland Automated Record Tracking (SMART) Population: US Census Bureau
Child Injuries, Maltreatment, and Reduction of ED Visits: Three indicators regarding the safety and well-being of children.	Child Injury	HSCRC Outpatient Files
	Emergency Department Visit Rate	Protective Orders: MD Judiciary Population: US Census Bureau
	Abuse & Neglect Investigation Rate	Abuse & Neglect: MDH Social Services Administration Population: US Census Bureau
School Readiness and Achievement: Two indicators	Kindergarten Readiness	Maryland State Department of Education (MSDE)
	High School Dropouts*	MSDE
Crime or Domestic Violence: One indicator for crime rate	Crime Rate*	Crime: Maryland State Police Population: US Census Bureau
Family Economic Self-Sufficiency: Five indicators regarding the socio-economic well-being of a community	Unemployed	US Census Bureau
	Families in Poverty	US Census Bureau
	WIC Enrollment Rate	WIC Enrollment: MDH WIC Program Population: US Census Bureau
	Medicaid Enrollment	Medicaid: Maryland Medical Assistance Program Population: US Census Bureau
	No Health Insurance	US Census Bureau

* indicator also considered in HRSA's simplified method

RIGOROUS METHODOLOGY USED TO DEVELOP A LIST OF AT-RISK JURISDICTIONS IN MARYLAND

Identifying jurisdictions at-risk began with obtaining raw data at the lowest granular level (census tract or zip code) for each indicator listed in Appendix A, Table 2. For each indicator, descriptive statistics were computed, including the jurisdiction mean (or the average value for each indicator at the jurisdiction level), the standard deviation (SD) for each indicator, and the number of missing values and the range. Then, all indicators were standardized by computing a z-score for each jurisdiction between that jurisdiction's mean score and the overall state average for that indicator, so that all indicators have a mean of zero and a standard deviation of 1. Finally, using the resulting z-scores for each jurisdiction, the number of indicators with a z-score greater than 1 was tabulated—that is, the proportion of indicators for which a given jurisdiction is in the 'worst' 16% of all counties in the state. Sixteen percent is the percentage of values greater than 1 SD above the mean in the standard normal distribution. Maryland's independent method differs from HRSA's simplified method: whereas the simplified method identifies a jurisdiction as being at-risk if there are elevated indicators in more than one domain, the independent method identifies a jurisdiction as being at-risk if at least two indicators are elevated, regardless of the indicator's domain. This was done because of the importance of each indicator to Maryland's stakeholders. See Appendix A, Table 1, for a detailed overview of Maryland's independent method, and Tables 4 and 5 for the raw data for each indicator as well as the standardized data using z scores.

THE RATIONALE FOR SELECTING THIS METHODOLOGY TO BEST MEET THE UNIQUE NEEDS OF MARYLAND

In total, Maryland conducted six different rigorous analyses to identify at-risk jurisdictions within the state, found in Appendix B. The independent method most resembled HRSA guidance and expectations for this needs assessment, including the indicators and level of granularity important to Maryland stakeholders, and resulted in its selection.

JURISDICTIONS IDENTIFIED AS AT-RISK AND HOW THEY REFLECT THE LEVEL OF RISK IN MARYLAND

As seen in Table C, using Maryland's independent method, 10 jurisdictions were identified as at-risk, meaning they each had at least two elevated indicators. Five of these jurisdictions (Baltimore City, Somerset, Washington, Dorchester, and Prince George's counties) were previously identified as at-risk in the 2010 needs assessment. In Appendix A, Table 5, there is analysis of the standardized value for each indicator and the raised indicators in each jurisdiction. Baltimore City had the most elevated indicators (8), followed by Somerset County (7), and Washington County (6). Three of 10 jurisdictions are rural[5] (Dorchester, Garrett, and Talbot counties), and four (Somerset, Talbot, Queen Anne's, and Dorchester counties) are on the Eastern Shore. The most common elevated indicator throughout the state was "Prenatal Care Began in the 3rd Trimester or not at all," with six jurisdictions having a z-score above 1 on this indicator. Table C below is a summary of data found in Appendix A, Tables 6 and 7 that show the jurisdictions with elevated indicators. These 10 jurisdictions have a higher concentration of at-risk indicators than the remaining 14 jurisdictions in the state. Table 7 details counties served partially or in whole by at least one home visiting program, and if those programs are evidence-based. Table 7 also identifies if the programs are MIECHV-funded, the estimates of the number of families served by home visiting programs in that jurisdiction, and the estimate of need in the

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[5] Throughout the needs assessment the following document authored by the Office of Rural Health Policy (2018) was used to decide whether or not a county is rural: List of Rural Counties and Designated Eligible Census Tracts in Metropolitan Counties

jurisdiction provided by HRSA. See Appendix G for profiles of each jurisdiction identified by the method and an overview of each county's individual level of risk.

Table C. Jurisdictions Identified as At-Risk

Jurisdiction	# of elevated indicators	Identified in 2010*	Indicators of Risk Identified
Baltimore City	8	Yes	Poverty, Pregnancy Associated with Hypertension on Hospitalization Rate, Child Injury Emergency Department Visit Rate, Medicaid, Substance Use Treatment Rate, Protective Order, Crime, Dropout
Somerset	7	Yes	Low Birth Weight, Prenatal Care Began in 3rd Trimester or None at all, Poverty, Pregnancy Associated with Hypertension Hospitalization Rate, Gestational Diabetes Hospitalization Rate, Very Preterm and Very Low Birth Weight, Dropout
Washington	6	Yes	Low Birthweight, Prenatal Care Began in 3rd Trimester or None at all, Poverty, Maternal Tobacco Use, Very Preterm and Very Low Birth Weight, Protective Order, Kindergarten Readiness, Dropout
Talbot	4	No	Low Birthweight, Prenatal Care Began in 3rd Trimester or None at all, Poverty, Maternal Tobacco Use, Very Preterm and Very Low Birth Weight.
Queen Anne's	3	No	Low Birth Weight, Prenatal Care Began in 3rd Trimester or None at all, Very Preterm and Very Low Birthweight
St. Mary's	3	No	Premature Birth, Low Birth Weight, Prenatal Care Began in 3rd Trimester or None at all
Dorchester	2	Yes	Maternal Tobacco Use, Child Injury Emergency Department Visit Rate
Garrett	2	No	Maternal educational attainment; Child Injury Emergency Department Visit Rate
Prince George's	2	Yes	Kindergarten Readiness, Dropout
Worcester	2	No	Prenatal Care Began in 3rd Trimester or None at all, Child Injury Emergency Department Visit Rate

* method for identifying jurisdictions at risk changed and it is not possible to make direct comparisons

While Maryland's independent method identified these 10 jurisdictions as having the highest level of risk factors as compared to the rest of the state, Maryland also conducted a series of analyses at the jurisdiction level, comparing each census tract for which data was available to the remaining jurisdiction of that census tract. For further detail, see Appendix A, Table 7.1 for the percentage of elevated indicators by jurisdiction and Appendix A, Table 7.2 for the percentage of risk across indicators by jurisdiction.

Figure A summarizes vast differences within jurisdictions with a box and whisker plot for the average of all standardized indicators by census tract in each of Maryland's 24 jurisdictions. A box and whisker plot displays the minimum, first quartile, median, third quartile and maximum for the average of all at-risk indicators for each tract within each jurisdiction. The display allows for comparison not only of the jurisdictions' median scores but also of the spread of at-risk scores of each census tract in that jurisdiction. As seen in For further detail, see Appendix A, Table 7.1 for the percentage of elevated indicators by jurisdiction and Appendix A, Table 7.2 for the percentage of risk across indicators by jurisdiction.

Figure A, the most at-risk communities with the highest percentage of elevated indicators exist in Baltimore City, followed by Washington County, Prince George's County, and Dorchester County. However, as seen in this display, some jurisdictions that appear to have no raised indicators at the jurisdiction level, do have pockets of communities that would qualify as being at-risk. For example, the counties of Montgomery and Harford have a median score of 0, meaning that half of all census tracts had no elevated indicators. However, in these two counties seemingly not at-risk, there are also individual census tracts with raised indicators--over 20% for Harford County, and more than 35% for Montgomery County--indicating pockets of need. Such pockets exist in each jurisdiction in the state. This analysis is an important addition to the updated needs assessment; the largest criticism from stakeholders during the process in 2010 came from the state not understanding that there were deep pockets of local need within areas that appear void of any at-risk indicators at the jurisdiction level. For further detail, see Appendix A, Table 7.1 for the percentage of elevated indicators by jurisdiction and Appendix A, Table 7.2 for the percentage of risk across indicators by jurisdiction.

Figure A. Elevated Indicators Comparing Each Jurisdiction to Itself

displays jurisdictions with elevated indicators at the state level[6]. It shows a geographic display of pockets of highest need throughout the state. In contrast, displays areas within jurisdictions with elevated indicators as discussed above in For further detail, see Appendix A, Table 7.1 for the percentage of elevated indicators by jurisdiction and Appendix A, Table 7.2 for the percentage of risk across indicators by jurisdiction.
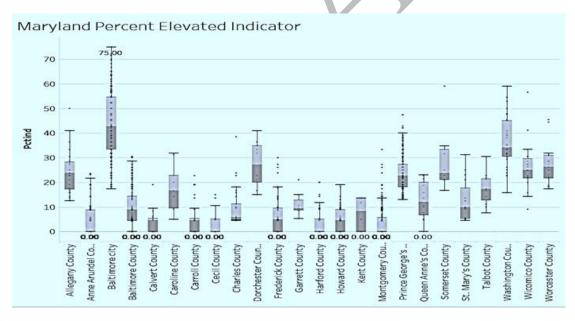
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[6] Source: Maternal, Infant, and Early Childhood Home Visiting Elevated Indicator Map

Figure A, comparing census tracts at the jurisdiction level to themselves. The areas in red are the most at-risk areas in each jurisdiction. Comparisons between Figures B and C highlight the diversity between the jurisdictions, and also between state averages to the jurisdiction. For example, in the statewide view, Garrett County appears to have few at-risk areas. However, when the county is compared with itself, two red pockets that indicate high risk areas of need (one in the south and one in the west of the county) can be seen. For additional information or to view the interactive maps click here.

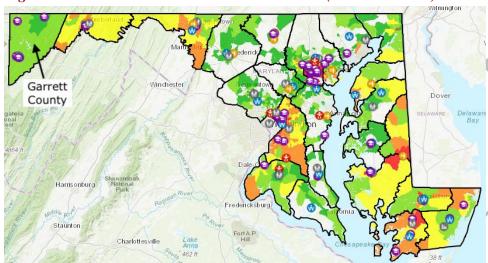*Figure B. Jurisdictions with Elevated Indicators (Statewide View)[4]*

Figure C. Areas Within Jurisdictions with Elevated Indicators [4 above]

III. IDENTIFYING CAPACITY AND QUALITY OF EXISTING PROGRAMS

In this section, Maryland identifies the quality and capacity of existing early childhood home visiting programs in the state. Prioritization of service delivery included eligible families in communities in need of such services, and also accounted for the staffing, community resources, and other requirements to operate at least one approved evidence-based model. In order to improve the capacity and quality of home visiting throughout the state, this needs assessment has identified gaps in the availability and accessibility of social services, family supports, and physical, mental, and behavioral healthcare. Gaps in services and barriers that impede access

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negatively impact outcomes for families and children throughout the state, and inhibit home visiting services from ensuring optimal outcomes for participating families. As detailed in Appendix H, Needs Identified to Improve Capacity and Quality, the MD-MIECHV needs assessment includes nine needs affecting capacity and quality in home visiting services in the state. These are detailed in Appendix H, and the top three are included below:

Need 1: Address racial/ethnic health care disparities, especially in prenatal care, infant mortality, and pregnancy outcomes for Black, American Indian/Alaskan Native (AIAN) and Latinx families to improve outcomes for those who are eligible to receive/could benefit from these services. Of the 17 key stakeholders who ranked findings from this needs assessment in order of importance, all ranked this as a top 10 finding out of 30 findings.

Inequities in prenatal care: The 2010 needs assessment noted widespread health disparities between White families in Maryland and other racial/ethnic groups, and explained that these disparities exact a significant toll on the state's overall health (Maternal and Child Health Bureau [MCHB], 2010). Unfortunately, many of the disparities that existed in 2010 still exist today. Across the state, many families that are non-White experience disparities in prenatal care and pregnancy outcomes. Black and American Indian/Alaska Native (AIAN) mothers have the highest rates of inadequate, late, or no prenatal care. Rates of low and very low birth weight are highest for Black and Asian/Pacific Islander infants. The Office on Women's Health in the U.S. Department of Health and Human Services states that infants of mothers who received no prenatal care are three times more likely to have low birth weight and five times more likely to die in infancy (Office on Women's Health, n.d.).

Mortality rates: Black infants face higher mortality rates than infants from other racial/ethnic groups. The Maryland Health Care Commission (MHCC) conducted a study on mortality rates (defined in the study as death within the first year of life) for Black infants in urban and rural areas and infants of any race in rural areas in 2019, as required by Chapter 83 of the 2018 Maryland State Laws. The study found that the infant mortality rates for Black infants is higher than that of White infants, and that mortality rates for Black infants born in rural areas is worsening (Maryland Health Care Commission [MHCC], 2019). In 2018, the mortality rate for Black non-Hispanic infants was 10.2 per 1,000 births, compared to the 4.1 per 1,000 births mortality rate for White non-Hispanic infants (Vital Statistics Administration, 2018). In order to eliminate this racial disparity in infant mortality, which has persisted over the past 25 years, the Maryland Maternal and Child Health Bureau estimates the Black non-Hispanic infant mortality rate needs to be reduced by 59% (MHCC, 2019; MCHB, 2020). Additionally, there are sharp geographic disparities in urban versus rural areas when the analysis is adjusted for race. The statewide infant mortality rate during 2012-2016 was slightly higher in urban areas (6.5 per 1,000) compared to rural (5.8 per 1,000), however Black infants born in rural areas of Maryland have the highest infant mortality rate (14.3 per 1,000) compared to Black infants born in urban areas of Maryland (9.9 per 1,000) (MHCC, 2019).

Lack of appropriate care for Latinx families: The fastest growing racial/ethnic group in the state are Latinx children—this group has been increasing more rapidly than both White and Black children (Maryland State Department of Education [MSDE], 2012). The Latinx population in Maryland is relatively young, with the median age being 28. With such a high portion of the population being of child rearing age, the population of Latinx children in Maryland under 5 is likely to continue to increase (MSDE, 2012). Latinx families make up over a quarter of the

population of Prince George's (27.5%) and Montgomery Counties (25.6%), but they also make up more than 10% of the populations of Fredrick, Anne Arundel, Talbot, and Caroline Counties. (Annie E. Casey Foundation, 2019).

This fastest growing group also faces great challenges preventing individuals from receiving "safe, quality and culturally competent and linguistically appropriate, timely and affordable healthcare" including poverty, lack of health insurance, inadequate transportation, and a language barrier (Latino Health Initiative, 2016). In addition to these, Latinx families are also more likely to experience legal barriers to health care; Medicaid is only available to immigrants who have been residing in the United States for five years, aside from a limited number of groups who are exempt from the five-year requirement. In Maryland, children under 21 years of age (regardless of immigration status) and lawfully residing pregnant women are exempt from the requirement (U.S. Dept. of Health and Human Services, 2020; Maryland Health Benefit Exchange, 2019). Over 11% of Maryland's Latinas received late or no prenatal care compared with 9.2% of all women and 5.8% of White women. Furthermore, almost half (47.1%) of the Latinx population in Maryland reported not having a personal doctor or health care provider (Latino Health Initiative, 2016).

Need 2: Greater access to mental and behavioral health treatment throughout the state.
Out of the 17 key stakeholders who ranked findings from this needs assessment in order of importance, 14 ranked this need as a top 10 finding out of 30 findings. According to the 2016 Title V Needs Assessment, Maryland has seen a steady rise in mental health issues, especially mental health issues related to substance use and co-occurring problems in child-bearing women (Maryland Department of Health and Mental Hygiene, 2016). A needs assessment conducted in Baltimore City cited substance use and mental health as a number one health concern (The Johns Hopkins Hospital & Johns Hopkins Bayview Medical Center, 2018). A comparable needs assessment conducted on the Mid-Eastern Shore, a rural area, also cited mental health as a major concern. Participants in this needs assessment expressed there is a shortage of resources on the Eastern Shore to help with the growing problems (Franzini, Kleinmann, & Knudson, 2017). Across Maryland, shortages of mental health professionals are a serious concern with 22 out of 24 jurisdictions entirely or partially in a mental health professional shortage area. It is of note that all counties on the Eastern Shore, which are mostly rural, as well as Washington and Allegany counties in Western Maryland and the counties of Charles, Calvert, and St. Mary's in Southern Maryland are experiencing a shortage of mental health professionals. Other barriers preventing residents across Maryland from seeking treatment for mental health issues include social stigma, lack of insurance coverage, and lack of health education about mental health (The Johns Hopkins Hospital & Johns Hopkins Bayview Medical Center, 2018).

Need 3: Support for families living in poverty -- especially around child development and how to provide a stimulating environment for their children.
Out of the 17 key stakeholders who ranked findings from this needs assessment in order of importance, 11 ranked this need as a top 10 finding out of 30 findings. While Maryland consistently ranks among the wealthiest states in the country (U.S. News and World Report, 2019), that wealth is not evenly distributed across the state—the median family income in Montgomery County is $126,275, compared to only $52,868 in Somerset County. The MIECHV needs assessment conducted ten years ago found significant pockets of poverty in the state spread across Baltimore City, the Eastern Shore and Western Maryland (MCHB, 2010), which are persistent today. The 2019 federal threshold for a family of four with two children is $24,600, though families need about twice this amount to meet basic needs. About 64,500

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children under 6 (15%) in the state live in poverty. Of these children, about 22,871 (35%) live in families that do not have an employed parent, and about 47,359 (73%) are in single family homes (National Center for Poverty, 2018). About 29,982 (14%) of these children are under age 3. Poverty rates across the state vary by ethnicity with about 24% of all Black children under 6 living in poverty, 18% of all Latinx in this age range, 9% of Asian children, and 8% of White children (National Center for Poverty, 2018).

Children living in poverty experience many challenges. As was pointed out in the PDG B-5 needs assessment, their needs often include access to food, clean clothes, and shelter (MAEC Inc., 2019). In 2016, about 15,755 children under the age of 6 in Maryland experienced homelessness (Yamashiro, Yan, & McLaughlin, Early Childhood Homelessness: State Profiles, 2018). Low-income families are most likely to experience transitions due to unstable financial situations at home (Madill et al., 2016). Furthermore, families living in poverty are more likely to encounter multiple traumas over many years, and are less likely than families living in more affluent communities to access resources they need to deal with and adapt to these traumatic experiences (Collins et. al, 2010).

Many of these children experience disadvantages in their development in essential skills such as attention, self-control, and memory. Many reach school age not able to meet the demands of school and behind their peers from more wealthy environments (Hayaski, 2016). Furthermore, many of them also reach school exposed to trauma and other negative stimulants like malnutrition, substance use, and lead exposure (Collins et. al, 2010). This experience of chronic trauma and stress associated with poverty can also have a negative effect on parent-child relationships and at times results in "decreased parental effectiveness, less warmth, limited understanding of child development and needs, increased use of corporal punishment and harsh discipline, high incidents of neglect and overall strategy of reactive parenting" (Collins et. al, 2010, p. 57). Rigorous, high quality home visiting programs can have a significant positive impact on families experiencing poverty by helping them understand their children's development and the child's needs while at the same time reducing the incidents of child abuse and improving school readiness (National Conference on State Legislatures, 2019). Access to quality child care options is important for home visiting participants particularly in regard to the prevention of child maltreatment, as programs encourage participants to engage in professional and/or educational advancements (Matone et al., 2018).

THE CAPACITY OF HOME VISITING SERVICES IN MARYLAND

Maryland's home visiting programs form a part of the state's mixed-delivery system, which provides a wide range of support to children ages birth to 5 and their families. This support includes school readiness programs such as public Pre-K, federally funded Head Start and Early Head Start, the state Child Care Scholarship program, home visiting programs, special education services, Family Support Centers, and Judy Center Early Learning Hubs (often referred to as Judy Centers[7]). There are home visiting programs operating in every jurisdiction in the state. They form an integral part of Maryland's system of support for expectant mothers and families with young children.

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[7] Source: Maryland State Department of Education Division of Early Childhood website "Judy Centers"

Finding 1. Maryland has increased the capacity of home visiting programs, and an evidence-based home visiting model is operating in every jurisdiction in Maryland. Since the last statewide home visiting needs assessment, Maryland has increased the capacity of its home visiting programs. In 2010, all jurisdictions except St. Mary's had a home visiting program (MCHB, 2010). In 2020, all jurisdictions in the state have at least one program (Governor's Report on Home Visiting, 2019). In 2010, more than a quarter of the state's jurisdictions had only one active home visiting program. As of 2019, all jurisdictions except for Cecil and St. Mary's counties operated more than one program. Additionally, we have increased our knowledge of programming from 35 known home visiting programs in 2010 to 78 known home visiting programs as of December 2019.

Currently, there are six prevailing evidence-based home visiting models used in the state: Early Head Start, Healthy Families America, Home Instruction for Parents of Preschool Youngsters (HIPPY), Nurse Family Partnership, Parents as Teachers, and Family Connects[8]. While these home visiting models serve a similar population—expectant mothers and/or families with children under 5—the programs target different subpopulations with varying needs. Most program models operate in Baltimore City (7), and the least number of models, (1) operate in Cecil County (Governor's Report on Home Visiting, 2019). In addition to the six prevailing models in the state, two additional evidence-based programs operate almost exclusively in Baltimore City: Attachment Bio-Behavioral Catch Up (ABC) and Exchange Parent Aide Model. Family Tree—a non-profit organization dedicated to providing families with solutions to prevent child abuse and neglect—administers these models (Family Tree, 2020). Appendix I summarizes the key characteristics of these models and their quantities across the state.

In addition to the evidence-based models detailed above, there are also six home visiting program models in operation in Maryland that are not evidence-based (Governor's Report on Home Visiting, 2019). These programs are usually locally funded. See Appendix J for full description of these models.

Finding 2. MIECHV programs currently operate in all tier one jurisdictions identified as high need by the 2010 needs assessment. In Maryland, MIECHV supports three evidence-based models--Healthy Families America, Nurse Family Partnership, and Family Connects. MIECHV programs operate in 10 jurisdictions in the state. Most MIECHV sites use the Healthy Families America model, but MD-MIECHV also funds one Nurse Family Partnership program and one Family Connects program.

During the 2010 needs assessment, the following six jurisdictions were identified as being at-risk: Baltimore City, Dorchester County, Washington County, Wicomico County, Prince George's County, and Somerset County. In 2014, additional funding from HRSA allowed the expansion of MIECHV into Allegany, Caroline, Harford, and Baltimore Counties.

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[8] A Family Connects site is opening in Prince George's County

Finding 1: There is a need to expand the capacity of home visiting programs across the state. All surveyed stakeholder groups (parents, home visitors, and community members) reported there are not being enough home visiting programs to meet everyone's needs in Maryland. Further, they indicated the need to expand current capacity by creating more slots in existing programs and increasing the offered programs. See Table D for the survey questions related to access and capacity and responses from stakeholders who agreed. There is a statistically significant difference between the responses of parents/caregivers, home visitors and community members for the first and last questions in the table.

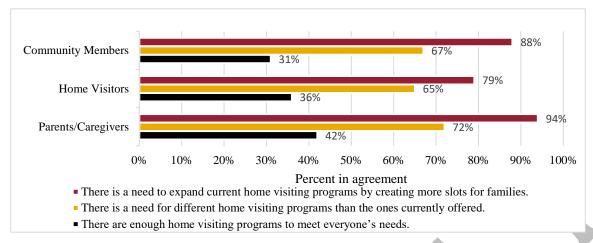*Table D. Percent of Stakeholders Agreeing with Access Questions*

Access Questions	Parent/ Caregivers (n= 352)	Home Visitors (n= 311)	Community Members (n= 234)
There are enough home visiting programs to meet everyone's needs.**	42%	36%	31%
Home visiting services are easy for families to access.*	69%	70%	64%
There is a need for different home visiting programs than the ones currently offered.	72%	65%	67%
There is a need to expand current home visiting programs by creating more slots for families.**	94%	79%	88%

*$p<0.01$, **$p<0.001$

The majority of stakeholders in all three groups agreed that home visiting services were easy to access, with the greatest percentage of home visitors agreeing with the statement (70%), followed by parents (69%), and ending with community members (64%). However, responses to survey items related to capacity indicate that while home visiting services are easy to access, their current capacity does not meet the demand.

All three groups disagreed with the statement *"there are enough home visiting programs to meet everyone's needs."* Community members were least likely to agree with the statement (31%), compared to home visitors (36%) and parents (42%). The difference between these three stakeholder groups was statically significant, which could be due to community members interfacing with a greater number of families than home visitors and parents/caregivers. The majority of all stakeholder groups agreed that there is a need for different programs than those already offered. However, all three stakeholder groups agreed that there is a need to expand current home visiting programs. The differences in the percentage of stakeholders in all three groups who responded to this question were statistically significant (See Figure D)

Figure D. Stakeholder Responses to Capacity Survey

Community Members — 88%, 67%, 31%
Home Visitors — 79%, 65%, 36%
Parents/Caregivers — 94%, 72%, 42%

Percent in agreement

- There is a need to expand current home visiting programs by creating more slots for families.
- There is a need for different home visiting programs than the ones currently offered.
- There are enough home visiting programs to meet everyone's needs.

Data for each stakeholder group was analyzed by region. While there were no statistically significant regional differences among the questions concerning access for the parent and community member groups, among home visitors, there was a statistically significant difference. Only 47% of home visitors from the Capital area (n=38) and 58% of home visitors from Baltimore City (n=14) reported that programs are easy to access, compared to 74% from the Baltimore-Metro Area (n=58), 78% from the Eastern Shore (n=43), 81% from Western Maryland (n=46) and all respondents from Southern Maryland (n=2). This difference could indicate a problem with accessing home visiting services in more urban areas, instead of more rural ones.

Finding 2. The need for home visiting services exceeds the current capacity. In 2018, there were approximately 364,504 children under the age of 5 in the state, and approximately 51,000 lived in poverty (Annie E. Casey Foundation, 2020a, 2020b). According to estimates of the number of families served in 2019, home visiting served just under 4,400 families--just over 1% of the population of children under 5 (not accounting for newborns) and about 8.5% of children living in poverty.

A report by the National Home Visiting Resource Center noted that Maryland home visiting programs served only 1.8% of high-priority families within the state (Meisch & Isaacs, 2019). The report defined high priority as meeting any one of five targeting criteria, including having an infant; income below the federal poverty threshold; pregnant women and mothers under 21; single/never married mothers or pregnant women; and parents without high school education. According to this report, Maryland was one of 10 states in the country (including California, Georgia, Mississippi, Nebraska, Nevada, New Hampshire, Tennessee, Texas, and Utah) serving less than 2% of the high needs population. It was below the national average of 3.1% (Meisch & Isaacs, 2019).

The total capacity of current programs is sufficient to serve only a small percentage of estimated eligible families who may elect to participate in home visiting (Maryland Department of Human Services, 2018). Table E compares various estimates of need by jurisdiction including, those provided by HRSA[9], Medicaid, and estimates of the number of children under 5 living in poverty

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[9]Estimates of families needing services provided by HRSA come from ACS 2017 1-Year PUMS Data and include the number of families likely to be eligible for MIECHV services based on the below criteria # of families with children under the age of 6 living below 100% of the poverty line + # of families in poverty with a child under the age of 1 and no other children under the

(Annie E. Casey Foundation, 2020b). The triangulation of data from the three sources detailed in Table E illustrates the difference in the scope of perceived need in Maryland. For example, HRSA's estimates of need calculated 19,875 eligible families, and home visiting programs in the state currently serve 4,357 or 22% (based on data gathered as a part of the Governor's Report on Home Visiting, 2019). The percentage of eligible families served decreases to 9.8% when calculated using the estimated number of children under 5 living in poverty as the eligibility proxy (Annie E. Casey Foundation, 2020b). What is more striking is that some of the jurisdictions with families most at-risk are only able to serve a fraction of the families eligible for services. In total, based on HRSA's estimates of families in need and the number of families served from the governor's report, 14 jurisdictions serve less than 50% of the population in need including: Baltimore City and, Allegany, Anne Arundel, Baltimore, Cecil, Charles, Fredrick, Harford, Kent, Montgomery, Prince George's, Washington, Wicomico, and Worcester Counties (see Table E). Of the 10 jurisdictions identified as "at-risk" in Section II, four jurisdictions--Baltimore City, Worcester, Washington, and Prince George's Counties--serve less than 50% of the population. Furthermore, in some jurisdictions there seems to be a misalignment between the need and the number of families served. Out of all the jurisdictions, three (Calvert, Dorchester, and Garrett Counties) serve more than 100% of the families eligible.

Finding 3. Across Maryland, programs struggle with family retention. Family retention is a significant issue faced by home visiting programs. Out of the 17 key stakeholders who ranked findings from the needs assessment in order of importance, five ranked this as a top 10 finding. Out of the total of 4,357 women enrolled in home visiting programs across the state in FY19, 1,229 women disengaged from services. While the overall rate of disengagement decreased by 18% from FY 2017, over 28% of participants in home visiting do not complete the program after enrollment (Governor's Report on Home Visiting, 2019, p. 22). Though the numbers of families disengaging from service appear high, they are typical to national trends. According to estimates of enrollment, across all models, approximately half of the families enrolled leave before completing the intended length of enrollment (Maternal, Infant, and Early Childhood Home Visiting Technical Assistance Coordinating Center, 2015). A family who enrolls in a program and does not complete it can affect the program's funding and have other implications for enrollment that affect overall program capacity. Several members of the MD-MIECHV Needs Assessment Steering Committee discussed in a planning meeting there potentially being a disconnect between what models require in terms of "completing" a program and what the families receiving services need and want. While some families might want to be part of a two to three-year program, others do not need or want that level of services yet are not counted as successful completions if they disengage before the intended length of enrollment. More efforts are needed to ensure that families are getting referred to programs that best meet their specific needs. The top four reasons for disengagement from home visiting programs[10] included: families moving; unable to locate or contact family; scheduling conflict/client getting a new job; and refusal/declining services. Additionally, five sites indicated that the primary reason for family disengagement was successful completion of the home visiting program.

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age of 6 (a proxy for families with a pregnant woman that would also be eligible for MIECHV services) and belonging to one or more of the following at-risk sub-populations: a) Mothers with low education (high school diploma or less), b) Young mothers under the age of 21, c) Families with an infant (child under the age of 1). Analysis includes primary families and unrelated subfamilies living in the same household.

[10] Source: Governor's Report on Home Visiting (2019) pp. 22–23 3

Table E. Number of Estimated Eligible Families and Those Served by Home Visiting

Jurisdiction	# of HV program sites*	HV program model(s) operating in county†	# of children <5 [1]	Estimated Eligible Families [2]	Medicaid birth data by County [3]	Estimated # of children <5 living in poverty [4]	Served in FY 2019 from Governor's report [5]	MIECHV Children Served in FY 2019 [6]
Allegany	4	HFA, EHS, PAT	3,193	272 (8.5%)	1,738 (54.2%)	683 (19.9%)	87 (32.0%)	29 (10.7%)
Anne Arundel	2	EHS, PAT	35,545	643 (1.8%)	9,787 (27.5%)	3,400 (9.6%)	144 (22.4%)	N/A
Baltimore City	17	ABC, EHS, HFA, HIPPY FCMD, NFP, PAT	36,583	7,066 (19.3%)	23,308 (63.7%)	9,916 (27.1%)	1,002 (14.2%)	485 (6.7%)
Baltimore County	4	HFA, EHA, PAT	48,807	2,108 (4.3%)	17,965 (36.8%)	6,341 (13.0%)	410 (19.4%)	141 (6.7%)
Calvert	3**	EHS, HFA, HIPPY, PAT	4,935	22 (0.4%)	988 (20.0%)	326 (6.6%)	115 (>100%)	N/A
Caroline	5	EHS, HFA, PAT	2,047	110 (5.4%)	1,144 (55.9%)	401 (19.6%)	100 (90.9%)	40 (36.5%)
Carroll	3	EHS, PAT	9,227	288 (3.1%)	1,741 (18.9%)	560 (6.1%)	173 (60.1%)	N/A
Cecil	1	EHS	5,827	289 (5.0%)	2,382 (40.9%)	746 (12.8%)	48 (16.6%)	N/A
Charles	1	HFA	9,625	790 (8.2%)	2,836 (29.5%)	894 (9.3%)	213 (27.0%)	N/A
Dorchester	2	EHS, HFA	1,773	108 (6.1%)	1,206 (68.0%)	472 (26.6%)	163 (>100%)	110 (101.8%)
Fredrick	2	HFA, PAT	15,326	465 (3.0%)	3,206 (20.9%)	1,116 (7.3%)	101 (21.7%)	N/A
Garrett	3	EHS, HFA	1,380	111 (8.0%)	658 (47.7%)	267 (19.3%)	147 (>100%)	N/A
Harford	2	EHS, HFA	14,395	197 (1.4%)	3,734 (25.9%)	1,390 (9.7%)	54 (27.4%)	49 (24.9%)
Howard	2	HFA, PAT	19,122	97 (0.5%)	4,063 (21.2%)	1,189 (6.2%)	67 (69.1%)	N/A
Kent	2	HFA, PAT	778	66 (8.5%)	373 (47.9%)	151 (19.4%)	31 (47.0%)	N/A
Montgomery	4	EHS, HFA, PAT	64,500	2,451 (3.8%)	20,399 (21.6%)	5,528 (8.5%)	364 (14.9%)	N/A
Prince George's	5	EHS, HFA, PAT	59,294	2,347 (4.0%)	24,844 (41.9%)	7,135 (12.0%)	559 (23.8%)	158 (6.7%)
Queen Anne's	2	HFA, PAT	2,563	164 (6.4%)	769 (30.0%)	219 (8.5%)	85 (51.8%)	‡
Somerset	2	EHS, HFA	1,167	146 (12.5%)	709 (60.8%)	759 (65.0%)	106 (72.6%)	9 (6.1%)
St Mary's	1	HFA	7,123	26 (0.4%)	1,993 (28.0%)	392 (5.5%)	19 (73.1%)	N/A
Talbot	3**	EHS, HFA, PAT	1,734	125 (7.2%)	841 (48.5%)	250 (14.4%)	117 (93.6%)	N/A
Washington	3	EHS, HFA, PAT	8,550	1,113 (13.0%)	3,821 (44.7%)	1,416 (16.6%)	174 (15.6%)	83 (7.5%)
Wicomico	3	EHS, HFA	6,297	580 (9.2%)	3,295 (52.3%)	1,257 (20.0%)	68 (11.7%)	57 (9.8%)
Worcester	4	EHS, HFA, HIPPY	2,146	291 (13.6%)	960 (44.7%)	385 (17.9%)	10 (3.4%)	N/A
Total			361,937	19,875	132,760	44,105	4,357	1,161
Total % of Population Served			--	5.5%	36.7%	12.2%	1.2%	5.8% of HRSA estimate
MD HV % Served			1.2%	22.0%	3.3%	10.0%	--	--

THE EXTENT TO WHICH HOME VISITING PROGRAMS MEET THE NEEDS OF ELIGIBLE FAMILIES

Finding 1. Parents report a lack of awareness of home visiting services, a lack of understanding surrounding eligibility requirements, and a lack of understanding of the role of home visiting services. The stakeholder survey revealed a general lack of awareness of home visiting services in Maryland among parents, and a lack of understanding of eligibility requirements and the role of the programs in supporting parents. Nearly a quarter (22.7%) of all parents expressed they did not know what home visiting services were. Of the 215 parents who responded that they knew what home visiting services were, 45% reported never participating in home visiting services. Thirty-eight percent of parents reported feeling the services were not for them or geared to a particular population such as parents in low-income families or parents of children with disabilities. Fourteen percent said they did not know about the services, and 6% reported not understanding the eligibility requirements. When asked to rate the question "Families know about home visiting services" (e.g., services provided, who is eligible, etc.), 51% of home visitors disagreed with the statement.

These findings are similar to those from the 2019 survey conducted as a part of the needs assessment for the Preschool Development Birth through Five (PDG B-5) grant, which also indicated that many parents in Maryland do not know about home visiting services (MAEC, 2019). Of all the parents who responded to the PDG B-5 survey (n=472), 60% indicated they do not know about home visiting programs, or they were not aware of them. Fifty-five percent of parents did not know whether or not there were adequate home visiting programs in their jurisdiction.

Finding 2. The perception that home visiting is a function of Child Protective Services (CPS) is prevalent in the state and this perception serves as a barrier to family enrollment, particularly for Spanish-speaking and Native American families. During interviews with parents and focus groups with home visitors and community members conducted for this needs assessment, 14 participants discussed that the view of home visiting as a function of CPS is a commonly held perception. Nine community members, three home visitors, and two parents

discussed this perception as inhibiting enrollment, particularly for Native American, Spanish-speaking, and/or immigrant families.

"Historically, Native people have worried about the government, just for a lack of better terms... the government taking their children . . . although we're trying to build the best rapport, we still have to let them know that if something does come up, we would have to report it. So that's definitely a level of trust that we have to build." (Community Member, Baltimore City)

A home visitor discussed that the political climate has made recruiting Spanish speaking families difficult because there is a strong association with home visiting and CPS. They further explained that their enrollment window is small (i.e., up to eight weeks), which presents a challenge when trying to address the perception that home visiting is related to CPS.

"*A lot of times, we have to work with them and, 'No, that's not what we're doing. That's not what this program is about at all. We're just here to provide support for you and your baby."* (Home Visitor, Eastern Shore)

Six home visitors also mentioned receiving referrals from CPS or engaging CPS. According to stakeholders, the perception that home visiting services are linked to CPS could be deterring families from seeking services, and accepting services when offered. Rather than being seen as a support to parents, families are apprehensive, thinking that the ultimate goal of these programs is to monitor the family and report them to CPS.

Finding 3. Stakeholders agree that the programs are not well advertised. Most families become aware of home visiting through word of mouth. The stakeholder survey asked respondents to rate the statement, "Home visiting services are well advertised." All three stakeholder groups (parents, home visitors, and community members) disagreed with the statement. While 41% of home visitors agreed with this statement, only 34% of parents and 33% of community members agreed, indicating a strong need for better advertising of home visiting programs.

During focus groups conducted for this needs assessment, stakeholders were asked how they learn about home visiting services. Both community members and home visitors stated that most families become aware of home visiting through word of mouth or having a family member participate. According to home visitors and community members, Latinx, Spanish-speaking, and immigrant families become aware of home visiting primarily through word of mouth.

"We just in the spring did a family survey... I believe it was 97% of the families we've had enrolled during this year said they found out about the program from word of mouth." (Home Visitor, Western Maryland)

In contrast, Baltimore City home visitors reported that self-referral/word of mouth clients were rare. Possibly explaining this difference in the recruitment of families between Baltimore City and the rest of the state is that Baltimore City relies on a centralized intake system—Health Care Access Maryland (HCAM)—to make referrals and connect families to home visiting services.

Finding 4. More initiatives are needed to increase the number of fathers served by home visiting in the state. Out of the 17 key stakeholders who ranked findings from the needs assessment in order of importance, 14 ranked the need to increase fathers served as a top 10 finding. The majority of those served by Maryland's home visiting programs are women—the programs served 4,357 women in FY 2019. In FY 2019, 4,108 children received services through one of seven evidence-based home visiting models and four promising practices (Governor's Report on Home Visiting, 2019, p. 50). That same year, home visiting programs served 161 fathers, 32 grandmothers, 21 foster/adoptive parents, eight aunts, and three grandfathers. As seen

in Table F, while the number of women served by the program decreased slightly between 2017 and 2019, the number of other stakeholders served by the program, as well as the number of children served, has increased. Other primary caregivers included*: fathers (n=161), grandmothers (n=32), foster/adoptive parents (n=21), aunts (n=8), grandfathers (n=3), and one cousin.

Table F. Number of Stakeholders Served by Home Visiting by Role in 2017 and 2019[11]

Home Visiting Participants	FY 2019	FY 2017
Women	4,357	4,602
Other primary caregivers*	181	109
Children	4,108	3,947

Researchers stress the importance of early father involvement in child development and learning. When fathers participate in home visiting and show positive attitudes, mothers tend to be more engaged and stay longer in home visiting programs (Sandstrom & Lauderback, 2019). Furthermore, when fathers participate in home visiting, they learn new parenting skills, become more confident in their parenting, and develop stronger relationships with their children and partners. When home visiting programs intentionally engage fathers, they optimize positive outcomes for children and the family (Sandstrom & Lauderback, 2019). The data collected for this needs assessment showed that father involvement is a critical issue for the state, with four home visitors stating programs need to engage fathers more.

"*I feel like a lot of the curriculum is more focused on mom and baby, and very little of dad and we have times where dads are in the home and I've had dads ask me 'You have something for me?' . . . the curriculum mainly focuses on mom and baby, even prenatally. Dad is just as important prenatally as mom.*" (Home Visitor, Baltimore Metro)

While the number of fathers served by home visiting in the state is currently small, MIECHV administrators are working to engage more in the program. In 2019, each MIECHV-funded site completed a fatherhood readiness assessment. Engaging fathers was determined to be an integral part of the state's Continuous Quality Improvement (CQI) efforts—including the creation of a CQI dashboard that aims to help sites evaluate local implementing agency (LIA) efforts to engage fathers. Staff from MD-MIECHV programs were invited to present about these efforts during a national HRSA webinar entitled "Engaging Fathers in MIECHV" on October 15, 2019 (HRSA Home Visiting Improvement Center Action Team, 2019).

Finding 5. Current home visiting services are not culturally appropriate for the diverse needs of Native American families. The 2020 needs assessment provided Maryland MIECHV with an opportunity to explore the continued provision of equitable home visiting services in the state for all those at risk of poor outcomes. This iteration included a concerted and deliberate effort to engage voices from Maryland's Indigenous community. The inclusion of Maryland's Native American demographic provided insight where information from census (and other available data sources) failed to provide adequate perspective due to several factors including: cultural/historical barriers, and properly identifying the size, individual membership, and resources of the tribal community because of demography instrumentation. Statistical othering is a commonly recognized limitation of self-reported demographics especially within the Native American community because of issues surrounding the classification of multiracial individuals

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[11] Source: Governor's Report on Home Visiting (2019)

(i.e., "other" identification) in data analysis processes, the willingness of community individuals to participate in census tracking methods, regulation of state and federally-recognized tribe membership, and having the correct racial/ ethnic option available to select.

Though there are no federally recognized tribes in the state, members of Maryland's tribal community still face many of the same challenges and stressors as their counterparts in other regions of the country. However, they have a different level of sovereignty and few equitable resources. The MD-MIECHV team felt, with great conviction, that the Maryland Indigenous community needed to be highlighted in this 2020 needs assessment to give voice to their needs and serve as an opportunity to better serve this oft-overlooked community.

During a focus group, a community member primarily serving urban Native Americans in Maryland shared the challenges with engaging Native American families in home visiting. They offered this is due mostly to a lack of culturally appropriate home visiting materials, and the fear of home visiting is a function of CPS. According to community members, the only existing model tailored to Native American families in Maryland is Family Spirit. Family Spirit is an evidence-based, culturally tailored home visiting model for young Native American families, "developed, implemented, and evaluated by the Johns Hopkins Center for American Indian Health in partnership with the Navajo, White Mountain Apache, and San Carlos Apache Tribes since 1995" (Johns Hopkins Bloomberg School of Public Health, n.d., para. 4). A community member shared that, for their organization, the Family Spirit model...

"*...is very hard to follow just because most of the research was done with families on a reservation…We just have other barriers that folks out west, or folks living on a reservation may not have. It's definitely a well-researched program curriculum but it does not always cater to the urban Native population*." (Community Member, Baltimore City)

This community member also shared that families living on a reservation would typically have access to an Indian Health Service (IHS) facility and obtain healthcare from there. Accessing care is more of a challenge for urban Native Americans (e.g., finding providers with medical assistance or particular insurance). Another community member suggested awareness of home visiting in the urban Native American community is low and further explained that the Family Spirit model has had to be modified to make families comfortable with a home visitor coming into the home. The necessity to modify a home visiting model to fit family needs aligns with research on the implementation of home visiting in Tribal communities—Barlow et al. (2018). According to this study, for four diverse tribal communities implementing home visiting, "expanding the meaning of 'home-visiting' to other private and convenient settings," was an effective strategy to address service delivery changes" (p. 9).

THE EXTENT TO WHICH HOME VISITING PROGRAMS ARE PROVIDING HIGH QUALITY SERVICES IN MARYLAND

Maryland's MIECHV program engages in quality monitoring and improvement for MIECHV-funded sites and has expanded access to training for home visitors across the state. Home visiting programs throughout the state have staff that represent the population served and promoted positive outcomes in children's health and development. However, home visiting programs in Maryland still face challenges in staff turnover and meeting the needs of linguistically diverse families. Non-MIECHV sites lack access to one data system that collects data for accreditation and multiple funders, as the Maxwell system does for MIECHV.

Finding 1. Across Maryland, home visiting is held in high regard, and the quality of the programs is rated as high. The survey asked stakeholders a series of questions related to different aspects of service quality. Across all questions and stakeholder groups, an overwhelming majority agreed with all statements related to quality on the survey, indicating that, in general, the quality of services provided by home visiting programs in Maryland is very high. Two statements which were rated slightly lower were: "Are prepared to work with families in languages other than English," with 82% of parents, 84% of community members, and 93% of home visitors agreeing (and the differences between the three stakeholder groups being statistically significant); and: "Address the varied cultural needs of families" with 86% of community members, 88% of parents and 92% of home visitors agreeing. The slightly lower rates of agreement from stakeholders on these two questions might indicate a need for more support to programs in the state around working with families who speak a language other than English, and more support around addressing cultural needs of families. On all quality related questions, a higher percentage of home visitors agreed with the questions than in the other two stakeholder groups. This difference was statistically significant on the statements "have qualified staff providing services," "are prepared to work with families in languages other than English," and "address the varied cultural needs of families."

Findings from the focus groups also revealed that overall, participants hold home visiting services in high regard and believe that families enrolled in home visiting benefit from participation. Stakeholders shared the following opinions about home visiting programs:

"*What I really like about the support staff is that they're very much concerned about the health and wellbeing of the people they serve. They work extremely long hours for not a lot, if we're being frank. But they're committed to the work. They're committed to ensuring that a lot of these, I would say they're younger moms, younger first time moms with a lack of support system, so they want to ensure that they're there.*" (Community Member, National Capital)

"*Like our program director is extremely intuitive about what our needs might be. And so, she makes trainings available to us constantly . . . she tries really hard with the professional development to make it so that what these families are hoping for, and expecting, that they're actually getting the services that are super quality. I would say we have really high quality home visitors.*" (Home Visitor, National Capital)

"*Overall, I feel like home visiting has done a lot for me, and I'm really glad that I do it.*" (Parent, Baltimore Metro)

Finding 2. Maryland's MIECHV program provides a strong Continuous Quality Improvement (CQI) framework for the MIECHV Local Implementing Agencies. Maryland's MIECHV programs have a strong Continuous Quality Improvement (CQI) framework to encourage quality improvements among home visiting programs funded through MIECHV and find ways to enhance maternal and child health in the state as a whole. MD-MIECHV provides a CQI framework to monitor improvement efforts and create best practices for its 14 funded programs. MD-MIECHV also offers training and support through various initiatives and activities for the LIAs to expand CQI knowledge and practices so that programs can meet the program requirements of their respective home visiting models while helping the maximum number of families achieve success (Maryland MIECHV [MD-MIECHV], 2019). The state's vision for this program is "to create a culture of quality," using data collected and analyzed by Maryland's Maxwell data system (MD-MIECHV, 2019, p.1). The range of topics addressed by CQI projects across participating sites is very diverse; however, the most commonly addressed issue is family retention, with over 31% of all programs attempting to address this concern. Additional topics include home visiting completion rate, increased rates of the age stage questionnaire, referral process, and increased community referrals, among others (MD-MIECHV, 2019).

The CQI process has led to some effective improvements, highlighted in MD-MIECHV's FY19 Continuous Improvement Plan. These improvements include more streamlined and timely enrollment processes, increased use of the safe sleep assessment, increased home visiting completion rates, numbers of families served, and the number of workforces that completed the Ohio State CQI training (MD-MIECHV, 2019).

Expanding access to the centralized data system could approve the quality monitoring and improvement of Maryland's home visiting programs. The coordination of home visiting programs by different agencies and organizations creates inefficiencies in service provision and incongruencies in data collection and sharing (MAEC, Inc., 2019; MD-MIECHV, 2019). In October 2018, MD-MIECHV launched Maxwell. Maxwell is a custom-built system designed to collect data required by HRSA but also allow sites to streamline multiple data systems (i.e., ETO, PIMS, and Insight) to facilitate reporting to multiple funders as well as provide access to necessary accreditation data. According to the Governor's Report on Home Visiting (2019), "The Maxwell system has the capability of importing data from other data systems and data formats and thus provides an opportunity for home visiting programs statewide to collect data for this biannual report in a thoughtful and methodical way," (p. 44). The Maxwell data system is currently only available to the 14 MIECHV-funded sites in the state implementing the Healthy Families America model; these 14 sites comprise 21% of home visiting programs in Maryland (p.48).

Finding 3. Maryland's diverse home visiting staff is racially and ethnically representative of the population served, leading to stronger relationships between parents and home visitors. The strength of the relationship between home visiting staff and the families they serve is an important marker of a program's quality. Research has shown that families tend to complete a greater number of home visits if their home visitor comes from the same culture or has a similar background (Maternal, Infant, and Early Childhood Home Visiting Technical Assistance Coordinating Center, 2015).

According to a national survey conducted by the Urban Institute on the career trajectories of home visitors employed by MIECHV-funded agencies, women comprise an overwhelming majority of the workforce (99 percent) (Sandstrom et al., 2020). The lack of gender diversity nationally is present in Maryland, where women made up 97% of the workforce (n=219) during FY 2019 (Governor's Report on Home Visiting, 2019; Sandstrom et al., 2020). Staff hired by home visiting programs in Maryland are diverse in terms of education level, and race/ethnicity. Program staff tend to be predominantly female, following national trends. When it comes to race and ethnicity, the staff in Maryland are representative of the population they serve, in contrast to the national trend which sees home visiting staff as predominantly White.

At the national level, home visitors are not as racially and ethnically diverse as the families they work with: 63% are non-Hispanic White, 16% are Hispanic, 13% are non-Hispanic Black/African American, 4% are Asian or Pacific Islander, 1% are Native American, and 4% are of an unknown or other race/ethnicity (Sandstrom et al., 2020). However, Maryland is representative of the families served. In FY 2019, home visitor demographics included Black or African American (41.5%), White (36%), and Latinx (21%) (Governor's Report on Home Visiting, 2019, p. 18). The demographics of families served by home visiting programs that year were similar: 43% were Black or African American, 21% were non-Hispanic White, 16% White *and* Hispanic, Latino, or Spanish (Governor's Report on Home Visiting, 2019, p. 24). There is a slightly higher percentage of home visitors who are White compared to the population

demographics, and there is a slightly lower percentage of home visitors who are Latinx compared to the population served (Governor's Report on Home Visiting, 2019). Table G shows the correlation between race and ethnicity between home visitors and women enrolled.

Table G. Race/Ethnicity of Home Visitors and Enrolled Women[12]

Race/Ethnicity[13]	Home Visitors	Enrolled Women
Black or African American	42%	43%
White	36%	21%
Latinx[14]	21%	27%
Non-Hispanic Multiracial	—	2%
Not specified	1%	4%
Other	—	1%

Note: Percentages may not total 100 due to rounding

However, home visitors report needing more bilingual service providers and printed materials in more languages. While home visitors are racially and ethnically representative of the families participating in home visiting, there is a need for more bilingual staff to meet the needs of families in parts of Maryland. In focus groups conducted for this needs assessment, five home visitors from the Eastern Shore, Baltimore Metro, and National Capital regions discussed a need for more bilingual home visitors who can provide services in Spanish, French, Farsi, and Pashto.

One home visitor stated that there are two out of seven home visitors that are bilingual, and that "there is a wait list because there are so many people who are interested in being in the program, especially Spanish speakers . . . so it is difficult to kind of accommodate that population." (Home Visitor, Eastern Shore)

Finding 4. Staff turnover in Maryland's home visiting programs is prevalent, and half of home visitor turnover is due to finding better compensation and benefits elsewhere. Out of the 17 key stakeholders ranking findings from this needs assessment in order of importance, 14 ranked this as a top 10 finding out of 30 findings. Staff turnover presents a significant challenge for home visiting sites. It can negatively impact the programmatic level (i.e., model fidelity, program quality, and costs associated with recruiting and training new staff) and retention rates with families (Schaefer, 2016).

The needs assessment stakeholder survey asked three questions of home visitors related to the quality of staff: whether programs have qualified staff providing services, whether they have enough staff providing services, and whether there is low staff turnover. Whereas 99% of home visitors responded that the program they work for has qualified staff providing services, only 50% agreed with the statement that home visiting programs they work for have enough staff providing services. Only 63% agreed that these programs have low staff turnover. The question

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[12] Source: Governor's Report on Home Visiting (2019)

[13] The naming of racial/ethnic categories in this table come from the 2019 Governor's report where the data originated and are slightly different than those reported elsewhere in this report.

[14] This category is an aggregate of the following three categories provided in the Governor's Report on Home Visiting (2019): (1) White and Hispanic, Latino, or Spanish; (2) Multiracial and Hispanic; and (3) Hispanic, Latino, or Spanish and Unspecified Race.

about staff turnover also received the lowest rating out of all quality-related questions among community members. Only 26% agreed that home visiting programs had low staff turnover.

There was a discussion on the impact of staff turnover on family attrition during the conducted home visitor and community member focus groups for this needs assessment. A community member explained that when families develop a relationship with a home visitor who then leaves, having to develop a new relationship with another home visitor acts as an internal barrier. That is why:

"Usually when a home visitor leaves, you see a number of families also drop out of the program as that person leaves." (Community Member, Statewide)

More than half (36/66) of the home visiting sites in Maryland experienced staff turnover during FY 2019. In total, 61 staff resigned, representing 27% of the home visiting workforce. Fifty percent of 36 reporting sites indicated the most frequent reason for staff turnover was home visitors finding better employment opportunities (i.e., better benefits and/or higher salaries), and the second most common reason, at 17%, was categorized as "other," which included staff moving to other states or out of the country, health issues, moving across programs in their organizations, and undisclosed reasons in the Governor's Report on Home Visiting (2019). The report found that since 2017, staff turnover has increased by 1.5% and notes that the retention of home visiting staff remains a concern, and "absent of meaningful intervention in areas identified by home visitors that contribute to turnover, in this case, compensation and benefits, there will likely be very little change in retention or turnover rates with home visiting staff" (p. 47).

Out of a total of 57 interview/focus group participants (21 community members, 18 home visitors, and 18 parents/caregivers), 12 home visitor and community member focus group participants spoke about the salary for home visitors as being insufficient and a catalyst for turnover.

Currently, the highest possible yearly salary for a home visitor in Maryland is $45,455, which is significantly below the average annual mean wage of $60,230 across all professions in the state (Office of Personnel Services and Benefits, 2020a, 2020b; Bureau of Labor Statistics, 2019). One compensation challenge across the state is that there are two separate job classifications utilized within Maryland's Department of Health for home visitor positions: Family Support Worker and Community Health Outreach Worker. The Family Support Worker classification has a yearly salary range between $28,559-$45,455 while the Community Health Outreach Worker classification salary range is $26,929-$41,786 (Office of Personnel Services and Benefits, 2020a, 2020b), potentially contributing to inequities in salaries.

Finding 5. Maryland has made strides in providing and increasing access to training through the UMBC Home Visiting Training Certificate Program. The UMBC Home Visiting Training Certificate Program has favorable immediate and long-term impacts on home visitor knowledge and attitudes; however, not all outcomes had favorable long-term impacts. The UMBC Home Visiting Training Certificate Program is a seven-day training series offered over 12 weeks covering six modules: (1) Communication, (2) Parenting, (3) Substance Use, (4) Mental Health, (5) Healthy Relationships, and (6) Culture. The training program is offered twice a year (once in the Spring and once in the Fall), and participants receive either a Home Visitor Certificate (43 hours) or a Home Visitor and Supervisor Certificate (45 hours) (UMBC Home Visiting Training Program, n.d.). As of 2019, 66% of the home visiting workforce (n=150) had completed the UMBC Home Visitor Training Certificate Program (Governor's Report on Home Visiting, 2019).

In 2015, a randomized trial evaluated the impact of the UMBC Home Visiting Training Certificate Program on home visitor communication around sensitive topics (interpersonal violence, parenting/spanking, maternal depression, smoking, alcohol use, and anxiety). The trial revealed the training course to show favorable long-term impacts on home visitor knowledge and attitudes regarding motivational communication techniques (MCT). Initially, all of the study domains (knowledge, attitudes, confidence, and observed skills in using MCT) observed favorable impacts; however, at two months post-training, the impacts on confidence and skills in MCT were reduced. This finding points to the importance of ongoing supervision, coaching, and additional methods of reinforcement to promote the implementation of skills in direct practice with home visiting participants (Burke & Hutchins 2007; De Roten et al. 2013; Schwalbe et al. 2014; West et al., 2018).

MARYLAND'S STANDARDIZED HOME VISITING MEASURES

The Maryland Home Visiting Accountability Act of 2012 mandates that all home visiting programs funded through state dollars report on standardized measures. While each program collects data specific to its funder and program model, the mandated standardized measures allow Maryland to view the impact of statewide home visiting efforts through a single lens. In 2014, Maryland state leaders, composed of representatives from Maryland's child serving agencies, home visiting programs, and advocates, with technical assistance provided by the Pew Foundation's Home Visiting Campaign, convened to develop the standardized measures. With the exception of measures related to maternal behavioral health, these are directly aligned with MIECHV's benchmarks.

As seen in Appendix K, there are five standardized domains with correlating data points for all home visiting programs in Maryland, irrespective of funding source or program model: (1) Child Health; (2) Typical Child Development; (3) Children's Special Needs; (4) Maternal Mental Health; and (5) Relationships. This needs assessment identified eight findings related to these measures from data in the 2019 Governor's Report on Home Visiting; these are also detailed in Appendix K. Overall, these findings illustrate that while home visiting programs in Maryland promote positive outcomes in children's health and development, screenings related to maternal health are conducted less frequently. Further, there is a considerable difference between rates of referral following a positive screen and rates of treatment engagement following referral for maternal depression and maternal substance use (the latter of which sees lower rates).

IV. CAPACITY FOR PROVIDING SUBSTANCE USE DISORDER TREATMENT AND COUNSELING SERVICES
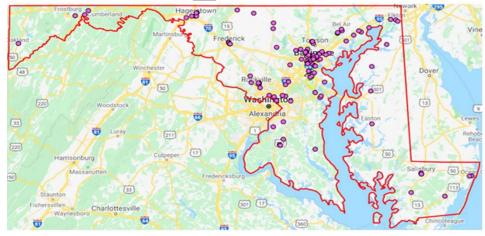
In Maryland, there are various systems and supports to meet the needs of pregnant women and families with young children impacted by substance use disorder. This section further identifies the system of care that is available for MIECHV-eligible families and ensures links to care for MIECHV families. Gaps and barriers in access to care are also identified. This information is important for planning state and local activities to strengthen the system of care. For this needs assessment, based on HRSA's guidance, substance use disorder treatment and counseling services are defined as "a service or set of services that may include medication, counseling, and other supportive services designed to enable an individual to reduce or eliminate alcohol and/or other drug use, address associated physical or mental health problems, and restore the patient to maximum functional ability" (Office of the Surgeon General, 2016, p. 4)

Maryland's strategic approach in addressing overdose death is multifaceted and includes (1) the expansion of public access to naloxone; (2) the Overdose Response Program, which provides individuals training in the administration of naloxone when emergency medical services are not immediately available; (3) the Prescription Drug Monitoring Program (PDMP) which maintains a database of all Schedule II-V controlled dangerous substances prescribed and dispensed in Maryland; (4) Maryland's Good Samaritan Law, which provides limited criminal immunity to individuals calling 911 to help themselves or another person experiencing an overdose crisis; and (5) Overdose Fatality Review teams, which are comprised of multi-disciplinary/multi-agency members that conduct confidential case reviews of overdose deaths and identify state needs, strategies, opportunities for collaboration at the local level, as well as policy, program, and legal recommendations (Behavioral Health Administration, 2020). These activities strengthen Maryland's system of care for preventing unintentional overdoses and substance use disorder, including for pregnant women and families with young children. However, as noted in the findings below, gaps remain for pregnant women and families with young children.

TREATMENT AND COUNSELING SERVICES

Finding 1: Current substance use disorder treatment services do not cover all jurisdictions in the state. While a range of substance use disorder treatment and counseling services are available in Maryland aiming to meet the needs of MIECHV-eligible pregnant women and families with young children, gaps also exist statewide and current services are inconsistent across jurisdictions. SAMHSA's treatment locator map indicates that Maryland currently has 403 substance use (SU) treatment facilities. Twenty-eight percent of these (n=114) offer specifically tailored programs or groups for pregnant or postpartum women (see Figure E), 6% (n=23) offer childcare for clients' children, and 2% (n=7) offer residential beds for clients' children (SAMHSA, 2020). Of the 114 facilities offering tailored programming, 107 accept Medicaid and 30 offer payment assistance for women with low income, no insurance, or who are underinsured (SAMHSA, 2020). Of the 240 facilities that provide services for adult men in the state, 6% (n=15) offer childcare.
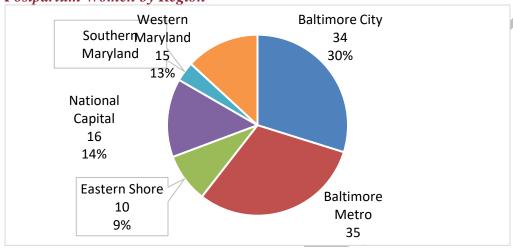
Figure E. Substance Use Treatment Facilities with Tailored Programming for Pregnant and Postpartum Women[15]

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[15] Source: SAMHSA Treatment Locator Map https://findtreatment.samhsa.gov/locator

As seen in Figure E above, Baltimore City has the greatest density of SU treatment facilities with tailored programming for pregnant and postpartum women. Baltimore City contains 30% (n=34) of the 114 treatment facilities in the state. There is a dearth of facilities in Southern Maryland, with only four facilities in Charles and Calvert Counties and on the Eastern Shore with 10 facilities serving seven counties (Caroline, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties). All but three counties (Caroline, Dorchester, and St. Mary's Counties) have at least one SU treatment facility (see Figure F).

Figure F. Substance Use Treatment Facilities with Tailored Programming for Pregnant and Postpartum Women by Region

Only 4% (n=17) of facilities in the state offer tailored programming for pregnant/postpartum women and childcare, with seven of those 17 facilities offering both childcare and residential beds for clients' children (see Figure G). These facilities are located in the Baltimore City region (n=9), Baltimore Metro region (n=4), National Capital Region (n=2), and Western Maryland region (n=2). Figure G highlights the few substance use treatment facilities offering tailored programming for pregnant or postpartum women and childcare/residential beds for clients' children. Table 1 in Appendix L lists each facility offering this tailored programming. Of note, there are no facilities that offer tailored programming and childcare in the Eastern Shore or Southern Maryland regions.

Figure G. Substance Use Treatment Facilities Which Offer Both Tailored Programming for

Pregnant or Postpartum Women and Childcare/Residential Beds for Clients' Children[16]

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[16] Source: SAMHSA Treatment Locator Map https://findtreatment.samhsa.gov/locator, accessed 19 September, 2020

Finding 2. **Nineteen jurisdictions have some or substantial programming in place for substance-exposed newborns and their families. substance-exposed newborns and their families.** When looking at support programming for substance-exposed or opioid-exposed newborns and their families, 18 jurisdictions have programming in place. Two jurisdictions do not have but are in the process of developing programming, and three jurisdictions have no programming nor plans for programming (Maryland Opioid Operational Command Center, 2019). Of note, the language is different for the Opioid Command Center vs. the SEN term more commonly used. "Substance-exposed newborns" covers exposure to all substances (opioids, cocaine, marijuana, nicotine, etc.). "Opioid-exposed" is specific to opioid and opiate exposure and often is focused on because the withdrawal syndrome for babies is more severe.

Finding 3. **Home visitors have diverse training needs and interests, particularly related to substance use.** In a national survey conducted by the Urban Institute on the career trajectories of home visitors employed by MIECHV-funded agencies, home visitors indicated a preference for trainings that delve deeply into topics important to them, and have the content in trainings be relevant to their local service population rather than provide overly generalized, surface-level information (Sandstrom et al., 2020).

The variance in training needs of home visiting staff suggests a need for tailored training for individual home visitors or program sites. In focus groups conducted for this needs assessment, home visitors spoke to the need for training on IPV, substance use, culturally responsive services for Native American families, and more training specific to home-based services as opposed to center-based. In the survey conducted for this needs assessment, of the 229 home visitors who responded: 77% of home visitors agreed with the statement "I am confident I can address the needs of families impacted by substance abuse;" 85% reported feeling confident they can support caregivers who screen positive for intimate partner violence; 90% reported feeling confident in addressing the needs of families of children with special needs; and 92% reported feeling confident in addressing varied cultural needs of families (see Appendix E, Table 4 for descriptive statistics for these survey items).

GAPS AND BARRIERS TO RECEIPT OF SERVICES

Overarching Finding: **There is a high prevalence of substance use among pregnant and postpartum women in Maryland and unintentional overdose is the leading cause of maternal death in Maryland.** In the survey conducted as a part of the MIECHV needs assessment, 50% of parents, 72% of home visitors and 69% of community members reported they have seen a rise of substance use/abuse in the state. Maryland has one of the highest rates of opioid-related deaths in the country (National Institute on Drug Abuse, 2020). The Centers for Disease Control and Prevention (CDC) reported that in 2014, Maryland ranked 5th in the number of pregnant women using opioids out of 25 states and the District of Columbia where data was available (Haight et al., 2018). In FY 2016, the aggregate number of pregnant women in substance use (SU) treatment in Maryland was 1,553 and the number of women with dependent children in SU treatment was 15,277 (Behavioral Health Administration, 2017). Unintentional overdose/substance use is the leading cause of maternal death and significantly impacts the approximately 1,500 infants born to Medicaid beneficiaries diagnosed with opioid use disorder (OUD) in the state per year (Maryland Medicaid Managed Care Program 2020; Maryland Maternal Mortality Review, 2020).

Finding 1: Some of the gaps and barriers to receipt of service include lack of facilities that offer childcare and transportation, long waiting lists, and a lack of culturally responsive practices. Although Maryland is meeting the needs of pregnant women and families with young children who may be eligible for MIECHV services in many jurisdictions (particularly in Baltimore City), there are disparate services for SU treatment across the state. In the analysis of at-risk jurisdictions conducted for this needs assessment, the only jurisdiction in the state that was elevated in the "substance use treatment rate" indicator was Baltimore City (see Needs Assessment Data Summary, Table 5). Because the highest density of treatment facilities in the state is located in Baltimore City, it follows that Baltimore City has the highest SU treatment utilization rate.

Childcare is an important promoter of treatment initiation and engagement, as women are more likely to seek and remain in treatment longer if they are able to maintain their caregiving role while engaged in treatment (Office on Women's Health, 2016; HRSA, 2018). In a survey completed by Maryland home visitors (n=60) in 2018, 39% indicated families they serve have difficulty accessing SU treatment, largely due to a lack of childcare and transportation (West, Madariaga-Villega, & Correll, 2019). This barrier is reflected in SAMHSA's (2020) treatment locator data, as there are only nine facilities for pregnant or postpartum women seeking tailored programming, transportation assistance, and childcare and/or residential beds for their child(ren). These facilities are located in the Baltimore City (n=5), Western Maryland (n=2), Baltimore Metro (n=1), and National Capital regions (n=1). Participants in the interviews and focus groups conducted as a part of the MIECHV needs assessment discussed the lack of childcare for treatment facilities:

"*In our community, there's a lot of wait lists. And that's what the big problem is. And then some of these moms that don't have someone that they can leave their child or children with.*" In order to engage in inpatient treatment that offers childcare, mothers "*would have to go across to the other side of the state, and there's a wait list over there.*" (Home Visitor, Eastern Shore)

Interview and focus group participants identified additional gaps and barriers in Maryland's current service landscape for SU treatment, such as a lack of data collection on the capacity of facilities at the state-level and a lack of bilingual treatment providers. Additionally, long wait lists were cited as a barrier to accessing treatment.

While Maryland has increased access to residential SU treatment facilities through Medicaid's §1115 demonstration waiver, significantly long waiting lists remain for pregnant women. As a result, expansion of residential treatment capacity for pregnant women is a priority for the state (Cunningham et al., 2020).

Finding 2: Home visitors report an increase in marijuana use among adolescent mothers and a lack of treatment options for marijuana use. Through focus groups conducted for this needs assessment, four home visitors from Baltimore City identified an increase in marijuana use, particularly with adolescent mothers. Home visitors spoke about an increase in marijuana use, the use of marijuana as a coping mechanism for depression, participants' perceptions that marijuana is not an addictive substance, and the lack of resources for adolescents regarding marijuana use.

"It just seems like when I talk to my clients—especially the ones that are depressed—they seem to use marijuana to help them cope and help them relax. The sad part about it is there are not many treatment areas for clients with marijuana." (Home Visitor, Baltimore City)

Finding 3. **Home visitors report a need for training on various substance use topics.** In a 2018 survey of 60 home visitors in Maryland to assess their experiences communicating with and coordinating services for families with SU challenges and/or substance-exposed newborns, 84% reported working with clients experiencing SU challenges (West, Madariaga-Villega, & Correll, 2019). Close to half identified needing more training on referring mothers to SU treatment (44%), coordinating services with SU treatment providers (48%), linking mothers with treatment (49%), and identifying resources for SU (55%) (Guerrero-Ramirez, West, & Barnet, 2018b). The results of this survey helped inform the collaborative MIECHV-funded SEN training for home visitors from MIECHV, DHS, and Infants and Toddlers mentioned further detailed in "Opportunities for Collaboration" below. In the stakeholder survey conducted as a part of this needs assessment, 33% of home visitors (n=228) reported they do not feel confident to address the needs of families impacted by SU. Out of five items asking about home visitor confidence to meet different family needs including cultural needs, the needs of families with special needs, supporting the needs of families impacted by substance use/abuse and support for caregivers who screened positive for intimate partner violence, this was the lowest scoring item, possibly indicating the highest need around trainings related to SU, compared to other topics.

Finding 4. **Less than half of the women in home visiting programs who screen positive for substance use are referred to treatment and less than fifty percent of those referred receive treatment.** Opioid and substance use screening isn't part of the MD standard measures, nor is it part of the current MIECHV measures, but that doesn't lessen its importance. Out of 66 sites that responded to the survey for the Governor's Report on Home Visiting (2019), 28 (42%) conducted routine substance use screenings of enrolled women in FY 2019, screening 1,337 out of 1,515 women (88%) due for a substance use screening. The lack of mandated screening may explain low screening rates. However, with the Governor developing the Heroin and Opioid Emergency Task Force, that provides 33 recommendations focused on prevention, treatment, and enforcement to aggressively combat the opioid and heroin crisis, substance use will be more closely measured moving forward.

Looking at FY 2019 data, only 19% of women who screened positive initiated or continued treatment for substance use (Governor's Report on Home Visiting, 2019). Out of the 17 key stakeholders who ranked findings from this needs assessment in order of importance, nine ranked this need as a top 10 finding out of 30 findings.

OPPORTUNITIES FOR COLLABORATION AND CURRENT ACTIVITIES

Maryland has engaged in several opportunities for collaboration with state and local partners to address gaps and barriers to care for pregnant women and families with young children. These initiatives are described below.

Working with Families with Substance-Exposed Newborns

In response to the Maryland governor's state of emergency as well as hearing challenges across agencies from front line staff that work with SENs and families experiencing substance use disorder, the MD-MIECHV team decided to create an interdisciplinary training for home visitors across sectors. In 2018, MD-MIECHV partnered staffing and dollars, and with UMBC and DHS, developed a workforce training for staff from three sectors who provide services for families with SENs: (1) MIECHV home visiting, (2) DHS/SSA child welfare, and (3) the MSDE: Infants and Toddlers program and Early Head Start home based option. The regional training includes eight online modules and a one-day in-person training, and brings together

family and child service providers by region to increase communication and collaboration among various program staff (UMBC Home Visiting Training Program, n.d.). To date, 119 program staff have been trained statewide, and participants across the three sectors saw an increase in knowledge of and confidence in working with families with SENs and engaging in interagency collaboration (see Appendix M for evaluation of the training). Due to the success of the training, the state plans to continue to offer it (Maryland Department of Human Services, 2019; University of Maryland Baltimore County, 2019).

Maryland Medicaid's Maternal Opioid Misuse Model: In January, 2020, MDH launched the Maternal Opioid Misuse[17] (MOM) model in collaboration with the Centers for Medicare and Medicaid Services (CMS) and with funding from the Center for Medicare and Medicaid Innovation (CMMI). Maryland is one of 10 states who received cooperative agreement funding from CMMI to implement this model, and will receive $3.6 million between January 1, 2020 and December 31, 2024 to implement the model. Based upon achievement of performance targets, the state has the opportunity to receive an additional $1.5 million from CMMI (Maryland Medicaid Managed Health Program, 2020).

The MOM model seeks to improve the quality of, and access to, care for pregnant and postpartum Medicaid beneficiaries diagnosed with OUD (MDH, 2020). Maryland's MOM model is a multi-pronged statewide approach that addresses care fragmentation through engaging the state's nine managed care organizations (MCOs) in collaborative work, improved data infrastructure, and strengthened provider capacity to treat pregnant and postpartum women with OUD (Center for Medicare and Medicaid Innovation, 2018; MDH, 2020). The model has three targeted initiatives: (1) increase the utilization of ambulatory and behavioral health care, such as medication-assisted treatment; (2) improve provider capacity, particularly in rural areas, to treat pregnant and postpartum women with OUD; and (3) leverage enhanced care coordination and health information technology to ensure families have access to needed community resources (Maryland Medicaid Managed Health Program, 2020).

Universal Training on Neonatal Abstinence Syndrome for Hospitals' Multidisciplinary Staff
The number of infants hospitalized for Neonatal Abstinence Syndrome (NAS) increased annually between 2009 (n=577) and 2014 (n=1,005). That number has since decreased, with 952 infants hospitalized in 2016 and 946 infants hospitalized in 2017 (Healthcare Cost and Utilization Project, 2019). To address the rates of infants born with NAS, the Maryland Patient Safety Center partnered with the Vermont Oxford Network (VON) in 2016 to provide universal training to 32 hospitals; the training included rapid-cycle distribution of evidence-based practices to the whole multidisciplinary workforce that provides care for substance-exposed newborns (SENs) and their families. Maryland was the first state to receive the State of Excellence in Education and Training award for NAS, which recognizes that at least 85% of multidisciplinary care teams participating in the Maryland Patient Safety Center's "Neonatal Abstinence Syndrome Collaborative: Improve Care to Improve Outcomes" completed the training. As a result of this partnership, participating hospitals decreased the average length of stay of infants with NAS treated pharmacologically to three days and saw a 51.6% decrease in transfers out of the birth hospital. The number of infants born with NAS treated pharmacologically and discharged to their home increased by 20.8% and the number of infants who were breastfed by

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[17] [Maryland Maternal Opioid Use (MOM) Model](#) 29

their birth mother in the 24 hours preceding discharge increased by 18.3% (Vermont Oxford Network, 2019).

Coordination and Collaboration Through Title V, Head Start, and CAPTA

Title V: In an effort to collaborate between the Title V and MIECHV needs assessments, staff working on the Title V needs assessment shared the following information with the MIECHV needs assessment team. According to the 2020 Title V needs assessment, females were less likely to die of drug- and alcohol-related intoxication death than their male counterparts (640 vs. 1,766, respectively). However, both genders are seeing an increasing trend throughout the state. Since 2015, roughly half of Maryland women reported having an alcoholic drink in the past 30 days. Consistent with the national trend, approximately 5% of Maryland women reported having had more than seven drinks per week. According to the CDC, smoking is the leading cause of preventable death. In 2018, women in Maryland reported smoking less frequently than the national trend (69.1% and 64.0 respectively). Approximately 30% of Maryland women reported smoking at least some days. In Maryland, Title V funds are used for local health departments to support the linkage of SU treatment for women of childbearing age, support screenings and referrals for SU and to support the standardization of care for infants born with NAS (Maternal and Child Health Bureau, 2019).

Head Start and the Maryland Early Childhood Education System: Maryland Head Start Association's (MHSA) 2019 strategic plan includes a goal to support, advocate and partner with programs in efforts to provide resources, education, advocacy, and access to care around SU. Some strategies identified to help achieve this goal include partnering with the Department of Health, Children's Mental Health Matters, Maryland's Early Childhood Mental Health Steering Committee and the Office of Head Start Training and Technical Assistance Network to provide training and resources on Mental Health and Substance misuse at workshops, conferences, institutes, and meetings with a focus on Naloxone training and/or resources to find Naloxone training. MHSA's strategic plan also urges continuing to engage local and state community providers to participate in roundtable discussions and networking forums to discuss program needs, policies, and procedures.

The PDG B-5 Needs Assessment also cites SU as a major concern in the state, particularly the strain that drug addiction places on the Maryland Early Childhood and Education System. Stakeholders in the PDG B-5 needs assessment reported problems supporting and finding childcare for children who are born with substance dependency. Children exposed to substances may exhibit decreased executive functioning and increased challenging behaviors, making childcare placement difficult where the staff ratios often do not allow the 1:1 care needed. Healthcare providers are overwhelmed by the number of referrals. This was particularly severe in the Western Maryland region, where according to community partners, the opioid crisis had created a much greater need in recent years for mental health support for children in their communities.

CAPTA: According to data provided by the Maryland Department of Human Services, from the Child and Adolescent Needs and Strengths, Family Functioning (CANS-F) assessment, SU was the most common actionable need for caregivers affecting 678 caregivers or 9.7% of 6,973 caregivers in Maryland (MAEC, 2019). The CANS-F is a multi-purpose tool developed for children's services to support decision making, including level of care and service planning, to facilitate quality improvement initiatives, and to allow for the monitoring of outcomes of services. Maryland's State Council on Child Abuse and Neglect's (SCCAN) 2019 Annual Report

calls out parental drug and alcohol abuse as a documented risk factor for child abuse and neglect. However, the report notes a concern regarding the accuracy of data gathered in Maryland about this risk factor, citing discrepancies between data sources. Whereas the U.S. Department of Health and Human Services Administration for Children and Families Child Maltreatment data shows that 5.1% of child maltreatment caregivers had substance use disorder and 2% had a caregiver with alcohol as a factor, the Maryland Department of Human Services data collected for Maryland's IV-E waiver indicates parental SU was a factor in removal decisions for 29% of all children removed from their homes in FY2012-2014. Based on the underestimation in the first set of data, there is a concern that parental risk factors associated with alcohol and SU many be inaccurately identified by child welfare workers and undocumented (SCCAN, 2019). The report also calls out a considerable need for improvement in providing comprehensive data and analysis of childhood adversity for both individual case determination and systems improvement decision-making, especially around ACEs of children involved in child welfare including data on parental SU, requiring collaboration and coordination between agencies serving these children and their families. CAPTA also stresses the importance of a partnership between DHS/SSA, MDH, local Core Service Agencies at BHA, and the Local Addiction Authorities to provide Family Mentors in the Sobriety and Treatment Recovery Teams (START) SU treatment model for child welfare-involved families (Maryland Department of Human Services 2019). Appreciating the importance of shared knowledge and effective collaboration and coordination amongst the sectors that serve families with SENs, the MD-MIECHV developed and offered the cross-sector training for frontline staff detailed above.

V. COORDINATION WITH TITLE V MCH BLOCK GRANT, HEAD START, AND CAPTA NEEDS ASSESSMENTS

This section addresses how the MD-MIECHV Needs Assessment coordinated with other data collection efforts in the state. These data collection efforts include the Title V MCH Block Grant Five-Year Needs Assessment, data associated with the Maryland State Department of Education Head Start programs, the PDG B-5 needs assessment, data collected through the coordination of Maryland's Department of Human Services (DHS), and the Maryland Family Network (MFN) who administers the Child Abuse, Prevention and Treatment Act (CAPTA) funds for Maryland. It summarizes findings related to how well home visiting programs coordinate their services and collaborate with other programs designed to serve the needs of young children and their families in the state, especially with early interventions and child welfare. This section also describes coordination with other agencies and needs assessments, and how this coordination informed this assessment of risk, unmet need, and gaps in care. MD-MIECHV is a partner in meetings, grants, and planning activities related to MSDE, MFN, and DHS. These coordinated efforts to include home visiting at town halls resulted in completing preliminary work for the MIECHV needs assessment and further informed the PDG B-5 plan. Also, receiving a Pritzker grant to move the needle on early care and acting as a planning partner on the Families First Prevention Act helps ensure home visiting has a voice at the table as part of a comprehensive system of care. Title V, part of the agency where MD-MIECHV also sits, is a partner in this coordinated effort to support families and children and collect relevant data.

METHODS USED TO INCORPORATE DATA

As described in Section I, this needs assessment uses a mixed-methods approach consisting of a literature review, a quantitative analysis of data to identify "at-risk" jurisdictions, a survey, focus groups with home visitors and community members, and interviews with parents/caregivers. Data and information from other needs assessments were incorporated into the literature review

and used to inform instrument development for the other data collections. As a part of the literature review, current data and reports related to Title V, Head Start, and CAPTA was reviewed (see Table H). Information from each of the reports was synthesized and used to develop the survey instrument and focus group questions. This data, and data collected from other sources were triangulated and incorporated into the literature review. Additionally, data collected from the focus groups and interviews are also incorporated into the findings listed in Sections III and IV.

Table H. Reports Related to Other Needs Assessments Used in the MIECHV Needs Assessment

Agency/Organization	Reports Used in the MIECHV Needs Assessment
Title V/MCH: Three offices jointly administer the Title V Program within the Maternal and Child Health Bureau (MCHB) at MDH: The Office of Family and Community Health Services, the Office for Genetics and People with Special Health Care Needs, and the Office of Quality Initiatives. The Title V Block grant is an annual application with a needs assessment conducted every five years.	● 2016 Needs Assessment Report ● 2018 Annual Report ● 2020 Needs Assessment Report
Head Start: The Maryland Department of Education (MSDE) has been the Head Start Collaboration grant administrator and provides technical assistance in aligning Head Start services with early learning programs in the Public Schools (Maryland Head Start State Collaboration Office, 2015). There are 56 Head Start Programs in Maryland: 20 Head Start Programs serving 8,561 children, and 36 Early Head Start Programs serving 2,557 children and 209 pregnant women (Maryland Head Start Association, 2019).	● 2015 Maryland Head Start State Collaboration Office Needs Assessment Report ● Maryland Head Start Association's 2019 Program Information and Needs Assessment Report for the State of Maryland ● 2019 PDG B-5 Needs Assessment
CAPTA: The Governor designated the Maryland Department of Human Services (DHS) to administer the Child Abuse and Prevention and Treatment Act (CAPTA). The Maryland Family Network (MFN) is the state's designated CAPTA Title II agency.	● 2018 Maryland State Council on Child Abuse and Neglect Annual Report ● 2020-2024 Child Family Service Plan and the Title IV-B Child and Family Service Plan Annual Progress ● Service Report, which includes needs related to child abuse prevention and treatment as a part of CAPTA.

Incorporation in the literature review: The MIECHV needs assessment included the most current data and reports in the literature and document portion of the data collection. They are described in this section of the report.

Incorporation in identifying "at-risk" indicators: Stakeholders representing Title V, Head Start, and child welfare agencies were included in the 2015 data collections that led to selecting indicators used in this needs assessment. Many of the indicators--including Premature Birth, Low Birthweight, Infant Mortality Rate, Very Preterm, and Very Low Birth Weight--align with indicators in the Title V State of Perinatal Health of Maryland Women and Infants annual report. To capture the importance of preventing child abuse through home visiting programs, three indicators for child maltreatment were used as an indicator of risk: Child Injury Emergency Department Visit, Protective Orders, and Abuse Rate.

Incorporation in other data collections: As detailed in Section I, stakeholders representing Title V from the Maryland Department of Health's Maternal and Child Health Bureau (MCHB), Head Start programs from MSDE, Maryland DHS, and MFN all served on the MIECHV Needs Assessment Steering Committee. The MIECHV Needs Assessment Steering Committee facilitated ongoing communication with the Title V MCH Block Grant, Head Start, and CAPTA representatives to ensure findings and data from respective needs assessments are shared on an ongoing basis. Steering committee members also served an important role in publicizing the MIECHV needs assessment survey instrument to stakeholders across the state and helped recruit participants for the focus groups. As a result of these efforts, representatives from local health agencies, Early Head Start home visitors, Head Start teachers, and representatives from the child welfare system were represented in the focus groups and provided important insights for this needs assessment.

IDENTIFICATION OF SERVICE GAPS IN AT-RISK COUNTIES

After reviewing the needs assessments referenced above, some themes emerged as gaps in services across at-risk communities. These include difficulty accessing public services in certain parts of the state, particularly in the Eastern Shore, Southern Maryland, and Western Maryland counties, transportation problems for participants, inequities related to services, especially prenatal care for Black, AIAN, and Latinx families, as well as a need for greater access to mental and behavioral health treatment. These needs are discussed in great detail in Section III of the needs assessment report. Furthermore, all of the needs assessments acknowledge the importance of curtailing and addressing substance use in the state, as discussed in Section IV of this report. This section highlights other needs affecting at-risk communities relevant to home visiting that were not yet highlighted in Sections III and IV.

There is a health care workforce shortage in the state: Throughout the state, there are federally designated health professional shortage areas and medically underserved areas/populations -- especially in urban and rural areas. According to data from the HRSA Data Warehouse, 19 of Maryland's 24 jurisdictions are either entirely or partially federally designated as health professional shortage areas for primary and dental care, while 18 are shortage areas for mental health (Maryland Department of Health, 2019).

There is a need for infant safe sleep education across agencies: Unexplained deaths in infancy comprise 'sudden unexpected infant death' (SUID) and deaths without ascertained cause. They are typically sleep-related, perhaps triggered by unsafe sleep environments. Preterm birth may increase risk, and varies with ethnicity. In 2017, 16.8% of mothers reported not placing their infants on their back to sleep, and 41% reported letting their baby sleep on a blanket (Maternal and Child Health Bureau, 2019). Although sleep safe is a priority in Maryland, more aligned and comprehensive education supporting this topic is needed. To decrease infant death, the state is working with the Office of Minority Health and Health Disparities to present safe sleep information to new parents and other caregivers in a more culturally sensitive way. Title V is working with Morgan State University on a related effort.

More support is needed for families affected by incarceration: The Maryland Head Start Association's 2019 Program Information and Needs Assessment Report specified that approximately 90,000 children in Maryland have a parent under some form of correctional supervision--parole, probation, jail, or prison. Most of these children live in communities with high unemployment, reliance on public assistance, high dropout rates, and large numbers of

vacant and abandoned houses. The report identified a gap in Head Start staff's preparation, planning, and strategies, including home visitors for working with parents that are re-entering the community after incarceration (Maryland Head Start Association, 2019).

More support is needed for families experiencing homelessness: According to the Maryland Head Start Association's 2019 Program Information and Needs Assessment Report, as of January 2018, 7,144 families in Maryland are experiencing homelessness any given day. However, according to the needs assessment, programming, and assistance for families experiencing homelessness is often fragmented. The needs assessment suggests working with the Health Manager Network and partnering with other agencies to raise awareness of this issue.

There is an absence of mandated leadership to focus on primary prevention of child maltreatment*:* Maryland has not identified a state agency specifically mandated to focus on primary prevention of child maltreatment. Without mandated leadership, there is no formal cross-sector statewide strategy for promoting child well-being and preventing child maltreatment and other adverse childhood experiences (ACEs) before they occur. Current prevention efforts are fragmented across agencies (SCCAN, 2018).

Children return to the welfare system in Maryland at rates that are concerning: The Child and Family Service Plan assessment found that Maryland has a relatively high rate of recurrence of maltreatment and a high rate of return to foster care in 12 months compared to national averages. Further, children in Maryland generally remain in care for more extended periods of time than is typical in other parts of the United States (Maryland Department of Human Services, 2018).

COVID-19 Considerations: Reports of child abuse and neglect have fallen sharply in Maryland since the coronavirus pandemic shut down most of the state, shuttering kids in their homes and away from the watchful eyes of teachers, health care workers, and extended family. DHS data shows a dramatic decline in reports of children suffering possible harm, but that's at the same time systems charged with protecting them have been hampered in their outreach by the pandemic. Caseworkers are conducting some safety checks on families by phone or video, but many believe that child maltreatment is going unreported. Especially worrisome is that families endure severe pressure from job losses, depression, and substance use triggered by isolation and unavailable mental health services. Across Maryland, Child Protective Services offices received nearly 70% fewer calls during the first two weeks in April compared to the same period last year. In 2019, officials got 958 calls in the first half of April. The state received 320 calls for the same period this year (Wenger & Knezevich, 2020) As one community member noted during a focus group:

"*We also have families who[se] experience with domestic violence ha[s] increased during this time since they are at home with their partners who are the main abusers.*" (Community Member, Baltimore Metro)

IDENTIFICATION OF SERVICE DUPLICATION

Many services targeted at the most vulnerable families are not well-coordinated, leading to duplicative data collections and application processes for families: Many of the needs assessments reviewed stressed the importance of a coordinated approach to services in order to achieve success. For example, the Maryland SCCAN Annual Report stressed that children and families involved in child welfare are often involved in multiple public systems. It is essential that these systems work in unison, share data effectively, and coordinate services to meet children's needs, including health care (SCCAN, 2019). However, as highlighted by the PDG B-

5 Needs Assessment, services for the most vulnerable populations in the state are often not coordinated. For example, a low-income family may qualify for services such as home visiting through MIECHV, Temporary Assistance for Needy Families (TANF), and the Child Care Scholarship. However, these three programs are currently coordinated through three separate government agencies (MDH, DHS, and MSDE). Therefore, the requirements for participation, the documentation required to qualify, and the application processes are different and not coordinated (MAEC Inc., 2019). This leads to duplication of data collections and creates a burden on families who often have to provide the same documents to different agencies to receive services. This uncoordinated system results in many low-income children participating in incongruent public programs over multiple years (MAEC Inc., 2019).

Duplicative aspects of home visiting and programs offered through Infants and Toddlers: In the focus groups conducted as a part of the MIECHV needs assessment, one issue raised was duplicative screenings conducted by home visitors and representatives from Infants and Toddlers. Home visitors reported wanting to see better collaboration between Infants and Toddlers and home visiting, with home visitors providing input into the developmental evaluation and the Individualized Family Service Plan (IFSP) process. In focus groups, some home visitors, especially in Baltimore City, reported challenges in coordinating services available to children with disabilities through Maryland's Infants and Toddlers program and home visiting. Challenges included scheduling visits, administering the respective curricula specific to the enrolled program, data sharing, and re-administering screenings. Conversely, home visitors in Prince George's County reported working in tandem with service providers from Infants and Toddlers to support the child and family mutually.

IDENTIFICATION OF CHALLENGES OR BARRIERS TO RECEIPT OF SERVICES

There is no integrated data management system: All the reviewed needs assessments highlighted the need for a more centralized data collection system across the state. The discussion described current data collection barriers as often duplicative and disjointed. As one of the home visitors explained:

"...we have different curriculums. . . I know if it's a toddler working on certain words, I don't want to come in with a whole new set of words and confuse the child and it's kind of like a reboot when another Infants and Toddlers worker comes in to do the same thing. So [it would help] if I knew exactly what was happening, then I could kind of piggy-back off of them to keep a routine for the child and their mom." (Home visitor, Baltimore City)

The Title V Needs Assessment discussed Maryland's State Systems Development Initiative Project focused on improving epidemiologic and capacity data at the state level as a tool for strengthening the state's ability to monitor and report on Title V performance measures and indicators. Gaps in this system hinder state and local capacity to access and prioritize needs, develop annual plans, and monitor program performance (Maternal and Child Health Bureau, 2019). The 2019 Need Assessment conducted by the Maryland Head Start Association highlighted the need to work with the state efforts to collect data regarding early childhood programs and child outcomes. According to this report, Head Start programs in Maryland use at least seven different management information systems. Many of them do not use the systems to their full potential.

The report highlights that a bridge between systems would help to reduce the workload when children transfer between Head Start programs and the Local Education Authority. The PDG B-5 Needs Assessment also called out a lack of a uniform data system across the state that makes it

difficult to track children's needs and outcomes. There is little standardization around what data is collected, how often, and how to report it to be best used to inform other agencies who might interact with the same child or family (MAEC Inc., 2019). Finally, according to the SCCAN Annual Report, there is a considerable need for improvement in providing comprehensive data and analysis of childhood adversity for both individual case determinations and systems improvement decision-making. Many key data points are either not regularly and systematically collected or are not readily accessible and therefore, not analyzed. Current systems have a plethora of duplicative data. However, little sharing occurs between systems, and multiple systems working with the same families do so with little knowledge and coordination of services provided in other systems (SCCAN, 2019).

There is no centralized tracking system of services received: The Maryland Head Start Association found it necessary to continue supporting efforts to collect data and track children's outcomes, including those receiving home visiting services. According to the needs assessment, there is a substantial need for a state identifying number to ensure that data on children is collected and reported accurately (Maryland Head Start Association, 2019). Maryland's SCCAN Annual report highlights the need for data that tracks referrals for services and actual links to services provision. There is an absence of data to verify how children are receiving necessary health and mental health services and care coordination. The report also highlights a need to track long-term outcomes for children and families and require tracking the life course across systems. Unfortunately, Maryland's current systems track only short-term system-specific outcomes.

Maryland parenting education and services often operate in silos: Overall, the reviewed needs assessments revealed that parenting education and many services in the state continue to operate in silos, with each program operating relatively independently in achieving its goals, defining populations served, finding funding sources and delivering services. This often leaves parents in the dark about what services are available and where to locate them (MAEC Inc. 2019). The default professional for many parents of young children is the family pediatrician, who may not be qualified to answer questions or provide services on child development and learning.

Coordination of home visiting programs varies by agency and organization, creating inefficiencies in service provisions. Improvements in service coordination is one of six benchmark areas required for MIECHV program grantee data collection and reporting (HRSA, 2016). In 2018, a survey of home visitors across the state (n=60) revealed a prevailing majority (80%) see collaboration with early intervention, child welfare, and substance use treatment providers as essential to effectively working with families, and most stated that their program expects them to communicate with such providers (Guerrero-Ramirez, West, & Barnet, 2018b). However, in the same survey, 17–22% were uncertain about program expectations surrounding communication with other service providers. The majority of home visitors surveyed (62%) reported having effective working relationships with the early intervention program, but 38% reported having ineffective or no working relationships with the program. According to the survey, there was less coordination with child welfare and substance use treatment providers, with a majority of home visitors stating they have ineffective or no working relationships with child welfare workers or substance use treatment providers (61% and 70%, respectively) (Guerrero-Ramirez, West, & Barnet, 2018b).

There is a lack of a unified message about home visiting and its benefits. In focus groups conducted as a part of the MIECHV needs assessment, home visitors listed no fewer than 20

distinct common referral services to home visiting programs. External services appear to share inconsistent information about home visiting with families who are eligible for services. Community members and families receiving home visiting services report widespread confusion about what home visiting is and what it does.

"I think it's important to educate the hospital staff in terms of how to present the programs, because quite often when the home visiting staff would call, [families] would say, 'Well, I didn't understand what this was about when referral was made.' I think it's like having everyone on board with a uniform message of support." (Community Member, Western Maryland)

Moreover, external organizations that were confused about home visiting had difficulty learning more about the program without a direct discussion with someone involved in monitoring and maintaining MIECHV sites.

Home visitors who enjoyed stronger relationships with home visiting referral services (due to proximity of offices, small community, and personal relationships) did not notice the lack of a unified message about home visiting and its benefits.

Public services are not always culturally responsive to Native Americans. Whether or not a service is culturally responsive or easily accessible is a key consideration for providers who work with Native American families in Maryland. A focus group was conducted with community members who provide services for the primarily urban Native American population in Maryland. Community members stated it was important that the agencies they refer clients to are trained in providing culturally responsive services.

"*I prefer not to refer anyone to a program or an agency unless I feel like I have faith in it . . . [when making a referral] we try to make sure that entities are also hopefully educated in some way on Native providers. A lot of the referral streams that I know I use, they're places that [have] requested or been engaged with us for our trainings and basically work with indigenous populations*." (Community Member, Baltimore City)

OPPORTUNITIES TO STRENGTHEN AND IMPROVE SERVICE COORDINATION

Maryland already has many programs that offer wrap-around services and support to vulnerable families: Many of the needs assessments reviewed focused on the importance of wrap-around services. The Title V needs assessment discussed the improvement of wrap-around public health and social services for at-risk pregnant and postpartum women as a strategy for improving statewide perinatal and infant health (Maternal and Child Health Bureau, 2019). The SCCAN Annual report urged Maryland to focus on preventing ACEs whenever possible as well as ensuring wrap around services for children, families, and communities. Parents in Maryland would benefit from a comprehensive and transformative preventive system that improves child development (SCCAN, 2019). These coordinated systems, including child abuse and domestic violence prevention, early childhood home visiting, mental health and substance use treatment can help align systems to more efficiently support children and families. Improvements in connecting families to community resources through wrap-around services are also a strategy that could prevent entry and re-entry of children into the child welfare system (Maryland Department of Human Services, 2018).

Maryland already has several such wrap-around services. Maryland's Family Support Center Network is designed to strengthen families and link them to economic success strategies through high-quality programs that support child development. Judy Centers provide comprehensive family supports and are an important and unique-to-Maryland hub for families located at or near schools in areas with high concentrations of poverty. Local DHS offices and local health

departments also serve as essential agents providing wrap around services by helping families plug into assistance and support services. Expansion of such services can help strengthen supports available to MIECHV-eligible families.

Centralized intake through HealthCare Access Maryland (HCAM) can improve access to services. The needs assessment found that in most jurisdictions, referral to home visiting is via word of mouth. This is not the case in Baltimore City, where several organizations partner to centralize intake through HealthCare Access Maryland (HCAM). When an eligible patient is identified, an alert is sent to HCAM via a care coordination platform developed by Audacious Inquiry. The notification triggers triaging events that result in the patient's connection to prenatal care services in the community. During a 2018 pilot study, this automated referral program contributed to significant increases in patients referred to HCAM, 83% of whom had no previous documentation of prenatal care (Audacious Inquiry, 2018).

Coordination between home visiting and primary care medical homes can promote better health and development: One of the objectives of Maryland's MIECHV program is strengthening coordination between primary care medical homes and prenatal, infant, and early childhood home visiting in the state. Medical homes and home visiting programs focus on the same communities who are experiencing: high levels of poor mental health and child development; high prevalence of infant mortality; low birth weight; and substance use. Additionally, focusing on the same families promotes better health and development outcomes, and prioritizes family-centered care/services (Barnet et al., 2016). In order to strengthen the coordination between medical homes and home visiting, Maryland created an enhanced coordination pilot in 2017 between two home visiting sites in Baltimore City and a medical home in the area.

The pilot was developed and involved two home visiting programs in Baltimore City, a medical home, and 18 home visiting participants between August 2017 and April 2018. Post-pilot, key findings included a shared desire to improve coordination between home visiting programs and medical homes and through coordination knowledge, beliefs, behaviors generally improved, however overall levels of coordination remained low.

Following this pilot, the state is collaborating with Maryland's Health Information Exchange, Chesapeake Regional Information System for our Patients (CRISP), to facilitate care coordination between MD-MIECHV programs and other care teams working with families by piloting home visitor access to consenting clients' health information in the CRISP system. Maryland is also exploring the CRISP platform's feasibility to support an information exchange with the MD-MIECHV data system, Maxwell (Audacious Inquiry, 2018).

EFFORTS TO CONVENE STAKEHOLDERS TO REVIEW AND CONTEXTUALIZE THE RESULTS OF THE NEEDS ASSESSMENT

As discussed in Section I, a steering committee was formed to guide and inform the MD-MIECHV needs assessment, including representatives from Title V, MSDE (the agency that administers Head Start in Maryland), and DHS (who is responsible for CAPTA). The steering committee met on August 25, 2020, to review key findings from the needs assessment, and provided recommendations for improvements. Throughout the needs assessment process findings were also shared with other stakeholder groups, including Maryland's Home Visiting Consortium (HVC) and the state's Early Childhood Advisory Council (ECAC). Both groups

provided feedback and were actively engaged in disseminating the stakeholder survey to their constituents. Stakeholders—including those representing education, health and human services, and individual Early Head Start sites—also participated in the focus groups and took part in the survey. In addition to the members of the steering committee, HVC and ECAC, a total of 954 stakeholders participated in the data collections of this needs assessment.

VI. CONCLUSION

This report describes findings from the 2020 Maryland MIECHV Home Visiting Needs Assessment. The needs assessment consisted of a quantitative analysis of indicators to identify communities "at-risk" as well as a literature review, a stakeholders survey, focus groups and interviews which gathered input from parents, home visitors, and other important community members across the state. A steering committee of key stakeholders in Maryland including representatives of Title V, Early Head Start and CAPTA was assembled and provided guidance and feedback throughout the various stages of the needs assessment. The steering committee also served as a link between this assessment and other data collections throughout the state.

Summary of Major Findings

Maryland identified "at-risk counties" using an independent method and indicators aligned with the HRSA guidance, which were vetted by stakeholders across the state. The independent method identified 10 jurisdictions as being at-risk, including Baltimore City and Somerset, Washington, Talbot, Queen Anne's, St. Mary's, Dorchester, Garrett, Prince George's, and Worcester counties. This directly contrasts the 2010 MD-MIECHV needs assessment when only five of the jurisdictions above were identified as most at-risk and further identified Maryland's changing landscape and demographics. Conversely to the 2010 needs assessment, this assessment also compared each jurisdiction to itself. This revealed the diversity within each of Maryland's jurisdictions, even those that are not considered at-risk from the state map. This more in-depth look into each jurisdiction provided perspective and demonstrated pockets of need that would not otherwise be identified.

Furthermore, the needs assessment found that Maryland's populations experiencing adversity manifest various needs ranging from racially and ethnically disproportionate health outcomes to lack of mental health services, especially in rural areas. Maryland has a comprehensive home visiting network, and services are offered in every jurisdiction. Home visiting services in the state rated consistently as high quality. The state actively works to improve the quality of home visiting programs that are a part of MIECHV through a robust Continuous Quality Improvement system. The home visiting staff in Maryland is very diverse, and its racial composition is similar to the population they serve. They are eager to participate in training, and Maryland has a strong training program for home visitors through the University of Maryland Baltimore County (UMBC).

However, in most of the state, demand for home visiting services is greater than the current capacity of programs. Throughout the state, data collection is fragmented, including screenings administered to families and children. Furthermore, there is evidence that parents do not always know about the services. Home visiting programs serve an important role in connecting parents

to vital community resources including substance use disorder treatment. However, of those who screen positive for substance use, only about half are referred to treatment, and only half of those referred get treatment. More could be done to help home visiting programs coordinate and collaborate with state and local agencies who serve these vulnerable populations.

Plans for Dissemination

MD-MIECHV shared preliminary findings from this report with members of the steering committee. The full report will be disseminated among Home Visiting Consortium members and the Early Childhood Advisory Council in the October and November meetings. The report will be made available on the MD-MIECHV website and shared in the team's newsletter communications. The MIECHV Needs Assessment Steering Committee provided many detailed recommendations to help improve services throughout the state. In the coming year, and once HRSA approves the needs assessment, MD-MIECHV plans to take these recommendations (listed below) and host regional town halls to gather input, determine regional preferences, and statewide trends. Using this information, Maryland will develop a five-year action agenda with state, local, and university partners.

MD-MIECHV Needs Assessment Steering Committee Recommendations

Awareness of Home Visiting

Lead a coordinated campaign with partners from various child serving organizations about what is available to improve children's outcomes in their first 1,000 days.

Develop specific infographics for stakeholders to help them understand what home visiting is and what it does.

Partner with the MD Chapter of the AAP to increase awareness about home visiting within the medical community.

Develop [with other state and local partners] a parent leader model that, using parents that have successfully completed a home visiting program, can educate other families on the importance of home visiting services.

Data and Standardized Measures

Develop a statewide strategic mission/strategy for aligning benchmarks, streamlining reporting and quality initiative requirements, and coordinating funding mechanisms.

Move towards one statewide Management Information System for all reporting requirements--centralized to accommodate different reporting, if the state aligns measures.

Develop statewide standards based on the quality of programs, and differences in how quality is conceptualized based on program models and geographic location.

Coordinated Statewide Efforts

Explore centralized intake and "one stop shop" options to facilitate better coordination and communication among providers at the local and state level, possibly using HCAM Baltimore as a model.

Create a comprehensive statewide list of referral sources by jurisdiction that home visitors and others in the field can access.

Conduct a salary survey to see disparities among various models/jurisdictions and engage agencies in determining the feasibility of developing a coordinated salary scale across home visiting models.

Substance Use Supports

Collaborate with state agencies to determine how to expand wrap-around services for women with substance use issues.

Increase substance use training access to programs for mothers, fathers, and children that home visiting programs can leverage.

Add an SBIRT (Screening, Brief Intervention, and Referral to Treatment) module to the UMBC HV Training Certificate program.

Provide training in a "warm handoff" for families to substance use referrals.

Use the Substance Exposed Newborn Training statewide as a regional training platform to reintroduce an opportunity to work as a team for treatment and referral.

Increase training for home visitors around substance use and intimate partner violence.

END NARRATIVE