Maternal and Child Health Services Title V Block Grant

Michigan

FY 2021 Application/ FY 2019 Annual Report

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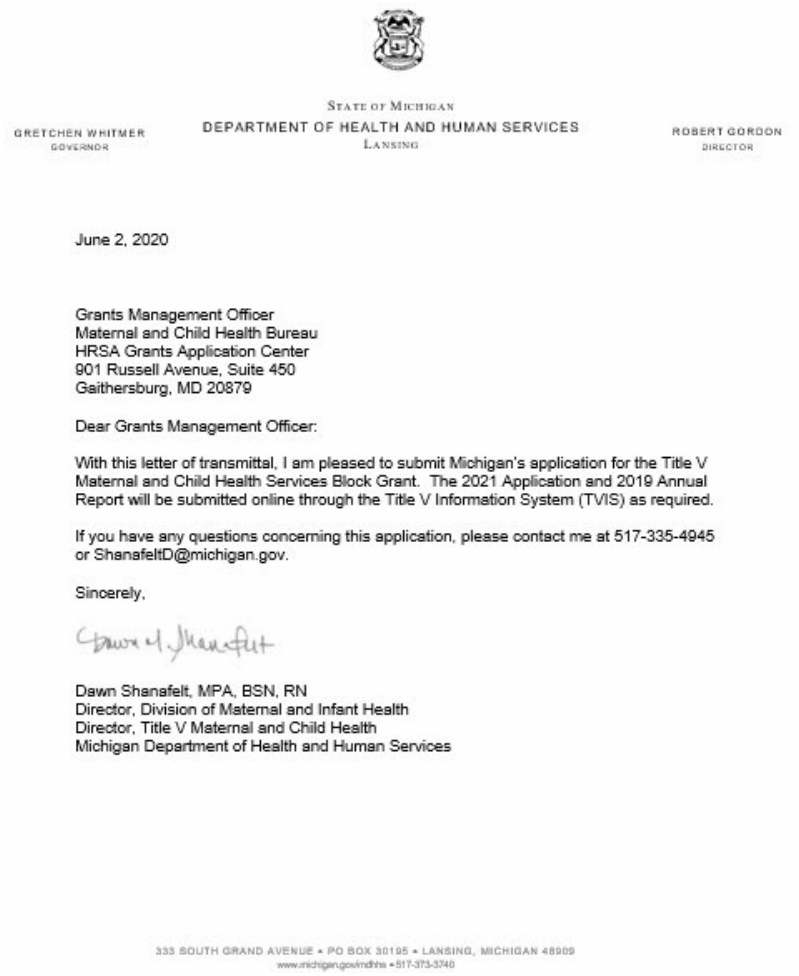
I. General Requirements

I.A. Letter of Transmittal



STATE OF MICHIGAN
DEPARTMENT OF HEALTH AND HUMAN SERVICES
LANSING

GRETCHEN WHITMER
GOVERNOR

ROBERT GORDON
DIRECTOR

June 2, 2020

Grants Management Officer
Maternal and Child Health Bureau
HRSA Grants Application Center
901 Russell Avenue, Suite 450
Gaithersburg, MD 20879

Dear Grants Management Officer:

With this letter of transmittal, I am pleased to submit Michigan's application for the Title V Maternal and Child Health Services Block Grant. The 2021 Application and 2019 Annual Report will be submitted online through the Title V Information System (TVIS) as required.

If you have any questions concerning this application, please contact me at 517-335-4945 or ShansfeltD@michigan.gov.

Sincerely,

Dawn M. Shansfelt

Dawn Shansfelt, MPA, BSN, RN
Director, Division of Maternal and Infant Health
Director, Title V Maternal and Child Health
Michigan Department of Health and Human Services

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I.B. Face Sheet

The Face Sheet (Form SF424) is submitted electronically in the HRSA Electronic Handbooks (EHBs).

I.C. Assurances and Certifications

The State certifies assurances and certifications, as specified in Appendix F of the 2018 Title V Application/Annual Report Guidance, are maintained on file in the States' MCH program central office, and will be able to provide them at HRSA's request.

I.D. Table of Contents

This report follows the outline of the Table of Contents provided in the *"Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms,"* OMB NO: 0915-0172; Expires: December 31, 2020.

II. Logic Model

Please refer to figure 4 in the "Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms," OMB No: 0915-0172; Expires: December 31, 2020.

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

Michigan's Title V Maternal and Child Health (MCH) program supports critical MCH programs and services across the state. Its overarching goal is to improve the health and well-being of mothers, infants, children, and adolescents—including children with special health care needs (CSHCN). The Michigan Department of Health and Human Services (MDHHS) administers the Title V block grant through the Division of Maternal and Infant Health (DMIH). The Children's Special Health Care Services (CSHCS) Division serves as the Title V CSHCN program. The Division of Child and Adolescent Health (DCAH) oversees Title V funding to local health departments (LHDs). Collectively the DMIH, DCAH, and CSHCS Division provide leadership on a wide array of MCH programs and policies, including oversight of program-specific work as well as statewide multisystem collaboratives, as discussed throughout this application.

Michigan's new FY2021-2025 state priorities were determined by the five-year needs assessment completed in 2020. The assessment helped to identify needs for preventive and primary care services for women, mothers, infants, children as well as services for CSHCN. Stakeholders and community members from each of the Title V population domains were engaged in the needs assessment. The goals of the assessment were to:

- Use multiple types of data to understand health outcomes, health behaviors, and health disparities, as well as underlying causes that drive inequity.
- Strengthen partnerships and strategies for achieving health equity.
- Engage diverse populations and system partners in describing and understanding the needs and strengths of the MCH population.
- Identify FY 2021-2025 state priority needs and performance measures for Title V.
- Identify opportunities to address needs beyond the scope of Title V.

Based on the 2020 needs assessment findings, the new Title V state priority needs are:

- Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity.
- Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play.
- Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they learn and live.
- Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems.
- Improve oral health awareness and create an oral health delivery system that provides access through multiple systems.
- Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities.
- Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person.

As required by Title V, National Performance Measures (NPMs) and State Performance Measures (SPMs) were chosen to align with the priority needs and are discussed below by population domain. Overall, Michigan retained

nine performance measures from the previous cycle; retired three measures; and added four new measures. The needs assessment also identified three key “pillars” that emerged across population domains related to achieving equitable health outcomes; engaging families and communities; and delivering culturally and linguistically appropriate health education.

Performance monitoring and program planning for NPMs and SPMs occurs on an ongoing basis. For example, MCH program staff review program results, client and family feedback, best practices, and emerging evidence to identify improvements to programs and policies. Detailed state action plans for NPMs and SPMs (which include program objectives, strategies, and metrics) are included in Section III.E. A brief summary of findings and activities to address each NPM and SPM is presented here.

Women/Maternal Health

The first goal in this domain is to decrease the percent of cesarean deliveries among low-risk first births (NPM 2). Michigan’s percentage of low-risk cesarean deliveries has consistently been higher than the US and has been slower to decrease over time. Michigan has also seen an increase in low-risk cesarean deliveries to Black mothers (from 29.6% in 2012 to 31.1% in 2018) while the percentage of low-risk cesarean deliveries to White mothers has decreased (from 29.5% to 28.0%[1]). The Title V plan focuses on reducing the overall rate of low-risk cesarean deliveries while focusing on disparities among women of color. Strategies include working with Regional Perinatal Quality Collaboratives (RPQCs) to implement the Alliance for Innovation on Maternal Health bundle and providing bias and equity training for providers.

The second goal in this domain is to increase the percent of women with a preventive dental visit during pregnancy (NPM 13.1). In 2018, only 49.3% of Michigan women had their teeth cleaned during their most recent pregnancy, a decline from a peak of 53.6% in 2015.[2] Non-Hispanic Black mothers saw a particularly large drop in preventive dental care during pregnancy, from 47.6% in 2016 to 39.2% in 2018.[3] Strategies to increase dental visits include training for medical and dental providers who treat pregnant women; education via the WIC oral health module; and exploring alternative models of care for service delivery.

The third goal is to increase the percent of women who have an intended pregnancy (SPM 5). While Michigan has seen a modest increase in the percentage of intended pregnancies from 2012 (52.2%) to 2018 (57.2%), White mothers (62.7%) were 1.9 times as likely as Black mothers (33.8%) to report their most recent pregnancy was intended (2018).[4] Michigan’s plan to strengthen intended pregnancy focuses on increasing the percent of women who use a most or moderately effective contraception method and increasing the percent of women who discuss reproductive life planning with a health professional.

Perinatal/Infant Health

The first perinatal/infant health goal is to increase the percent of infants who are ever breastfed and the percent of infants breastfed exclusively through six months (NPM 4). While breastfeeding rates have increased in Michigan, exclusivity rates are still short of the Healthy People 2020 goal (25.5% of infants exclusively breastfed through six months). In Michigan, 87.7% of infants are ever breastfed and 23.9% are exclusively breastfed through six months[5], [6]. To impact breastfeeding rates, MDHHS will implement strategies to increase the number of home visitors trained on breastfeeding support and increase the number of Baby-Friendly© hospitals. To address disparities in breastfeeding rates, Michigan will also identify ways to support non-Hispanic black women who initiate breastfeeding, including promotion of culturally responsive messages and racially diverse breastfeeding professionals.

The second goal is to increase the percent of infants placed to sleep in safe sleep environments (i.e., infants placed

to sleep on their backs, alone, without objects) (NPM 5). In 2017, 123 infants in Michigan died of sleep-related causes[7]. For several years, sleep-related death has been the leading cause of death for infants 28 days to one year old and is considered the most preventable. Michigan has seen an increase in the percent of infants placed to sleep on their backs, but challenges remain in sleeping without soft objects and in their own sleep space. MDHHS strategies to impact safe sleep include supporting local safe sleep activities; working with providers to ensure safe sleep education and resources for families; and developing tools for client-centered safe sleep conversations. Another goal is to increase the percent of non-Hispanic black infants who sleep safely by promoting protective factors and working with hospitals in areas with high rates of sleep-related infant deaths.

Child Health

Michigan continues to focus on increasing the percent of children who have a preventive dental visit (NPM 13.2). In 2012, fewer children had preventive dental visits as compared to 2007[8]. A key objective in Michigan's Title V plan is to increase the number of students who receive preventive dental screenings in a school-based dental sealant program. MDHHS will administer the SEAL! Michigan program and promote the program through school health professionals. To address disparities in access to care, MDHHS will also work with Detroit Public Schools to increase dental screenings.

A second goal is to increase the percent of children less than 72 months of age who receive a venous lead confirmation testing within 30 days of an initial elevated capillary test (SPM 1). Between 1998 and 2016 Michigan made progress reducing lead poisoning, with the percentage of birth to six-year-old children in Michigan with blood lead levels ≥ 5 ug/dL decreasing from 44.1% to 3.6%[9]. Yet some communities still experience higher rates of lead poisoning. Confirming elevated capillary results with a venous test is key to facilitating follow-up. Progress has been made, with MDHHS data indicating a rise in venous confirmation testing within 30 days of an initial elevated capillary test from 16.1% in 2013 to 43.35% in 2018. To continue to make progress, Michigan will screen for lead exposure risk factors in children; conduct provider education; and focus on blood lead testing for Medicaid-enrolled children.

MDHHS is working to increase the percentage of children ages 19-35 months who are up-to-date with all recommended vaccines (SPM 2). In Michigan, the estimated percent of children in this age group who received a full schedule of age-appropriate vaccines was 69.9% in 2017[10]. Strategies to increase vaccination rates include targeted outreach to parents of children who are overdue for a vaccine; partnering with the City of Detroit to address racial disparities in vaccination rates; working with private providers and LHDs to reach under-vaccinated populations; and a statewide I Vaccinate campaign.

Adolescent Health

The first goal in this domain is to decrease the percent of adolescents who are bullied or who bully others (NPM 9). From 2011 to 2017, just under one-third of Michigan adolescents reported being bullied at school or online[11]. Among CSHCN, the percentage rises to 53.6%[12]. In 2017, 37.3% of Michigan adolescents reported feeling sad or hopeless for two or more weeks, compared to 31.5% of US adolescents; Michigan adolescents are also more likely than US adolescents to report considering suicide (21.3% vs. 17.2%)[13]. Key objectives for MDHHS are to work with secondary schools to implement bullying prevention initiatives; provide guidance on state laws and bullying prevention best practices; and identify anti-bullying campaigns for CSHCN.

A second goal is to increase the percent of adolescents who have received a completed HPV vaccine series (SPM 3). As of December 2018, 73.5% of adolescents ages 13 through 17 years were up-to-date with immunizations, but that percentage dropped to 39.1% when HPV series completion was included[14]. However, Michigan has improved the percentage of adolescents receiving at least one dose of the HPV vaccine almost every year since 2012[15]. To boost HPV completion rates and increase protection from HPV-related diseases, MDHHS will generate letters to

parents of adolescents who have initiated but not completed the HPV series; partner with the American Cancer Society to promote HPV vaccination; and continue to work with local health departments, providers and health systems to implement quality improvement measures.

Children with Special Health Care Needs

A goal in Michigan is to increase the percent of adolescents with special health care needs who receive services necessary to make transitions to adult health care (NPM 12). In Michigan, 16.0% of CYSHCN reported they received services necessary to transition to adult health care, which is below the Healthy People 2020 target[16]. To improve transitions to adult care, key efforts will include increasing the delivery of family-centered transition efforts; training health care professionals on transition; and increasing the number of partner organizations using *Got Transition* assessments.

Another goal is to increase the percent of CSHCN enrolled in CSHCS who receive timely medical care and treatment without difficulty (SPM 4). CSHCN often require and use more health care services than other children. Health care costs can pose significant burdens for families, even with private insurance. CSHCS helps to cover the costs of medical care and treatment. In FY2019, 50,211 individuals were enrolled in CSHCS. Strategies to increase access to high-quality services include covering specialty care and treatment costs for qualifying conditions; expanding telemedicine; improving outreach and advocacy services; and ensuring a competent workforce.

Cross-Cutting

A goal across all population domains is to support access to developmental, behavioral, and mental health services (SPM 6). The needs assessment identified unmet mental health needs in the women/maternal health, adolescent health, and CSHCN domains. In 2017, nearly 20% of Michigan women reported more than two weeks of poor mental health during the prior 30 days[17]. Postpartum depression symptoms were reported by 16.3% of mothers in 2018[18]. In 2017, 37.3% of adolescents reported two or more weeks of sad or hopeless feelings and 21.3% considered suicide in the previous year[19]. Only 57.7% of CSHCN with a mental or behavioral health diagnosis received appropriate treatment in 2017[20]. The Title V program will support the work of local health departments who are addressing these needs in their communities; support perinatal screenings and telehealth among RPQCs; and increase collaboration between Title V and behavioral health partners.

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[1] Michigan PRAMS
[2] Michigan PRAMS
[3] Michigan PRAMS
[4] Michigan PRAMS
[5] MDHHS, Division of Vital Records & Statistics
[6] National Immunization Survey (NIS) 2017 Breastfeeding Report Card
[7] CDC SUID Case Registry, 2010 to 2017, Michigan Public Health Institute, 2019
[8] National Survey of Children's Health (NSCH), 2011/2012
[9] 2015 Data Report on Childhood Lead Testing and Elevated Blood Lead Levels: Michigan
[10] NIS
[11] Youth Risk Behavior Survey (YRBS)
[12] NSCH
[13] YRBS
[14] Michigan Care Improvement Registry
[15] NIS
[16] NSCH
[17] Behavioral Risk Factor Surveillance System
[18] Michigan PRAMS
[19] YRBS

[20] NSCH

III.A.2. How Federal Title V Funds Support State MCH Efforts

The Title V block grant provides a critical source of funding for MCH priority needs in Michigan, in conjunction with state MCH funds and other federal funds. As per federal requirements, a minimum of 30% of Title V funding supports services for children with special health care needs (CSHCN) and a minimum of 30% of funding supports preventive and primary care services for children ages 1 through 21 years. In Michigan, Title V funding is used to support medical care and treatment for CSHCN as well as a variety of services for children and adolescents including immunizations, oral health and dental sealants, lead poisoning prevention, fetal alcohol spectrum disorder, and pregnancy prevention. Services for women and infants are also supported by Title V funding, including infant safe sleep, regional perinatal care systems, PRAMS, fetal infant mortality review, and maternal mortality surveillance. Approximately 3% of Title V funding is used for administrative costs of the block grant. Title V funding also supports the MCH work of all 45 local health departments (LHDs), which collectively receive over one-third of Michigan's Title V dollars. LHDs serve as Michigan's local public health "arm" and focus on Michigan's identified NPMs and SPMs, as well as locally identified MCH needs.

III.A.3. MCH Success Story

The Fetal Infant Mortality Review (FIMR) is an evidence-based process that identifies and analyzes factors contributing to fetal and infant deaths. In Michigan, 13 local teams make up the Michigan FIMR Network. The information obtained from the local case reviews as well as the recommendations developed by the Michigan FIMR Network are essential for identifying areas for system change to improve health and available resources for infants, women, and families. FIMR receives direct support from Title V funding. In June 2019, the Michigan FIMR Network went through four Lean Process Improvement workshops to improve the method of how recommendations were written and then elevated to the State for analysis. After the workshops, a FIMR recommendation form and log were developed by the FIMR Network to assist in writing actionable, specific recommendations during the case reviews along with tracking recommendation implementation. Additionally, a need to better understand how inequity leads to disparities in infant mortality was identified during the workshops. As a result, a health equity toolkit was developed by the FIMR Network. The toolkit provides resources and trainings which FIMR teams may use to gain a deeper understanding of health equity, to incorporate health equity into the case review process, and to inform local systems recommendations at the community level.

III.B. Overview of the State

Geography, Demographics, and Economy

Michigan encompasses 56,804 square miles of land and is the only state made up of two peninsulas. Composed of 83 counties, Michigan is the10th most populous state and 11th largest state by total square mileage. Nearly 10 million people lived in the state in 2019. According to the U.S. Census Bureau, while Michigan saw its eighth consecutive year of population growth, it has slowed to less than 3,000 new residents over the past year. Michigan has seen a steady decrease in birth rates over the past 20 years, including a decline in teen births. Most of Michigan's population resides in the southern half of the Lower Peninsula, with approximately half of the population residing in Southeast Michigan. The state's largest cities are Detroit, Grand Rapids and Warren. Over 1.7 million people live in rural areas. The median age of the population is 39.5 years of age. Out of the total population, approximately 22% are age 0-17 and 78% are age 18 and over. Michigan's population is 79.3% Caucasian, 14.1% Black or African American, 3.4% Asian and Pacific Islander, 2.5% two or more races, 1.1% other races, and 0.7% Native American. Out of the total population, 5.2% identify as Hispanic or Latino.

Michigan's economy saw improvements over the past nine years, with the seasonally adjusted unemployment rate decreasing from 14.9% in June 2009 to 4.0% in January 2019. However, the COVID-19 pandemic is having severe economic impacts on the state. Since March 15, over 1.7 million workers applied for unemployment in Michigan. The immediate and long-term effects of COVID-19 are not fully realized but are expected to have a significant negative impact on recent economic gains as well as future economic viability. In addition to COVID-19, the state faces significant challenges that affect the maternal and child health (MCH) population. For instance, even before the pandemic certain areas of the state experienced higher unemployment. According to the 2019 ALICE (Asset Limited, Income Constrained, Employed) report, 61% of jobs in Michigan were low wage jobs, paying less than $20 per hour; out of those jobs, two-thirds paid less than $15 per hour.

Poverty remains a significant issue, especially for Michigan's children. Michigan ranks 32nd in the nation for overall child well-being. According to Kids Count in Michigan (2019), one in five children (416,305) ages 0-17 live in poverty. Statewide, the percentage of students eligible for free or reduced-price lunches increased 30% over a nine-year span. In 2017, 50.3% of students were eligible for free or reduced-price lunches.

Of additional concern are findings from the 2019 ALICE report indicating that even in households with earnings *above* the federal poverty level (FPL), 43% of households struggle with basic needs such as housing, childcare, food, health care and transportation. In addition to households *below* the FPL in Michigan, this equates to more than 1.66 million households struggling to meet basic needs. Given this environment plus the impacts of COVID-19, family support programs—such as WIC, food and cash assistance, health care and childcare—will continue to be critical resources for Michigan families.

Agency Roles and Priorities

The Title V program is administered by the Division of Maternal and Infant Health (DMIH) which is housed in the Bureau of Health and Wellness (BHW) within the Public Health Administration. The DMIH program areas include Family Planning and reproductive health, the Maternal Infant Health Program, infant safe sleep, and Early Hearing Detection and Intervention. In addition to the DMIH, the BHW includes the Division of Child and Adolescent Health; Women, Infants and Children (WIC) Division; Division of Chronic Disease and Injury Control; and Local Health Services. To coordinate the Title V grant, the DMIH works in partnership with the Children's Special Health Care Services (CSHCS) Division and the Division of Child and Adolescent Health (DCAH). CSHCS includes the Family Center for CYSHCN, CSHCS customer support, policy and program development, and quality and program

services. The DCAH oversees Title V contracts to Michigan's 45 local health departments which implement local MCH work. These Title V areas work collaboratively with an array of programs within the Michigan Department of Health and Human Services (MDHHS) which oversees a wide range of programs, including but not limited to public health; environmental health; emergency preparedness and response; communicable and chronic disease; Medicaid; food and cash assistance; migrant and refugee services; child support; juvenile justice; child and adult protective services; and foster care and adoption.

In 2020, MDHHS released a new vision and new strategic priorities. The MDHHS vision to "Deliver health and opportunity to all Michiganders, reducing intergenerational poverty and health inequity" is supported by four strategic priorities:

- **Give all kids a healthy start.** Improve maternal-infant health and reduce outcome disparities; become a national leader in reducing childhood lead exposure; and create a child welfare system that reduces maltreatment and is a model for prevention.
- **Provide families with stability to escape poverty.** Expand and simplify safety net access and protect the gains of the Healthy Michigan Plan.
- **Serve the whole person.** Address food and nutrition, housing, and other social determinants of health; integrate services, including physical and behavioral health, and medical care with long-term support; and reduce opioid and drug-related deaths.
- **Use data to drive outcomes.** Manage to outcomes; invest in evidence-based solutions; and drive value in Medicaid.

Michigan's Title V program aligns with and supports several of these priorities. In September 2019, Michigan released the 2020-2023 Mother Infant Health & Equity Improvement Plan (MIHEIP) which focuses on the mother-infant dyad and builds on previous work and existing partnerships, while expanding partnerships and strategies that can enhance the ability to address the root causes of adverse outcomes—social determinants of health and drivers of health inequity. Efforts to achieve the collective vision of "Zero preventable deaths. Zero health disparities" are focused on working with local communities and Michigan's families to 1) align public and private sector interventions, 2) integrate evidence-based and promising practice interventions, and 3) explicitly address disparities.

The MIHEIP was developed collaboratively by MDHHS and stakeholders. Through town hall listening sessions, input was garnered from MCH stakeholders, families and community members across the state. Feedback from the Maternal Infant Health and Equity Collaborative (MIHEC), health care providers, hospitals, local health departments, health plans, universities, professional associations, business, community leaders and—most importantly—the voices of Michigan families have been infused into the MIHEIP as well as the work of Regional Perinatal Quality Collaboratives (RPQCs). Implementation of the MIHEIP is multi-faceted to increase its reach and impact. It includes alignment of programs within MDHHS to increase the awareness, reach, and availability of public health resources; implementation of quality improvement projects within each of Michigan's RPQCs; and external implementation through community partners and maternal infant health providers.

To support the MDHHS priority to give all kids a healthy start, early childhood system building is also critical. The Office of Great Start (OGS) within the Michigan Department of Education (MDE) leads the integration of the state's health, development and early learning investments for prenatal to age 8. MDHHS collaborates with OGS and other partners to support the development of early childhood systems that are designed around the needs of children and families. One example of Michigan's cross-systems work is the launch of a new Home Visiting Advisory (co-led by MDHHS and MDE) in 2019 that is charged with building an integrated home visiting system that provides Michigan's families with the right model, at the right time, in the right place. Several MDHHS program areas, including Title V, serve on the Advisory and also on the Great Start Operations Team (GSOT). The GSOT convenes state agencies

and partners to provide strategic direction and to address early childhood services integration and coordination for programs that serve Michigan's families and young children.

Strengths and Challenges that Impact the MCH Population

Through the 2020 Title V needs assessment and ongoing program work, Michigan's Title V program identified strengths and challenges that impact the MCH population. In summary, strengths include:

- Strong, longstanding relationships with Michigan's local health departments.
- Home visitation programs with the ability to positively impact maternal and infant health and early childhood development.
- Commitment to addressing health disparities and pursuing equity within the MCH system.
- Educational campaigns that leverage technology, social media, and community voice to disseminate health information.
- Recognition of the impact of social determinants on health.
- Existing resources and services intended to meet basic needs.
- A strong system to elevate family voices and serve children and youth with special health care needs.

A core strength is Michigan's public health system which is comprised of 45 LHDs serving 83 counties and the City of Detroit. MDHHS works closely with LHDs to provide comprehensive public health services to Michiganders. This decentralized public health infrastructure allows for local efforts within the community to remain connected to the state for support, funding and other resources.

Michigan has a robust home visiting system that provides preventive services to pregnant women and families with infants and young children. Evidence-based home visiting models in Michigan include the Maternal Infant Health Program (MIHP), Nurse-Family Partnership, Healthy Families America, Early Head Start-Home Based, Parents as Teachers, and Family Spirit. These models offer families the opportunity to connect with a home visitor who can partner with them to meet their needs. The potential of home visiting has been recognized by Governor Whitmer, who discussed healthcare concerns for women and new moms (including health disparities among women of color) and specifically called attention to home visiting programs in her January 2020 State of the State address. Details are included in the Healthy Moms, Healthy Babies factsheet.

MDHHS and its MCH partners are working to intentionally change MCH policies and programs to address discrimination and disparities in health outcomes. MDHHS has instituted a Diversity, Equity and Inclusion Plan that details the Department's "commitment to eliminating systematic inequities and promoting diversity, equity and inclusion." The Office of Health Equity and Minority Health (OEMH) within MDHHS delivers an annual report to the state legislature on the Department's progress and health disparities among key populations within the state. The OEMH also provides training to the MDHHS workforce on unconscious bias, systemic racism, and community engagement.

Another strength is the recognition of social determinants of health and the understanding that good health requires a robust infrastructure to meet basic needs. MI Bridges is an online site managed by MDHHS that enables users to apply for benefits (including healthcare coverage, food assistance, cash assistance, childcare, and state emergency relief) and to find resources such as transportation, food, and utilities assistance. MI Bridges users can review and access their benefits information; renew benefits; and share beneficiary information with their specialist. Women, Infants and Children (WIC) and the Supplemental Nutrition Assistance Program (SNAP) both provide resources and support for families experiencing food insecurity. These and many other programs connect Michigan's MCH population to resources to help meet basic needs.

In 2020, MDHHS identified social determinants as a strategy integral to serve the whole person. The goal of this

strategy is to improve the health and social outcomes of all Michiganders while working to achieve health equity by eliminating disparities and barriers to social and economic opportunity. Sub-strategies include: realign programs, policies and resources to improve equity and address community directed SDOH needs; reduce barriers to economic mobility; and support robust community continuums of care.

Michigan has created innovative educational campaigns that leverage technology and social media to reach their intended audiences, such as safe sleep. Additionally, initiatives like the *Mother Infant Health and Equity Improvement Plan* leverage community voice to influence decision making and provide cohesive messaging.

Finally, Michigan's CSHCS program has a long-standing history of providing services and resources to children and youth and elevating parent leadership within its organizational structure. Michigan's CSHCS program provides medical care and treatment, care coordination services, insurance payment, transportation support, and access to social support groups.

The Title V needs assessment also highlighted challenges facing Michigan's MCH system and the families it serves, including:

- The impact of poverty coupled with limitations in the MCH system for addressing poverty as a driver of health outcomes and health disparities.
- Gaps in capacity to support access to services that meet basic needs like reliable transportation, quality childcare, and quality healthcare.
- Communities face inadequate investment in their cities and neighborhoods.
- Culturally and linguistically appropriate health information is not consistently produced across programs and services.
- Gaps in respite care for caregivers of CSHCN.
- Systemic barriers impede access to mental and behavioral health services.
- Racism, discrimination, and other drivers of health inequity.

The MCH system recognizes a substantial need for strategies and resources to address basic needs created by poverty. Availability, accessibility, program capacity, eligibility requirements and programmatic silos are challenges that impede families' ability to meet their basic needs. Access to public or reliable transportation, quality childcare services, and access to healthcare services were frequently identified in the needs assessment as gaps driven by poverty.

A lack of investment in communities and low resident engagement also negatively contributes to the health of communities. Therefore, funding and support for community resources, in conjunction with community member engagement, is needed to improve the environment where people learn, live, work and grow.

The needs assessment also identified the importance of tailoring health information materials to be more culturally and linguistically appropriate. While dissemination of health information via technology and social media was noted as a strength, the materials and messages themselves were not always adapted to reflect the state's cultural and linguistic diversity.

Respite care for families with a child with special health care needs was identified as a gap. Families and caregivers expressed difficulties finding quality and reliable respite care. Michigan currently has few options for reimbursing families for respite care and has identified this as an area for increased attention in the future.

Access to quality, integrated physical and mental health care was identified as a challenge for the MCH population. Barriers to accessing care were exacerbated by provider shortages, rural disparities in access, a lack of specialty care providers, the rising cost of health care services and prescription drugs, and the stigma associated with receiving mental health care.

Lastly, the MCH system faces a challenge in tackling racism, discrimination, and health inequities across programs and services. There continues to be a need to identify and address racism and discrimination in policies, procedures, and practices. This requires the allocation of time, resources, and continued prioritization by leadership, as well as elevating the voices of those most impacted.

Changes in Health Status and Needs

MDHHS continues to closely monitor infant and maternal mortality and has seen the following trends and emerging concerns. The infant mortality rate in Michigan for 2018 was 6.6 deaths per 1,000 live births, which has remained stable over the past five years (range 6.6 to 6.8 per 1,000 live births since 2014). Racial and ethnic disparities remain a major contributor to the persistence of these rates. The Black infant mortality rate has continued to be approximately three times that of the White infant mortality rate (most recently, 14.5 versus 4.6 per 1,000 live births in 2018). The pregnancy-related mortality ratio in Michigan for 2016 was 11.5 maternal deaths per 100,000 live births[1]. As with infant mortality, disparities between Black and White mothers are striking, with the Black pregnancy-related mortality ratio more than two times that of the White rate (20.4 versus 8.6 per 100,000 live births based on 2012-2016 data). In addition to maternal deaths caused by pregnancy-related issues, addressing pregnancy-associated mortality[2] remains an important component of Title V work: 47.4% of all pregnancy-associated injury deaths from 2012-2016 were caused by accidental poisoning/drug overdose. Michigan's maternal mortality committees have focused their efforts on developing recommendations to help prevent current and expecting mothers from developing opioid use disorders.

Emerging Public Health Issues that Impact the MCH Population

Infant and maternal mortality remain two critical public health issues in Michigan. Other public health issues include **COVID-19, substance use challenges, lead exposure, per and polyfluoroalkyl substances (PFAS), and vaccine hesitancy** which are discussed below.

COVID-19

The Coronavirus (COVID-19) pandemic has had a significant impact on public health in Michigan, including the MCH population. As of May 29, 2020, Michigan had 56,621 confirmed COVID-19 cases and 5,406 deaths. Michigan's first presumptive positive COVID-19 case was reported on March 10 and Governor Whitmer declared a state of emergency on the same day. On March 16, the Governor ordered restrictions on restaurants, bars, and entertainment venues. On March 24, the Governor issued a statewide "Stay Home, Stay Safe" executive order 2020-21 to fight the spread of COVID-19. To date, 79 of Michigan's 83 counties have confirmed cases with the majority in Southeast Michigan (Macomb County, Oakland County, and Wayne County including the City of Detroit). No age group is exempt from COVID-19, and deaths in Michigan have ranged from ages 5 to 107. However, the direct health impact of COVID-19 has disproportionately affected individuals with pre-existing health conditions or over the age of 60 and African Americans. In April, Governor Whitmer created the Michigan Coronavirus Task Force on Racial Disparities to assess disparities and make recommendations to address systemic inequities.

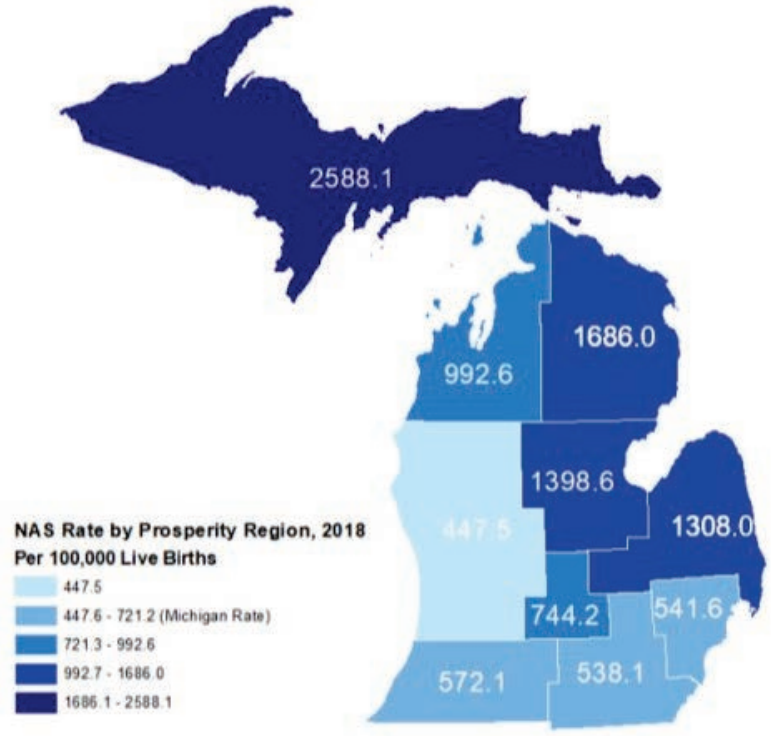
The economic impact of COVID-19 has been extreme. To date, claims for unemployment benefits have passed 1.7 million. On March 25, the Governor signed executive order 2020-24 to temporarily expand unemployment benefits. The expansion included individuals who cannot work due to caring for family members (including children who are home due to school and daycare closures) and individuals who are sick or quarantined but do not have paid sick leave, both of which will assist Michigan's MCH population. The Governor also signed an agreement with the U.S. Department of Labor as part of the federal CARES Act to extend unemployment benefits to workers in the gig economy and those who are self-employed or independent contractors. Throughout the pandemic, Michigan's MCH

programs have worked hard to continue to support women, mothers, children, and CSHCN. For example, Michigan's home visiting programs have continued to deliver services through remote appointments and referrals. Many MCH programs have provided regular updates to community members, partners, and providers on COVID-19 resources. And MCH staff has supported the state's COVID-19 hotline and contact tracing. Additional information on COVID-19 in Michigan and the state's response is available on the State of Michigan website.

Substance Use

Michigan continues to experience an increase in opioid use during pregnancy and, as a result, an increase in the number of infants diagnosed with Neonatal Abstinence Syndrome (NAS). Figure 1 details the incidence of NAS by region. As illustrated by the map, rural areas of Michigan have been hardest hit by this epidemic.

Figure 1. Map of 2018 NAS Rates by Prosperity Region



Data source: Michigan Resident Inpatient Files created by the Division for Vital Records and Health Statistics, Bureau of Epidemiology and Population Health, MDHHS, using data from the Michigan Inpatient Database obtained with permission from the Michigan Health and Hospital Association Service Corporation (MHASC). All data analyses were conducted by the MDHHS, Maternal and Child Health Epidemiology Section.

The number of drug exposed infants increased by 49% from FY 2010 to FY 2013, from 2,589 to 3,866 infants[3]. Additionally, infants hospitalized and treated for drug withdrawal symptoms has increased[4]. In 2010, 478 infants in Michigan had a diagnosis code of 779.5 (ICD-9-CM) and needed treatment for withdrawal from a drug, not specifically identified as opioids. In 2018, the number of infants with a diagnosis code of P96.1 (ICD-10-CM) increased to 794 infants. This represents a jump from 41.7 per 10,000 live births in 2010 to 72.1 in 2018. The opioid epidemic has also impacted maternal deaths. In 2011, 9% of maternal deaths were opioid related compared to 19% of maternal deaths in 2016[5].

MDHHS remains committed to supporting opioid use disorder prevention for pregnant and parenting women and women of childbearing age; increasing screening and identification; maintaining data collection and reporting;

optimizing resource allocation to target resources to those in greatest need; developing a quality improvement system; and improving workforce development and training programs. In December 2019, MDHHS also released the "End the Sigma" campaign to decrease the stigma related to opioid use and treatment.

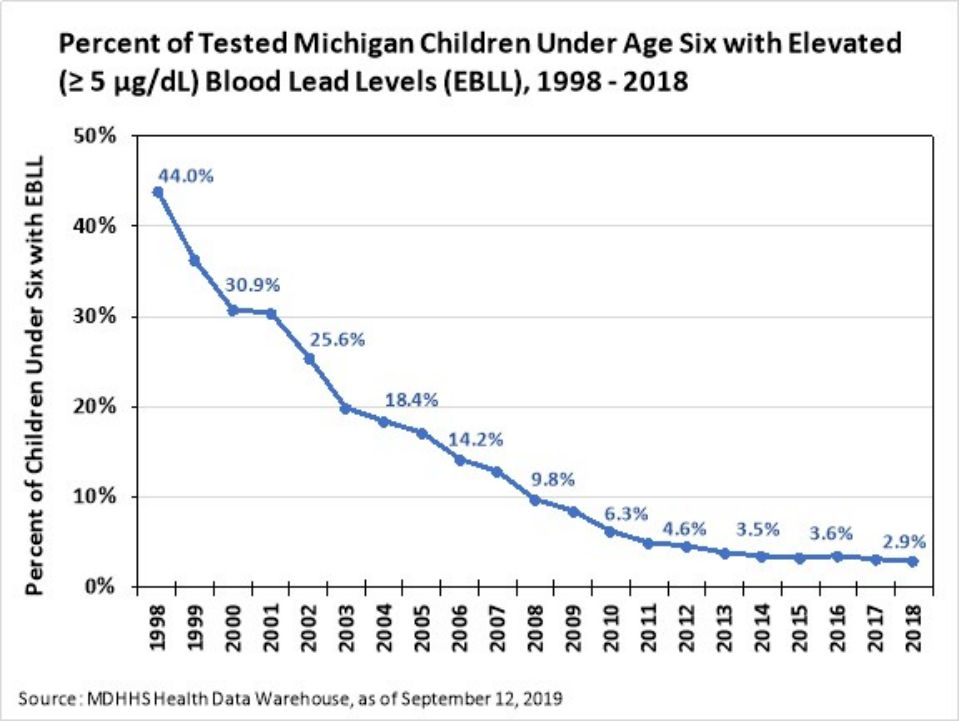
On November 6, 2018, Michigan voters approved Proposal 1, creating the Michigan Regulation and Taxation of Marihuana Act (MRTMA). This Act delegates responsibility for marijuana licensing, regulation and enforcement to the Michigan Department of Regulatory Affairs (LARA). LARA's Bureau of Marijuana Regulation (BMR) is responsible for the oversight of medical and adult-use (recreational) marijuana in Michigan. The MRTMA permits the personal possession and use of marijuana by persons 21 years of age or older. MDHHS is closely monitoring ongoing research on marihuana use in pregnancy and during breastfeeding. Studies have demonstrated that use during pregnancy increases the chance of low birthweight, lower IQ, and risk for admission to NICU. Studies also show that use during breastfeeding may lead to slower development of an infant's motor skills. Moving forward, MDHHS will assess and assure public health education and messaging for the MCH population.

Michigan has a strong foundation of family support services within community and clinical settings to address substance use. Home visiting services are critical in addressing perinatal substance use disorders among pregnant and parenting women. Home visitor education and training has been inclusive of motivational interviewing and other evidence-based interventions. Healthcare professionals remain abreast of Perinatal Substance Use Disorder (PSUD) and NAS and the importance of linking families to ongoing support services after hospital discharge. However, substance use prevention and response efforts pose staffing challenges to an already taxed public health, nursing, and behavioral health workforce—especially in light of the current COVID-19 pandemic.

Lastly, the use of e-cigarettes in Michigan has drastically increased, especially among youth and young adults. From 2015-2016 to 2017-2018, counties in Michigan saw between a 30% and 118% increase in high school students who used an e-cigarette during the past month.[6] The use of e-cigarettes among Michiganders aged 18-24 is 12.8% (2017 BRFSS), higher than cigarette use in this group. Further, e-cigarette use among women three months before pregnancy is 3% and 1% in the last three months of pregnancy (PRAMS 2015-17). E-cigarette rates are highest in socioeconomic status groups with low income and low educational attainment (Vital Statistics, 2017). To address the dangers of e-cigarettes and to adopt 24/7 comprehensive tobacco free policies, the MDHHS Tobacco Control Program works closely with Regional School Health Coordinators and MDE to educate parents, coaches, teachers and administrators. The Michigan Tobacco Quitline also offers a specialized quit tobacco program for pregnant and postpartum women, which includes nine counseling phone calls with a health coach who is trained in motivational interviewing.

Lead and PFAS

Lead has continued to be a priority public health issue in Michigan. MDHHS staff coordinate initiatives to prevent lead poisoning through case management services available through local health departments; surveillance systems for blood lead testing data; lead abatement services in homes; and lead educational materials for health care providers, child care providers, schools, and families of young children. As illustrated in the figure below, the percent of tested children under age six with an elevated blood lead level has decreased since reporting began in 1998.



Michigan is also addressing PFAS, an emerging class of contaminants. Although the health impacts of PFAS are still being investigated, the better-studied PFAS chemicals appear to have greater health impacts during early life with higher exposure through breastfeeding because the substances bioaccumulate. The state's activities to address PFAS include:

- Identify sources of these contaminants.
- Sample private drinking water wells near known sources and resample previously sampled private drinking water wells to determine if levels have changed.
- Provide alternate water (e.g., certified water filter) when private wells are impacted.
- Sample post-filter water at residences over time (throughout the certified life of the filter) to evaluate the potential for breakthrough above screening levels but below the concentration considered for the certification and for additional PFAS not included in the certification. If breakthrough is seen, additional filter in series will be added and tested for efficacy.
- Sample public water supplies and schools/daycare centers with drinking water wells.
- Investigate other potential PFAS sources (e.g., fire-fighting foam, biosolids, surface water discharges) and exposures (e.g., recreating in surface water, eating fish and deer).
- Develop public health screening levels for some PFAS and future development of regulatory levels including enforceable drinking water standards for PFAS.
- Research the blood levels, exposure history, water levels, and health outcomes over three time points in three communities with higher levels of PFAS in drinking water.

Vaccine Hesitancy

Vaccine hesitancy was identified by the WHO as a threat to global health in 2019. Pockets of low vaccination coverage have allowed serious and highly contagious diseases like measles to make a resurgence in countries where it had previously been eliminated. The U.S. recently experienced multiple measles outbreaks, including one in Michigan. Michigan also has a strong and active anti-vaccine community that has branded itself as "pro vaccine

choice." The anti-vaccine community has fought Michigan administrative rules on immunization education required to obtain a non-medical immunization waiver for school entry and introduced new legislation to eliminate public health's right to exclude unvaccinated children from school and daycare during vaccine-preventable disease outbreaks.

The MDHHS Division of Immunization works diligently to correct anti-vaccine messages. One strategy is through the I Vaccinate media campaign in partnership with the Franny Strong Foundation. The I Vaccinate campaign is a parent-to-parent network to provide accurate vaccine information. MDHHS also works through the Parent Information Network, the Alliance for Immunizations in Michigan, the Michigan Advisory Committee on Immunizations, and other stakeholder groups to diminish vaccine hesitancy. The division also provides immunization education to healthcare providers via education modules, conferences, and webinars.

Components of the State's Systems of Care

Michigan's health care system currently includes 206 hospitals of which 155 are acute care, teaching or critical access hospitals. These include 80 birthing hospitals and 21 Neonatal Intensive Care Units. The remaining hospitals are for psychiatric or long-term care. The health care system also includes 45 Federally Qualified Health Centers with over 250 delivery sites; over 120 school-based/school-linked health centers; 33 Family Planning agencies providing services at 77 clinic sites; and 186 rural health clinics.

Health Care Reform

Since its passage in 2010, the Affordable Care Act (ACA) has impacted how health care is accessed and delivered across the country. In Michigan, the impact has been particularly significant since the implementation of the Medicaid expansion in 2014. ACA coverage expansions provided Michigan consumers with two new options: Healthy Michigan Plan (HMP) and Health Insurance Marketplace (Marketplace). In January 2014, eligible individuals above 133% of the FPL could enroll in private health insurance coverage through the Marketplace. In April 2014, Michigan expanded its Medicaid program to cover residents aged 19 to 64 who were at or below 133% of the FPL, and who were not previously eligible for traditional Medicaid. Between the HMP and the Marketplace, Michigan insured over 700,000 people in less than a year, exceeding initial enrollment expectations.

The ACA also provided significant funds through HRSA to expand access to primary care by increasing the number of Community Health Centers in Michigan. The number of Federally Qualified Health Centers (FQHCs) grew as additional centers were funded and look-alike sites were approved. According to the Michigan Primary Care Association, Michigan has 45 Health Centers that provide care at over 250 delivery sites and are health care homes to more than 680,000 individuals.

As of March 23, 2020, 674,853 beneficiaries are enrolled in HMP (HMP County Enrollment Report). The benefit design of the Healthy Michigan Plan ensures beneficiary access to quality health care, encourages utilization of high-value services, and promotes adoption of healthy behaviors. HMP benefits include preventive/wellness services, chronic disease management, prenatal care, oral health and family planning services. Most HMP beneficiaries are required to pay some level of cost-sharing in the form of monthly contributions and co-pays based on income. Some populations are excluded from cost sharing, such as individuals enrolled in CSHCS, under 21 years of age, pregnant women, and those with no income. To promote the overall health and well-being of HMP beneficiaries, MDHHS developed a Health Risk Assessment which, when completed, provides health plan beneficiaries the opportunity to earn incentives for actively engaging with the health care system. HMP enrollees who complete a health risk assessment and agree to maintain or address healthy behaviors, as attested by their primary care provider, may be eligible for select cost-sharing reductions.

For CSHCN, ACA consumer protections have improved access to private insurance by eliminating preexisting

condition exclusions and discrimination based on health status, the two most frequently encountered enrollment barriers for families. The ACA also expanded access to parent employer coverage for adults 19-26. As of December 2019, the HMP covers approximately 1,649 individuals who are dually enrolled in CSHCS. LHDs, Family Resource Centers and designated state staff work with families and community partners to help families understand and access all available private and publicly funded resources to meet individual needs.

CSHCN often require and use more health care services than other children. Specialty care and extensive, on-going or long-term treatments and services may be required to maintain or improve health status. Financing these costs can pose significant challenges and burdens for families even with access to private insurance. Family health care costs can include deductibles, cost sharing and premium payments. In addition, private insurance may not include any covered benefit for a specific, medically necessary service. In other cases, only a limited benefit may be available through insurance. Although ACA eliminated annual and lifetime dollar limits, other annual limits exist and benefits may be exhausted for the current contract year even though needs continue. As such, CSHCS helps to limit costs to families and continues to be a significant resource for achieving adequate, appropriate, and equitable health and specialist care. Steady CSHCS enrollment following ACA's implementation reflects the value of CSHCS to families even when private insurance is available.

MDHHS currently supports five community-based collaborative bodies called Community Health Innovation Regions (CHIRs). The CHIRs were first funded through Michigan's State Innovation Model to create a mechanism for addressing social determinants of health, such as housing and transportation. CHIRs bring together partners from across sectors to change community conditions, improve service delivery networks between clinical and community providers, and link individuals to services. A CHIR evaluation plan is currently being created which will focus on CHIRs' clinical community linkages infrastructure and the work of the CHIR hubs. Each CHIR has established a hub that receives referrals, identifies needs, and makes referrals to clinical and community services. While the specific population served by each hub differs, as does the mechanism for screening and referral to services, their purpose is to improve access to clinical and community services.

Integration of Services

Michigan's Title V and Title XIX programs share the common goal to improve the overall health and well-being of the MCH population through implementation of affordable health care delivery systems, expanded coverage, and implementing strategies to address social determinants of health and reduce health disparities. Areas of collaboration include maternal and infant care, adolescent health, perinatal care, developmental screening and referral, home visitation, oral health, and CSHCS. Like programs located within the Public Health Administration, Michigan Medicaid employs a population health management framework to build a Medicaid managed care delivery system that maximizes the health status of beneficiaries, improves beneficiary experience, and lowers cost. Medicaid contracts with 10 Medicaid Health Plans (MHPs) to achieve these goals through evidence-based and value-based care delivery models, supported by health information technology, and robust quality strategies to prevent chronic disease and coordinate care.

The BHW and Michigan Medicaid jointly manage several programs for the Medicaid-eligible MCH population. One of the largest collaborations is the Maternal Infant Health Program (MIHP), Michigan's largest population-based home visiting program available to all Medicaid-eligible pregnant women and infants up to age one. Effective January 1, 2017, MIHP services provided to beneficiaries enrolled in an MHP are administered by the MHPs.

Another area of coordination is for CSHCN, as 78.5% of individuals with both CSHCS and Medicaid coverage are enrolled in an MHP. MHPs are responsible for the medical care and treatment of CSHCS members while assistance with community-based services beyond medical care and treatment is provided through the LHD's CSHCS office. MHPs are responsible for coordinating and collaborating with LHDs and the Children's Multidisciplinary Specialty

Clinics to make a wide range of essential health care and support services available to enrollees. MHPs are also responsible for the coordination and continuity of care for enrollees who require integration of medical, behavioral health and/or substance abuse services.

In October 2016, the Healthy Kids Dental program was expanded statewide to cover all children with Medicaid under the age of 21. It currently provides dental services to approximately 1 million youth. As of October 2018, eligible beneficiaries are offered a choice of two statewide HKD dental health plans (DHPs). In July 2018, MDHHS also expanded managed care dental coverage for non-Healthy Michigan Plan Medicaid eligible pregnant women through a Comprehensive Health Care Program (CHCP) 1915(b) waiver amendment. This managed care dental benefit is intended to provide greater access to dental services and comprehensive prenatal care. BHW and MSA are coordinating outreach and engagement efforts for these oral health programs via multiple avenues including MIHP and other home visiting networks.

Additionally, as a result of collaborative efforts between DMIH, MSA and other state partners, MDHHS updated its hospital reimbursement policy for Long Acting Reversible Contraceptives (LARCs) including intrauterine and implant devices. To improve access, beginning in October 2018 Michigan Medicaid now reimburses for immediate postpartum LARC devices, paid in addition to the standard DRG-based payment for childbirth services.

Overall, MDHHS recognizes the importance of integrating both physical health and behavioral health services to effectively address enrollee needs and improve health status. In December 2019, MDHHS Director Robert Gordon announced a new approach to improving the state's behavioral health system. As outlined in the MDHHS press release, the approach will "lead to greater choice of providers, better coordination of services, and increased investment in behavioral health." To achieve these goals, three key components are to preserve a strong safety net; integrate physical and behavioral health in care and financing; and establish Specialty Integrated Plans. In January 2020, MDHHS announced five public forums throughout the state to receive input from Michigan residents and families about the proposed plan and ways to improve the behavioral health system. Additional information is available on the MDHHS Future of Behavioral Health webpage although implementation plans are currently being impacted by the COVID-19 pandemic.

To help achieve integrated care, MHPs are required to work with MDHHS to develop initiatives to better align services with Community Mental Health Services Programs/Prepaid Inpatient Health Plans (PIHPs) to support behavioral health integration. Medicaid collaborates with the MDHHS Behavioral Health and Developmental Disabilities Administration (BHDDA) to incentivize performance by MHPs and PIHPs on shared metrics and shared populations. The MHPs must also provide or arrange for the provision of community health worker (CHW) or peer-support specialist services to enrollees who have significant behavioral health issues and complex physical co-morbidities. CHWs serve as a key resource for services and information needed for enrollees to have healthier, more stable lives. CHW services include conducting home visits; participating in office visits; arranging for social services; and helping enrollees with self-management skills.

Health Services Infrastructure

MDHHS has developed multiple health information systems to support the care and services provided to the MCH population. The Michigan Care Improvement Registry (MCIR) allows for the identification of children who are not up-to-date on Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) well child visits according to the American Academy of Pediatrics Bright Futures Recommendations for Preventive Pediatric Health Care periodicity schedule. All MHPs have access to MCIR, and it is an approved data source for Medicaid Healthcare Effectiveness Data and Information Set (HEDIS) immunization and lead testing data. MIHP providers also have access to MCIR to facilitate referral and access to appropriate preventive services.

MDHHS also developed and implemented CareConnect360 (CC360), a statewide web-based care management system that allows for the bi-directional exchange of health care information. CC360 allows for the identification and coordination of services to Medicaid beneficiaries—particularly in relation to physical and behavioral health information—by sharing of cross-system information between state health plans and the Community Mental Health/Prepaid Inpatient Health Plans. CC360 makes it possible to analyze healthcare program data, manage and measure programs, and improve enrollee health outcomes. Within the Division of Maternal and Infant Health, CC360 addresses the need for improved communication within MIHP, including sharing care elements that can aid in successful case management by assuring that MIHP home visitors are part of the care team. CC360 enables access to comprehensive Medicaid claims and encounter data for patients of record to support care coordination services. It will also allow for comparison of population health data across counties or regions. As previously discussed, MI Bridges is another important component of the MDHHS service platform to better interface with customers through technology and to make the service delivery system more focused on customer needs.

State Statutes Relevant to Title V

The Michigan Public Health Code, Public Act 368 of 1978, governs public health in Michigan. The law indicates that the state health department shall "continually and diligently endeavor to prevent disease, prolong life, and promote the public health through organized programs" (MCL 333.2221). Furthermore, it shall "promote an adequate and appropriate system of local health services throughout the state and shall endeavor to develop and establish arrangements and procedures for the effective coordination and integration of all public health services including effective cooperation between public and nonpublic entities to provide a unified system of statewide health care" (MCL 333.2224).

In FY 2020, state funding for MCH and CSHCS programs was appropriated through Public Act 67 Enrolled Senate Bill 139 Health and Human Services of 2019. CSHCS is mandated by the Michigan Public Health Code, Public Act 368 of 1978, in cooperation with the federal government under Title V of the Social Security Act and the annual MDHHS Appropriations Act. State general fund dollars for MCH programs are itemized in Sec. 117 of Public Act 67 of 2019, whereas CSHCS is addressed in Sec. 119. Additional MCH details are provided in Sec. 1301- 1305; 1308 – 1317; 1320. These sections identify how funding shall be used; MDHHS and contractor requirements; and requirements that some appropriated funding be used to implement evidence-based programs to reduce infant mortality, continue development of an outreach program on fetal alcohol syndrome services, enhance education and outreach efforts to seek early prenatal care, allocate funds to the Michigan Dental Association to administer a volunteer dental program that provides dental services to the uninsured, and the provision of high-quality dental homes for seniors, children, and adults enrolled in Medicaid and low-income uninsured. Statutory requirements in the FY 2019 Health and Human Services budget for CSHCS included criteria in Sec. 1360 for MDHHS to provide services; and in Sec. 1361, the authorization that some of the appropriated funding be used to develop and expand telemedicine capabilities and to support chronic complex care management.

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[1] Includes maternal deaths while pregnant or within 1 year of the end of a pregnancy from any cause related to or aggravated by the pregnancy or its management. Data source: Maternal Deaths in Michigan, 2012-2016 Data Update. MDHHS. Michigan Maternal Mortality Surveillance Program.
[2] Includes maternal deaths while pregnant or within 1 year of the end of a pregnancy due to a cause unrelated to pregnancy.
[3] Data from Michigan's Services Worker Support System (SWSS).
[4] Data from Michigan Inpatient Hospitalization Files.
[5] Division for Vital Records and Health Statistics, MDHHS.
[6] Michigan Profile for Healthy Youth Survey by MDE and MDHHS, 39 County Data from 2015-16 and 2017-18.

III.C. Five-Year Needs Assessment Summary
(as submitted with the FY 2021 Application/FY 2019 Annual Report)

III.C.2.a. Process Description

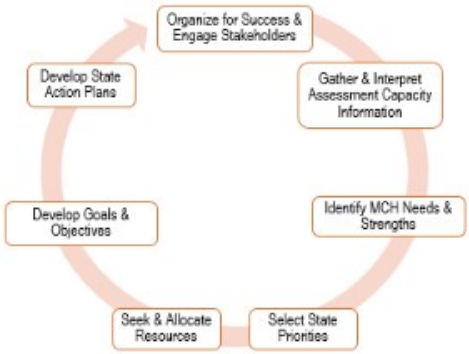
Goals, Framework, and Methodology

Title V requires a comprehensive needs assessment every five years to identify the strengths and needs of the MCH population and to guide efforts to improve the health of the MCH population. Michigan's goals for the 2020 needs assessment were to:

- Use multiple types of data to understand health outcomes, health behaviors, and health disparities, as well as underlying causes that drive inequity;
- Strengthen partnerships and strategies for achieving health equity;
- Engage diverse populations and system partners in describing and understanding the needs and strengths of the MCH population;
- Identify the state priority needs and performance measures that will be the focus of Title V for FY 2021-2025; and
- Identify opportunities to address needs beyond the scope of Title V.

The Public Health Planning Cycle (see Figure 1) from the Title V Guidance was adapted and used to organize the assessment process. Many methods and tools were adapted from the Mobilizing for Action Through Planning and Partnerships (MAPP) framework developed by the National Association of County and City Health Officials (NACCHO).

Figure 1. Needs Assessment Process



MAPP is a health assessment and improvement planning framework commonly used by local health departments. It was selected to guide the needs assessment because it aligns well with Michigan's goals. The MAPP process uses multiple types of data, engages diverse system partners, and emphasizes health equity. The framework is comprised of six phases and four assessments, as depicted in Figure 2.

Figure 2. MAPP Phases

Stakeholder Involvement

The needs assessment process was led by Michigan's Title V MCH and CSCHN directors. Several groups were involved in different aspects of the process to comprehensively represent the Title V population domains, including many MCH stakeholders external to MDHHS and MCH leadership within MDHHS.

- **Needs Assessment Planning Committee:** Comprised of MDHHS Title V leadership, MDHHS epidemiologists, and MPHI consultants who were responsible for planning and implementation of the needs assessment. The group convened in May 2018 to begin the planning process and oversaw all logistics.
- **Title V Steering Committee**: Comprised of state MCH staff who oversee programs and initiatives that receive Title V funding and/or implement Title V state action plans. Members provided feedback and insight into the needs assessment process and used findings to inform state action plans.
- **Needs Assessment Stakeholder Group:** Included more than 70 MCH stakeholders from across Michigan, with over 50% representation outside of MDHHS. This group convened from February 2019 to February 2020 and participated in several needs assessment activities.
- **Population Domain Workgroups:** Three workgroups were convened to reflect the Title V population domains: women/maternal health and perinatal/infant health; child/adolescent health; and CSHCN. Participants at each workgroup included state and local MCH staff, MCH system partners, consumers and parent representatives, and partners with health equity expertise. The workgroups identified needs within each population domain based on the needs assessment findings and their experience within the MCH system.

Organizations and program areas that participated in the above groups are listed in a Supporting Document. Notably, the needs assessment was completed prior to the COVID-19 pandemic. The Title V program recognizes the significant impacts of COVID-19 on the MCH population and will assess emerging and shifting MCH needs over the next year.

Quantitative and Qualitative Methods and Data Sources

Identification of unmet needs was based on the four MAPP assessments, described below. The assessments collected a combination of qualitative and quantitative data to provide a holistic view of health and were tailored to focus on the MCH population.

Health Status Assessment

This assessment uses quantitative population level data to describe health status. The assessment began by identifying key MCH health indicators, including Title V National Performance Measures and National Outcome Measures and other measures tracked in each population domain.

Seventy health indicators were identified for maternal and infant health, of which 60 had adequate data for analysis. Eighty-two indicators were identified for child and adolescent health, of which 59 had adequate data for analysis. To identify indicators suggesting need, the following criteria were applied to each measure: a Black/White disparity of 10% or more; observed Black/White disparities worsening over time (minimum five years of data); statewide trend worsening over time (minimum five years of data); and Michigan performing two percentage points worse than the US overall in the most recent data year.

The analysis of CSHCN data relied heavily on the National Survey of Children's Health (2016-2017 combined) and used the HRSA Maternal Child Health Bureau (MCHB) framework for understanding the prevalence and impact of special health care needs on children. Key indicators quantified the types and levels of severity of special health care needs for children in Michigan. Selected indicators were stratified by CYSHCN status and level of complexity, at both the state and national level. Analysis focused on understanding the CSHCN population as compared to all children and those without special health care needs. When possible, data were stratified by race and ethnicity.

System Assessment

This assessment explores the degree to which public health systems deliver essential services within existing capacity and available resources. Michigan focused on six of the 10 essential public health services: educate and empower; mobilize partnerships; develop policies; link to/provide health services; evaluate and improve; and inform and apply research. These services were prioritized to gather input from external partners to develop a well-rounded view of capacity. The National Public Health Performance Standards Program, which is designed to be inclusive of all public health services, was used to complete the assessment. The tool was significantly adapted for Michigan's needs assessment to focus on MCH and health equity.

The system assessment was completed during a facilitated full-day meeting of the Stakeholder Group and involved a series of discussion questions to identify strengths and gaps in capacity in each essential service. After discussing specific aspects of an essential service, the group used confidential electronic voting to capture the degree to which the system was delivering the service.

Forces of Change Assessment

This assessment identifies forces outside the MCH system that could impact population health. Forces include trends, factors, and events that may influence health, both in the recent past and the foreseeable future. This assessment was completed by members of the Stakeholder Group who self-selected into one of four breakout groups: women, maternal and infant; child and adolescent; CSHCN; or cross-cutting. The assessment was completed during a half-day facilitated session in which each group identified forces that influence health. Forces that could create inequities were highlighted.

Community Themes and Strengths Assessment

This assessment gathers the perspectives of community members, including thoughts, experiences, and opinions about their health and quality of life. It is designed to gain a deeper understanding of the strengths, assets, and barriers that exist in communities. Data for this assessment were collected through provider surveys, encounter surveys, focus groups, and listening sessions with both service providers and community members across Title V population domains. The provider survey was an online survey administered to participants (n=526) through the survey platform Qualtrics. The encounter survey was administered to recipients of MCH services (n=307) in one of two formats, an online survey or paper survey. Trained facilitators facilitated 22 focus groups and listening sessions to gather experiences and perspectives on health. Quantitative survey data were analyzed in SPSS and qualitative data were thematically analyzed to identify reoccurring strengths, barriers, and opportunities for improvement.

Identifying Priority Needs

After completion of the four MAPP assessments, data were analyzed to identify themes. Themes were identified

when common topics or issues arose across each MAPP assessment. This filter supported narrowing themes, and ultimately priorities, to those most present in the data. The only exception to this process was related to the Community Themes and Strengths Assessment findings. If community data led to a theme that was less present in the other assessments, it was still included as a theme.

Three population domain workgroups representing a broad array of MCH stakeholders were convened in the fall of 2019 to review the findings of the MAPP assessments, review the themes, and identify priority needs. This process involved three full-day meetings. During the morning session, participants were guided through the assessment findings. In the afternoon, they participated in a facilitated session to explore each of the themes and draft priority need statements.

Following the population domain workgroups, over 50 priority need statements were reviewed to identify areas of commonality. Where the groups identified a similar need, a consolidated need statement was developed. Those needs that best aligned with Title V were identified and linked to a relevant NPM or SPM. The needs assessment findings were then used to inform state action plan development. Originally, an in-person workshop was planned with MCH staff to develop strategies, objectives, and ESMs. Due to the COVID-19 pandemic, the meeting was shifted to a webinar format during which guidance and resources for developing state action plans were provided. State action plans were developed with virtual technical assistance from Title V staff.

III.C.2.b. Findings

III.C.2.b.i. MCH Population Health Status

Michigan's Title V priority needs for 2021-2025 were developed from themes that emerged across the four MAPP assessments. This section provides a high-level summary of major findings from each assessment, highlighting data that drove the selection of priority needs and performance measures.

Strengths and Needs

The Community Themes and Strengths Assessment revealed assets and needs across each population domain. The themes most closely related to Michigan's Title V priority needs are summarized here.

Women, Maternal, & Infant Health

The provider survey, focus groups, and encounter survey all identified barriers in accessing healthcare, specialty providers, and mental healthcare for women and mothers. Provider survey and focus group participants shared that the cost of medical care limits access; families experience gaps in coverage; and coverage is too limited. Additionally, encounter survey and focus group participants identified gaps in the availability of high-quality care, including prenatal care, postnatal care, breastfeeding education and support, and family planning.

Provider burnout and a lack of birthing hospital access in rural areas was highlighted as a gap by both consumers and providers. The provider survey identified provider shortages in areas of the workforce critical to the health of women and mothers, including licensed medical social workers, community health workers, obstetricians, gynecologists, and medical assistants.

Women and mothers who participated in focus groups reported experiences of racism and implicit bias when seeking medical care. Focus group participants also reported feeling their race impacted the quality of care they received, particularly around family planning and birth spacing. This finding was echoed in responses to the provider survey, where providers suggested that frontline medical providers could benefit from training in implicit bias.

Focus group participants reported that more support for infant safe sleep and positive parenting practices would

help families. Similarly, provider survey respondents suggested expanding supportive services such as home visiting, early childhood programs, and Great Start Collaboratives to support family planning, safe sleep, breastfeeding, and parenting. Focus group participants provided examples of restrictive workforce policies and practices that limit breastfeeding and stressed the need for supportive breastfeeding policies.

Child & Adolescent Health

Mistrust in the healthcare system was reported as a concern among focus group participants who noted gaps in access to accurate, trusted, linguistically appropriate, and culturally adapted messages about child health. Additionally, focus group participants reported that healthcare could be more accessible if it were integrated into settings where children live, learn, and play, such as school-based health centers. The provider survey also raised concerns about the availability of primary care for young children and limited access to preventive services.

Focus group and encounter survey participants reported environmental health concerns such as lead and PFAS contamination. They noted that socioeconomic status and race drive inequities in childhood exposure to lead contamination. Housing stock free of environmental contaminants was identified as a challenge, especially in lower-income neighborhoods. Focus group participants noted the need for greater investment in safe, livable communities and quality housing. This concern was echoed in the provider survey, and providers also noted that structural racism impacts exposure to unsafe living conditions.

Bullying, child abuse, domestic violence, and social/emotional abuse were all raised as concerns facing children and adolescents. Bullying in schools was highlighted as driving risky behaviors and mental health challenges among children and adolescents, especially those who identify as LGBTQ+. Focus group participants shared that schools need additional support to address the social and emotional needs of students, such as more counselors, social workers, and nurses.

Children with Special Health Care Needs

Insurance challenges and gaps in specialty providers were identified through focus groups and encounter surveys as challenges for families with CSHCN. Participants noted that access to available therapies, adaptive devices, and payment options that cover a variety of needs would help alleviate some of the stressors that result from caring for a child with special needs. Additionally, silos in communication across providers and provider turnover were reported as challenges that contribute to challenges in transition to adult care.

Multiple Population Domains

Mental and behavioral health was identified as an area of concern across population domains and through each data collection method. An overall lack of mental and behavioral health providers in Michigan, especially in rural areas, was reported as a challenge. Specifically, substance use disorder treatment and access to Community Mental Health centers were highlighted as challenges by focus group participants. Focus group participants also described how stigma surrounding mental health contributes to generational mental health issues and challenges.

While the Community Themes and Strengths Assessment highlighted many needs across population domains, it also identified assets such as:

- Michigan’s caring and compassionate providers offer high-quality care with limited resources;
- Federally Qualified Health Centers, local health departments, and school-based health centers fill gaps in access to care;
- Community-based, culturally and linguistically appropriate organizations provide quality support services;

- A strong home visiting system that spans the state and provides numerous programming options to align with family needs;
- Michigan's CSHCS program and its long-standing history of providing quality supports and helping families afford care; and
- Longstanding relationships, collaborative bodies, and MCH expertise at the state and local level.

Major Health Findings

The Health Status Assessment elevated strengths and areas of concern in each Title V population domain. Key findings related to Title V priority needs are highlighted below.

Women, Maternal, & Infant Health

Addressing disparities in infant and maternal mortality is one of Michigan's top MCH priorities. Michigan has a large and persistent disparity between white and black women in maternal mortality, and the maternal mortality rate in Michigan overall has been increasing since 2012 to a high of 82/100,000 live births in 2016 (Michigan Maternal Mortality Surveillance, MDHHS, 2011-2016). Additionally, black infants are three times more likely to die before their first birthday as compared to white infants (14.6/1,000 as compared with 4.8/1,000 live births in 2017) (Vital Records & Health Statistics, MDHHS). Disparities also exist within other racial and ethnic groups.

The assessment highlighted factors driving maternal and infant health outcomes. Michigan has persistently lagged the US in women receiving prenatal care beginning in the first trimester (72.4% US compared to 64.0% MI in 2017), and black women in Michigan are 20% less likely to begin care in the first trimester (Vital Records & Health Statistics, MDHHS). Similarly, Michigan's mothers undergo a low-risk cesarean delivery more frequently than the US (26.0% in the US compared to 28.7% in MI in 2017), and both the disparity and the rate for black mothers are increasing (Vital Records & Health Statistics, MDHHS, 2012-2017). Disparities in safe sleep are also striking; babies who are black are 20% less likely to be placed on their backs to sleep as compared to babies who are white (MI PRAMS, 2012-2017). Babies who are black are also 40% less likely than babies who are white to sleep alone, in a safe bed, on their backs (MI PRAMS, 2012-2017). Finally, while Michigan has seen a steady increase in breastfeeding initiation, disparities remain with 77.2% of black mothers initiating breastfeeding as compared to 90.1% of white mothers in 2017 (MI PRAMS, 2012-2017).

The assessment also highlighted improvements in the health of women, mothers, and infants. Since 2012, Michigan has observed a steady increase in women receiving a routine medical checkup in the past 12 months, from 62.9% in 2012 to 69.1% in 2017 (Behavioral Risk Factory Surveillance Survey). Smoking during pregnancy has also declined from 16.5% in 2012 to 11.3% in 2017 (MI PRAMS).

Child & Adolescent Health

One strategy to support child and adolescent health is through access to a medical home. The assessment found a disparity between white and black children, with 53.3% of white children having a medical home compared to 29.0% of black children in 2017-2018 (National Survey of Children's Health, 2016-2018). Similarly, Michigan found disparities in access to preventive dental visits, with black children (71.5%) being less likely than white children (79.2%) to receive a preventive dental visit (NSCH, 2016-2018). Michigan also lags in vaccination rates. Children in Michigan ages 19-35 months have been less likely than children in the US to complete the seven-vaccine series every year from 2013 and 2017, and only 69.9% completed the series in 2017 (National Immunization Surveys). Children in Michigan's large, urban centers have significantly higher rates of elevated blood lead levels among children under age six as compared with the state. For example, in 2016, 8.8% of children under six years old who received testing in Detroit had a blood lead level greater than or equal to 5 micrograms of lead per deciliter of blood,

as compared with 3.6% in Michigan (Childhood Lead Poisoning Prevention Program, MDHHS). Finally, rates of bullying in Michigan have remained high with 29.6% of high school students reporting bullying in the past 12 months in 2017. Rates of bullying are higher among American Indian high school students, 43.6% of whom reported bullying in 2017 (Youth Risk Behavior Surveillance System, 2011-2017).

However, Michigan experienced improvements in continuous and adequate insurance for children. The percentage of children 0-17 without health insurance declined each year from 2012 to 2017; Michigan's children were less likely to be without health insurance as compared to the US; and black children were less likely to be uninsured than white children (NSCH, 2016-2018). Additionally, Michigan observed a steady decline in its teen birth rate among females age 15-19, from 26.2/1,000 in 2012 to 15.8/1,000 in 2018 (Vital Records & Health Statistics, MDHHS, 2012-2018).

Children with Special Health Care Needs

The CSHCN data revealed unique needs among this population. The assessment raised concerns regarding adequacy and continuity of insurance coverage with 36.4% of CSHCN reporting that their insurance was inadequate or that they encountered a gap in coverage (NSCH, 2016-17). Additionally, 46.1% of CSHCN (as compared with 38.3% CSHCN in the US) experienced bullying (2016-17) (NSCH, 2016-17). Finally, only 16.0% of CSHCN had the support needed to transition to adult care, which was lower than the US average of 16.7% (NSCH, 2016-17).

Multiple Population Domains

The Health Status Assessment identified findings across population domains related to mental health. In 2017, 19.2% of Michigan women 18-44 reported more than 14 days of poor mental health in the past 30 days, as compared to 16.2% in the US. Moreover, 24.2% of black women reported poor mental health (BRFS). Similarly, the prevalence of postpartum depression for black women was reported to be almost twice that of white women in 2018 (23.6% compared to 13.6%) (MI PRAMS). Among adolescents, 37.3% reported feeling sad or hopeless for two weeks or more in 2017, a dramatic increase from the 26.0% who reported feeling sad or hopeless in 2011 (YRBS, 2011-2017). Michigan has also seen a disturbing upward trend in suicide mortality among adolescents from 6.5/100,000 in 2012 to 7.5/100,000 in 2016 (Vital Records & Health Statistics, MDHHS, 2013-2017). Finally, access to mental health care is problematic across all population groups, including CSHCN. Compared with a US average of 22.9%, 27.4% of CSCHN in Michigan sometimes or never had the insurance coverage they need for mental/behavioral care (2016-17) (NSCH, 2016-17).

MCH Efforts to Address Needs

The System Capacity Assessment identified strengths and weaknesses of the MCH system in Michigan. The Forces of Change Assessment identified opportunities and threats in the broader sociocultural and political context. Although the System Capacity Assessment was organized by Essential Services and not by population domain, this summary of key findings is organized by population domain for continuity.

Women, Maternal, & Infant Health

The System Assessment identified examples of services and strategies helping to meet the needs of this population. Michigan's Regional Perinatal Quality Collaboratives are enhancing collaboration and supporting innovation; home visiting models are supporting families throughout pregnancy, birth, and the early years; safe sleep partners have developed and disseminated more culturally sensitive and responsive messaging for families; and policy and programs that support breastfeeding have grown steadily.

However, the System Assessment raised concerns regarding the shortage of OB/GYNs, nurse midwives, doulas and

other specialty providers, especially in the state's rural areas. These provider shortages limit supports available for women and mothers around breastfeeding, safe sleep, and family planning. The System Assessment also raised concern about the availability of birthing hospitals.

The Forces of Change Assessment noted factors beyond the MCH system that impact the health of women, mothers, and infants. The assessment highlighted the impact of the political climate on women's health and raised concerns about access to family planning and unbiased reproductive care. The assessment also noted that existing policies and polarization create barriers to promoting optimal health and well-being for women and mothers. Medicaid work requirements, for example, were generating significant concerns about access to care. Finally, the assessment described how racism, discrimination, and biases in society have significant impacts on the health and well-being of women of color.

Child & Adolescent Health

The System Assessment identified examples of services that benefit children and adolescents. Home visiting and early childhood system building efforts have worked toward providing greater continuity and connection across services for young children. Additionally, while they are not available statewide, school-based health centers were noted as a key asset in Michigan's public schools.

The System Assessment found gaps in the capacity of the MCH system to provide preventive services in the places where families live, learn, work, and play. This included primary care, dental care, developmental services, and mental health services. It also found gaps in the availability of home visiting beyond the first year; gaps in health and mental health care within school settings; and gaps in collaboration between different types of providers. The assessment noted that MCH services are often siloed, although examples of collaboration and coordination exist.

The Forces of Change Assessment indicated that the consistently rising cost of medical school was compounding the shortage of primary care providers. In addition, the assessment found that funding cuts to public education have led to a decrease in school nurses, threatening access to care. The assessment also raised concern about trauma and Adverse Childhood Experiences (ACEs) threatening the mental and physical health of children and adolescents. Finally, the assessment highlighted the complex and multifaceted impact of technology on child and adolescent health (which can be both positive and negative) and the need to address cyber bullying.

Children with Special Health Care Needs

The System Assessment noted several strengths of the CSHCN system in Michigan. Most prominently, the Family Center for CYSHCN was highlighted as a system strength. The Family Center provides support, information, and linkages to families of children with special health care needs and elevates the voices of parents within the system.

The System Assessment also highlighted the complexity of providing services and supports to CSHCN given that coordinating services for this population requires collaboration across multiple agencies and systems. Silos in communication and connectivity among partners present barriers to providing coordinated care and create barriers for families in accessing supports. The System Assessment also noted unique system gaps faced by this population and emphasized the potential for telemedicine and telehealth to mitigate some challenges.

The uncertainty of the health insurance system was reported as a challenge throughout the Forces of Change Assessment, specifically for individuals with pre-existing conditions. The supports that are provided through CSHCS, coordinated care and adequate transition services were identified as potential ways to support CSHCN and minimize the risk of losing adequate care.

Multiple Population Domains

Across all population domains, the System Assessment found that the MCH system has made progress toward improving its focus on equity. However, the assessment also found that more work is needed to address the root causes of inequity. The assessment highlighted the lack of diversity in the MCH workforce; the need to use data in more innovative ways to identify and address inequities; and the need for additional education for MCH providers on implicit bias. The System Assessment also noted the need for better linkages between healthcare services and community-based services to address social determinants of health and link families to needed services.

The System Assessment noted significant limitations on the provision of mental and behavioral healthcare and developmental services across all population domains. It found a systemic lack of consistent resources supporting access to these services, creating barriers to ensuring Michiganders have continued access to needed care.

Finally, the Forces of Change Assessment identified concerns about the rising cost of healthcare and other basic needs which may force families to make difficult choices between food or medicine, healthcare or rent. The assessment also highlighted the impact that a lack of a basic living wage can have on health, and the disproportionate increase in the cost of living versus access to jobs that pay a living wage.

III.C.2.b.ii. Title V Program Capacity

III.C.2.b.ii.a. Organizational Structure

The Title V program is administered by the Division of Maternal and Infant Health (DMIH) within MDHHS. The Division Director is the Title V MCH Director. The Division is located within the Bureau of Health and Wellness which includes the Divisions of Chronic Disease and Injury Control; Child and Adolescent Health (CAH); Women, Infants and Children (WIC); and Local Health Services. The Bureau of Health and Wellness is located within the Public Health Administration. Structurally, the Title V MCH Director reports to the Director of the Bureau of Health and Wellness, who currently reports to the Chief Deputy for Health. The Chief Deputy for Health is also the Chief Medical Executive and reports directly to the Governor.

The Title V CSHCN program is operated by the Children's Special Health Care Services (CSHCS) Division. The Division Director is the Title V CSHCN Director. The CSHCS Division is located within the Bureau of Medicaid Care Management and Customer Service which is located within the Medical Services Administration (MSA). The Title V CSHCN Director reports to the Bureau Director, who reports to the MSA Director, who reports to the MDHHS Director.

In Michigan, Title V funding is used to support programs and services across several bureaus and administrations. A Title V leadership team (including DMIH, DCAH, and CSHCS directors) provides administrative oversight for Title V in coordination with program areas that receive Title V funding. Title V allotments currently support the following:

- Local Health Departments
- Medical Care and Treatment for CSHCN
- Family Planning Local Agreements
- Childhood Lead Poisoning Prevention Program
- Immunizations
- Dental Programs for Children
- Infant Safe Sleep
- Family Center for CYSHCN
- MCH special projects including maternal mortality surveillance, PRAMS, fetal alcohol spectrum disorder, and parent leadership

The mechanisms by which MDHHS administers Title V are described throughout the grant.

III.C.2.b.ii.b. Agency Capacity

MDHHS has a longstanding history and capacity to promote and protect the health of the MCH population, including CSHCN. Most Title V programs are administered by the DMIH, DCAH, and CSHCS. Collectively, these three divisions provide services across the five HRSA population domains. They also work with MCH programs outside their divisions that receive Title V funding (e.g., Childhood Lead Poisoning Prevention Program, Immunizations, and maternal and infant mortality surveillance) to ensure a statewide system of services with comprehensive, community-based care. The divisions are responsible for assessing need; recommending policy; developing and promoting best practices and service models; engaging families and communities; and supporting the capacity within communities to provide high quality, accessible, culturally competent services. Priority is placed on prevention and health promotion activities to improve physical and behavioral health. A synopsis of key program areas is below.

Division of Maternal and Infant Health: DMIH focuses on improving the health, well-being, and quality of life for infants, pregnant women, and women of childbearing age and their families. Major programs include Title X Family Planning, the Maternal Infant Health Program, Infant Safe Sleep, Early Hearing Detection and Intervention (EHDI), Michigan Fetal Infant Mortality Review, Fetal Alcohol Spectrum Disorders, and Regional Perinatal Quality Collaboratives. DMIH provides a leadership role in state efforts to reduce maternal and infant mortality, including oversight of the *Mother Infant Health and Equity Improvement Plan*. The division provides technical assistance, infrastructure and epidemiologic support across maternal and infant health.

The *Women and Maternal Health Section* focuses on preconception, interconception, maternal and perinatal health for women. The section supports health planning and the delivery of equitable, quality contraceptive and reproductive health services. The Title X program supports local providers who provide health education and counseling, reproductive health assessments, contraceptive services, and referrals to the general population, including low-income women and men. The section is also involved in statewide breastfeeding and prenatal smoking cessation initiatives.

The *Perinatal and Infant Health Section* focuses on supporting a healthy perinatal period through positive pregnancy and infant health outcomes. The target populations are pregnant and postpartum women and newborns. The section administers the Maternal Infant Health Program (MIHP), Michigan's statewide home visiting program for Medicaid beneficiaries. Certified local providers offer assessment, case management and support services to pregnant women and infants. The section is also responsible for infant health initiatives to reduce fetal and infant deaths; achieve infants safe sleep; promote screening and evidence-based treatment for chronic conditions in newborns; and increase the proportion of newborns that receive hearing screens, evaluations and services.

Division of Child and Adolescent Health (DCAH): DCAH works to improve the health and well-being of Michigan's children, adolescents and young adults. The division is responsible for managing the Local Maternal Child Health (LMCH) program which provides consultation and monitoring to Michigan's 45 local health departments (LHDs) that receive Title V funding. The Oral Health Unit is also located in DCAH.

The *Child and Adolescent School Health Section* oversees federal teen pregnancy prevention programs including the Personal Responsibility & Education Program (PREP), the State Abstinence Education Program, and Pregnancy Assistance Funds used to implement the Michigan Adolescent Pregnancy and Parenting Program. These programs work collaboratively with state and local partners including the Michigan Department of Education (MDE), faith-based and health organizations, schools, LHDs, parents, and early childhood partners. The section oversees Michigan's Child and Adolescent Health Centers (CAHCs), funding 100 health centers and related programs in medically underserved, high-need communities. CAHCs provide primary care and behavioral health services, health education, Medicaid outreach and enrollment, and screening to K-12 students and young adults up

to age 21. The section also oversees the state's school nurse program and mental health in schools initiative; Michigan Model for Health, the state's comprehensive school health education program; and Hearing & Vision Screening Program.

The *Early Childhood Health Section* administers programs and initiatives to improve child health outcomes and support the development of an integrated and comprehensive early childhood system, including program management for home visiting and early childhood initiatives. The section administers the MIECHV grant and state home visiting dollars with a focus on stakeholder engagement to build a more effective and robust system. The section oversees the Parent Leadership in State Government initiative and serves as a liaison between public health and Part C/Early On.

CSHCS Division: The CSHCS Division focuses on identifying and addressing the health needs of CSHCN to help them achieve optimal health and an improved quality of life. CSHCS partners with families, community providers and other state agencies to ensure access to quality services. Within Medicaid Health Plans (MHPs), eligible Medicaid enrollees (e.g., SSI, Blind and Disabled, Healthy Michigan Plan, etc.) who have qualifying diagnoses and meet criteria of severity and chronicity are also enrolled into CSHCS. These CSHCS/Medicaid dual enrollees are guaranteed access to primary care providers and a network of subspecialists and receive care coordination services through the MHP. Care coordination, case management, outreach and advocacy for blind and disabled individuals under the age of 16 receiving SSI are provided through CSHCS programs at local health departments.

The CSHCS Division includes five work areas. The Customer Support Section (CSS) processes medical eligibility determinations made by the Office of Medical Affairs (OMA), program applications for clients with qualifying diagnoses, and providers approved by OMA. CSS also conducts financial assessments; implements payment agreements; and issues and renews client program coverage. The Policy and Program Development Section (PPD) develops program policies; oversees implementation of program development plans; and develops and promotes transition strategies. PPD is responsible for administering the Insurance Premium Payment Benefit Assistance Program and provides oversight for care coordination through specialty clinics. Staff also help LHDs and families navigate complex billing issues. The Quality and Program Services Section (QPS) ensures program quality and improvement planning, monitors customer satisfaction, conducts LHD trainings, and assists LHDs in supporting clients (e.g., transportation and care coordination). The Children with Special Needs (CSN) Fund provides services and equipment to CSHCN not available through any other resource, including state or federal programs. The CSN Fund is available for Michigan residents under 21 who are eligible for CSHCS enrollment.

The Family Center for CYSHCN shapes CSHCS policies and programs by bringing a family perspective and helps families navigate the systems of care for CSHCN. Parent Consultants within the Family Center help to identify family needs; provide referral to resources; and connect parents to educational and emotional supports. Parent Consultants also promote the CSHCS program and provide trainings to help parents become advocates. Through its Parent-to-Parent Support Network, the Family Center provides emotional support and information to families. The statewide Family Leadership Network provides community-based perspectives on programs and policies and informs families of resources and services. The Family Phone Line provides another avenue of support and is available to any family that has a child with special needs.

III.C.2.b.ii.c. MCH Workforce Capacity

Michigan has many MCH leaders who provide strategic leadership and oversight to MDHHS programs and initiatives. Title V senior level leadership and program staff include:

- ***Dawn Shanafelt, MPA, BSN, RN, Director, Division of Maternal and Infant Health*** has 23 years of clinical and administrative public health experience at local and state levels. Ms. Shanafelt has served as the

Title V MCH director since 2019. She administers Michigan's maternal and infant health programs including Title X Family Planning, the Maternal Infant Health Program, and statewide initiatives to reduce maternal and infant mortality.

- ***Lonnie Barnett***, ***MPH, Director, CSHCS Division*** has over 25 years of state and local public health experience in health administration, health planning, systems development, workforce development, and data-informed program development. Mr. Barnett has worked for MDHHS since 1998 and previously served as the Manager for the Health Planning and Access to Care Section. He has served as the Title V CSHCN Director since 2011.
- ***Carrie Tarry***, ***MPH, Director, Division of Child and Adolescent Health*** has 20 years of state-level experience working in child health, adolescent and school health, and teen pregnancy prevention programs. She also oversees the MIECHV home visiting initiative and oral health programs and administers Title V funding to 45 local health departments.
- ***Sarah Davis, MPA, Departmental Specialist, Division of Maternal and Infant Health*** has 13 years of state-level experience in health and human services program coordination and grant management. She has served as the Title V block grant coordinator since 2015 and serves on state-level MCH committees and advisory boards.
- ***Theresa Christner, MA,*** **CSHCS Policy and Program Development Section Manager**, has more than 30 years of public health experience at the local and state level. She provides oversight to staff responsible for policy, healthcare transition services, specialty clinics, insurance premium payment benefit and billing assistance.
- ***Chris Fussman, MCH Epidemiology Section Manager*** has 12 years of state level experience with epidemiologic analysis and interpretation to inform and guide MCH program leaders and policy makers about population health.
- ***Lindsay Townes, MPH, Adolescent School Health Epidemiologist*****,** has nearly a decade of experience in academic and government epidemiology. Ms. Townes provides epidemiological and data support to the Title V program, including comprehensive needs assessment activities and annual reporting.
- ***Trudy Esch, MS, BSN, RN, Nurse Consultant, Division of Child and Adolescent Health*** has worked for 37 years as a nurse, with 20 years in academia and 10 years of state level experience. She oversees contract monitoring for Title V local MCH services funded through 45 local health departments.

Additional managers and staff across MCH program areas provide oversight and administration of services funded by Title V. These include managers and staff in the Childhood Lead Poisoning Prevention Program; the reproductive health unit; the infant health unit; the infant safe sleep program; the oral health unit; the adolescent and school health unit; and the Division of Immunization. Representatives from each Title V program area serve on the Title V steering committee to ensure a coordinated approach to Title V activities.

Title V funding currently supports five state-level positions that provide administrative support to the Title V block grant. Two positions provide oversight of the local MCH program; two positions provide epidemiological support; and one position provides coordination of all block grant activities. These positions are based in MDHHS central office in Lansing, Michigan. Only one LMCH position is supported in full by the Title V block grant; the remaining four positions are supported through blended funding (e.g., state general funds) as most positions have responsibilities in addition to Title V.

Approximately $105,000 of Title V funding helps to support the programmatic work of the Family Center for CYSHCN and its staff, which are paid positions:

- ***Candida Bush, Director,*** is a Certified Family Life Educator through the National Council on Family Relations***.*** She is a parent of two young adults with special health care needs and has worked over 25 years

to support, empower, and increase access to services for CSHCN.

- ***Lisa Huckleberry, Megan Mezel, Aleisha Leavitt, Ayanna Eggleston, Kate Jones (Parent Consultants)*** are parents of children with special health care needs or chronic health conditions. They have 40 years of combined experience advocating, educating, supporting, and providing direct care to individuals with special health care needs and their families. Parent consultants encourage, engage, and help to empower families to know the value and impact of their voice and their story.
- ***Dawn Adkins, Program Assistant,*** is a parent of two adult children with chronic health issues and continues to advocate for their health and the health of others.
- ***Christina Davis and Brenda Blair (Family Phone Line Representatives)*** are parents of children with special health care needs or chronic health conditions. They have 17 years of combined experience supporting and advocating for those with special health care needs.

The Title V needs assessment identified MCH workforce capacity and gaps. A provider survey was sent to individuals across the state who provide services to children and families to assess unmet needs impacting the MCH population. In total, 526 responses were captured. The top two survey respondents were Registered Nurses (n=90, 26.9%) and licensed childcare providers (n=65, 19.4%). The provider survey and other needs assessment data revealed that Michigan faces gaps in provider availability, including:

- A systemic lack of mental and behavioral health providers equipped to provide treatment specific to substance use disorders
- A shortage in medical and dental providers for CSHCN
- A statewide shortage of medical and dental providers that accept Medicaid
- A shortage of providers with open caseloads accepting new patients
- A limited numbers of obstetricians and birthing hospitals in rural areas

These findings related to gaps in provider availability align with other studies. A September 2019 Kaiser Family Foundation (KFF) report concluded that Michigan required an additional 529 primary care providers to ensure Michiganders have access to primary care and that only 42% of Michiganders' primary care needs are met. Similarly, an Altarum report identified a critical shortage of behavioral health providers in Michigan. Of the 1.76 million Michiganders experiencing a mental illness, about 62% receive treatment. Additionally, only 20% of Michiganders with a substance use disorder receive treatment.

MCH provider shortages in Michigan align with similar shortages across the US. The March of Dimes report *Nowhere to Go: Maternity Care Deserts Across the US* (2018) revealed an uneven distribution of MCH providers (OB/GYN, certified nurse-midwives, and family physicians) across the US, which contributes to access inequities in certain communities and rural areas. Almost half of US counties lack a single OB/GYN, and more than 20 million women lived in counties without an OB provider. The US also faces a critical shortage of Registered Nurses. According to the 2018 National Sample Survey of Registered Nurses (HRSA), 83% of licensed nurses were currently employed and 47.5% were over the age of 50. Michigan also faces an aging nursing workforce. Additionally, according to the 2019 Michigan Annual Nurse Survey 12.4% of Michigan nurses who provide direct patient care and 27% of nurses who do not provide direct patient care plan to leave the workforce in the next five years.

Equally problematic is the shortage of pediatric subspecialists, pediatric surgical specialists, child and adolescent psychiatrists, and advanced practice professionals. The Children's Hospital Association Survey (2017) reports that nationwide, these shortages exacerbate burdens on families who experience long wait times for appointments and often must travel great distances to obtain care.

The needs assessment also found strengths and gaps in the degree to which the MCH workforce feels well prepared for their roles. When asked on the provider survey whether they agreed with the statement “My workforce has access to high-quality training specific to their role” 52% of respondents strongly agreed, 27% agreed, and 18% disagreed. Additionally, the needs assessment found:

- Longstanding MCH staff and leaders at the local and state level bring expertise and wisdom to the MCH system
- Michigan’s MCH system is collaborative and provides opportunities for statewide learning
- Providers need additional training and resources on cultural competency
- Providers need additional training and resources to assess and address patients’ basic needs

These findings can inform future efforts to strengthen Michigan’s MCH and public health workforce in partnership with MDHHS, local partners, and colleges and universities.

III.C.2.b.iii. Title V Program Partnerships, Collaboration, and Coordination

The Title V needs assessment utilized and built upon a wide range of partnerships and collaboration. Long-standing relationships between MDHHS and public and private organizations, service providers, and advocacy organizations were identified as a strength in the needs assessment. These relationships allow for collaborative and coordinated work which strengthens the ability to meet MCH population needs. For example, MDHHS provides Title V funding to local health departments to address MCH needs through local program implementation. MDE is also a close partner in programs supporting early childhood, school health, and child and adolescent health. MDE and MDHHS have a long history of integrated funding for early childhood, Child and Adolescent Health Centers, Hearing and Vision school-based screenings, and shared state-level positions.

Key Title V and MCH partnerships include the following: Children’s Special Health Care Services Advisory Committee; Children’s Trust Fund; Early Childhood Investment Corporation; Early Hearing Detection and Intervention (EHDI) Advisory Committee; Family Leadership Network; Family to Family Health Information Center; Great Start Operations Team; Health Disparities Reduction and Minority Health Section; Infant Safe Sleep State Advisory Team; Michigan Alliance for Families; Michigan Association for Local Public Health; Michigan Association of Health Plans; Michigan Breastfeeding Network; Michigan Council for Maternal and Child Health; Michigan Family Voices; Michigan Health and Hospital Association; Michigan Maternal Mortality Surveillance Committee; Michigan Primary Care Association; Michigan Oral Health Coalition; Regional Perinatal Quality Collaboratives; School-Community Health Alliance of Michigan.

Provider organizations such as the Michigan chapters of the American College of Obstetrics and Gynecology, American Academy of Pediatrics and Society of Adolescent Medicine enhance health advocacy efforts and offer education and training. Several Michigan universities partner in program evaluation and in pilot projects to expand services, including projects in telemedicine and telepsychiatry. Tribal, youth-serving, faith-based, community-based and other non-profit organizations are often recipients of grant funds for service delivery and create linkages to service recipients, allowing MDHHS to uplift the consumer voice through consumer representation on advisory boards, councils and task forces.

Lastly, the Title V program regularly partners with other federal investments (including the State System Development Initiative, Newborn Screening, MIECHV, Healthy Start, Medicaid, and WIC) and state programs (including chronic disease and injury control, substance abuse prevention, behavioral health, vital records, and epidemiology). Many of these partnerships and collaborative initiatives are described throughout this application.

III.C.2.c. Identifying Priority Needs and Linking to Performance Measures

The findings from Michigan’s needs assessment drove identification of seven state priority needs which were used

to select seven NPMs and six SPMs. The alignment between NPMs/SPMs, state priority needs, and population domains is illustrated in the NPM/SPM chart included as a Supporting Document. The needs assessment also identified three “pillars” that apply across Michigan’s state action plans.

The process of selecting state priority needs included two phases. First, the 50+ priority need statements developed by the population domain workgroups were reviewed to identify commonalities. Similar statements were consolidated, resulting in a list of 35 priority needs. Second, the priority need statements were reviewed to determine if they were within or outside the scope of Title V. As a result of this process, priority needs were sorted into five categories:

1. Title V State Priority Needs
2. Title V Pillars
3. Needs Assessment Gaps
4. MCH Priorities
5. Priorities to Elevate beyond MCH

Priority needs in the first category were selected as Michigan’s Title V state priority needs for the next five-year cycle. They aligned with the purpose of Title V and could be linked to performance measures and/or used to develop SPMs. The Title V priority needs for 2021-2025 are:

1. Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity.
2. Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play.
3. Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they learn and live.
4. Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems.
5. Improve oral health awareness and create an oral health delivery system that provides access through multiple systems.
6. Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities.
7. Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person.

The needs categorized as Title V pillars aligned with the purpose of Title V and were used to inform NPM and SPM state action plans. They reflected broad and overarching drivers of health outcomes and system effectiveness. The Title V pillars are:

1. Build capacity to achieve equitable health outcomes by understanding and addressing the role of implicit bias and macro-level forces (such as racism, gender discrimination, and environmental degradation) on the health of women, infants, children, adolescents, and children with special health care needs.
2. Intentionally and routinely find opportunities to seek the knowledge and expertise of communities and families in all levels of decision-making to build trust and create policies and programs that align with family and community needs.
3. Deliver culturally, linguistically, and age-appropriate health education that reflects customer feedback, effectively uses technology, and reaches multiple audiences.

Needs in other categories will be carried forward in various ways. Three needs suggested gaps in the needs

assessment and will be used to inform future assessment activities. Ten needs were identified that aligned with the work of broader MCH programs and partners. These priorities highlighted needs related to addressing social determinants of health, strengthening advocacy, diverse representation in the workforce, and respite care. These priorities can be considered through MCH programs beyond Title V and/or addressed through partnerships.

Lastly, ten needs were identified that are broader than Title V and the MCH system. These priorities included creating systems for whole person care, improving rural health care, addressing payment barriers and administrative and funding silos, abolishing racism and other forms of oppression, and creating equitable distribution of income. These findings will be shared with leadership in the Public Health Administration and with other system partners. For example, Michigan is currently conducting its State Health Assessment and these priorities will be elevated as part of that process.

Michigan developed its state priority needs in 2015 and 2020 through a comprehensive group process. In each cycle, dozens of MCH partners reviewed data and developed priority need statements independent of priorities that emerged from the prior assessment. Given this process, it is highly unlikely that the specific statements developed from one iteration of the needs assessment to the next would be the same. As such, Form 9 indicates all state priority needs as “new.” However, commonalities and differences emerged between the two cycles, as illustrated in Table 1.

Table 1: Alignment between FY 2016-2020 and FY 2021-2025 Priority Needs

FY 2016-2020 Priorities	FY 2021-2025 Priorities
Reduce barriers, improve access, and increase the availability of health services for all populations	Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity
Invest in prevention and early intervention strategies	Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play
Foster safer homes, schools, and environments with a focus on prevention	Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person
Increase family and provider support and education for Children with Special Health Care Needs	Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they learn and live
Increase access to and utilization of evidence-based oral health practices and services	Improve oral health awareness and create an oral health delivery system that provides access through multiple systems
Promote social and emotional well-being through the provision of behavioral health services	Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems
Support coordination and linkage across the perinatal to pediatric continuum of care	
	Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities

In both cycles, the needs assessments suggested gaps in access to healthcare, including physical, mental,

behavioral, developmental, and oral health care. They also highlighted the need to expand or enhance key components of the service system for families, including preventive services, early intervention, and services for children with special needs. Both sets of priority needs also highlighted the need to partner with schools and communities to foster safety and wellbeing.

Compared to the 2015 needs assessment, the 2020 needs assessment resulted in priority needs more focused on equity and social determinants of health. It also focused more explicitly on integrated, whole-person care, as well as delivering care and services where people live, learn, work, and play. Finally, this needs assessment more explicitly focused on family partnership in defining need, shaping services, and driving improvement.

NPMs and SPMs were assessed and selected based on three main criteria: conceptual alignment between the measure and the priority need statement; the capacity of the Title V program to impact the measure (e.g., whether activities, funding, and/or leadership related to the measure are within the scope of Title V); and current performance based on population health data. Title V leadership determined whether state or local Title V resources were allocated toward the measure, and MCH epidemiologists examined each NPM and potential SPM to identify disparities, trends, and Michigan's performance related to the US. Once NPMs and SPMs were selected they were vetted with the Title V Steering Committee and presented to the Needs Assessment Stakeholder Group.

III.D. Financial Narrative

	2017		2018	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$19,025,100	$20,986,297	$18,959,000	$18,718,089
State Funds	$50,849,000	$40,501,426	$45,199,700	$33,539,006
Local Funds	$0	$0	$0	$0
Other Funds	$450,000	$562,110	$500,000	$394,249
Program Funds	$68,027,100	$63,683,177	$68,201,100	$62,748,608
SubTotal	$138,351,200	$125,733,010	$132,859,800	$115,399,952
Other Federal Funds	$320,292,289	$289,596,875	$373,642,410	$257,083,069
Total	$458,643,489	$415,329,885	$506,502,210	$372,483,021

	2019		2020	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$19,193,200	$19,238,763	$19,316,300	
State Funds	$46,999,800	$41,868,576	$48,158,300	
Local Funds	$0	$0	$0	
Other Funds	$500,000	$763,473	$500,000	
Program Funds	$68,309,200	$58,013,859	$68,599,500	
SubTotal	$135,002,200	$119,884,671	$136,574,100	
Other Federal Funds	$381,595,500	$312,150,786	$344,942,800	
Total	$516,597,700	$432,035,457	$481,516,900	

	2021	
	Budgeted	Expended
Federal Allocation	$19,415,900	
State Funds	$42,008,500	
Local Funds	$0	
Other Funds	$790,000	
Program Funds	$7,868,700	
SubTotal	$70,083,100	
Other Federal Funds	$315,888,100	
Total	$385,971,200	

III.D.1. Expenditures

Financial Narrative Overview

Title V federal funding, in conjunction with non-federal state monies and other federal funds, are obligated and expended to support Michigan's MCH priority needs and Title V requirements. Over one-third of Title V funding supports Children with Special Health Care Needs (CSHCN) and over one-third supports the MCH work of all 45 local health departments across the state. The remaining Title V funding supports other MCH priorities such as immunizations, childhood lead poisoning prevention, oral health for children, infant safe sleep and breastfeeding initiatives, reproductive health, infant and maternal mortality reduction strategies, health equity initiatives, parent leadership, and Pregnancy Risk Assessment Monitoring System (PRAMS). State general funds are used for Michigan's required state match. To ensure alignment with Title V requirements, Title V leadership and the MDHHS Budget liaison meet throughout the year to review Michigan's MCH expenditures. Expenditures for FY 2019 and budget plans for FY 2021 are discussed in Sections III.D.1 and III.D.2, respectively.

Expenditures (FY 2019 Annual Report Year)

In FY 2019, Title V funds were spent on an array of MCH programs and initiatives. The following narrative corresponds with the budget forms in this application and annual report.

Form 2

Michigan's Title V state match (as reflected on Form 2, line 3, "State MCH Funds" in Annual Report Expended) exceeds federal match and Maintenance of Effort requirements. Approximately 82% of Michigan's state match is comprised of state general funds for CSHCS medical care and treatment. The remaining 18% includes state general funds that support health and wellness initiatives, family planning local agreements, prenatal care and outreach, non-emergency medical transportation for CSHCN, and bequests for care and services for CSHCN. Fluctuations in State MCH Funds expended can occur each year based on significant one-time costs for CSHCS medical care and treatment. Form 2, line 5, "Other Funds" in the Annual Report Expended represents the Children with Special Needs Fund. Approximately $1 million was authorized for FY 2019, but CSHCS only spends the earnings of the fund, which in FY 2019 was $763,473. Program Income (Form 2, line 6) includes WIC rebates and newborn screening follow-up.

As illustrated in Form 2, line 9, "Other Federal Funds," Michigan's MCH work was supported by a variety of other federal funds in FY 2019 including: Women, Infants and Children (WIC); State Systems Development Initiative; Title XIX (Medicaid); Oral Health; Vaccines for Children; Epilepsy; and Title X (Family Planning). MCH priorities across the Title V population health domains were supported by federal and state dollars in FY 2019. For example, in the Title V child health domain, a state priority was to foster safer homes, schools and environments with a focus on prevention. Michigan's performance measures for this state priority need focused on safe sleep environments and lead poisoning prevention. Other federal awards helped to support this Title V priority such as the CDC Childhood Lead Poisoning Prevention Program (CLPPP), PRAMS, DHHS Support for Expectant and Parenting Teens, and USDA WIC funding. In the perinatal/infant health domain, a state priority was to support coordination and linkage across the perinatal to pediatric continuum of care. Federal grants such as the CDC Early Hearing Detection and Intervention (EHDI) State Program; HRSA Maternal, Infant and Early Childhood Home Visiting Program (MIECHV); and HRSA Universal Newborn Hearing, Screening and Intervention help support this priority and related work.

30/30/10 Requirement

Michigan tracks expenditures to comply with the Title V 30/30/10 legislative requirements. That is, a minimum of 30% of total funding must be expended for CSHCN; a minimum of 30% of total funding must be expended for preventive

and primary care for children ages 1-21; and a maximum of 10% of total funding can be expended for Title V administration. In FY 2019, expenditures were tracked by CSHCN; preventive and primary care for children ages 1-21; pregnant women, mothers and infants; and other. Earmarked expenditures track the required amount, variance, percent of total and percent required to assure legislative compliance. In FY 2019, 36.3% of Title V expenditures were for services for CSHCN; 31.2% of expenditures were for preventive and primary care for children; and 3% of expenditures were for Title V administrative costs. The remaining 29.5% of expenditures were for pregnant women, mothers, infants and others. Funding across the Title V populations supported work related to Local Maternal and Child Health (LMCH), medical care and treatment for CSHCN, safe sleep, fetal alcohol syndrome disorder (FASD), childhood lead prevention, pregnancy prevention, Perinatal Care System Quality Improvement Collaboratives, and surveillance mechanisms such as PRAMS, maternal mortality surveillance and fetal and infant mortality reviews.

To assure the 30/30/10 requirement is documented and to record expenditures by the MCH Pyramid of Services, the Local MCH (LMCH) program has specific budget project titles in the Electronic Grants Administration & Management System (EGrAMS). The FY 2019 budget project titles included the following five categories:

- Direct Services Children – MCH
- Enabling Services Children – MCH
- Direct Services Women – MCH
- Enabling Services Women – MCH
- Public Health Functions & Infrastructure – MCH

Expenditures for CSHCN also have specific project titles in EGrAMS to record and document expenditures for medical care, treatment, case management services, outreach and advocacy.

For the 30% children requirement, Michigan tracks related expenditures at the state and local level including immunizations for children and adolescents, oral health services for school-age children, family planning and reproductive health for adolescents, teen pregnancy prevention, childhood lead poisoning prevention and case management, special projects such as services for children with FASD, and other LMCH activities.

In Form 2, Annual Report Expended, the following line items were greater or less than 10% of the Annual Report Budgeted, due to the following reasons:

- Line 1A, Preventive and Primary Care for Children, FY 2019 Annual Report Expended, was lower than budgeted due to decreased Title V expenditures related to children in the Local MCH appropriation.
- Line 1C, Title V Administrative Costs, FY 2019 Annual Report Expended, was less than anticipated due to decreased personnel and administrative costs.
- Line 3, State MCH Funds, FY 2019 Annual Report Expended, was lower than expected due to realized medical care and treatment expenses being lower than anticipated.
- Line 5, Other Funds, FY 2019 Annual Report Expended, was higher than budgeted because the Children with Special Needs Fund earnings were above the authorization amount.
- Line 6, Program Income, FY 2019 Annual Report Expended, was lower than budgeted due to WIC rebate earnings less than the appropriation amount.

Local MCH

Title V funding is allocated to each of the 45 local health departments (LHDs) in Michigan through the LMCH program. Each LHD receives a fixed amount of funds, with allocations ranging from $15,490 to $1,709,654. LMCH funds are available to support one or more of the Title V national and state performance measures plus

locally-identified needs. Each LHD completes a work plan for every national, state and/or local performance measure selected. Activities within the work plan are categorized by the MCH Pyramid of Services.

Table 1 summarizes LHD spending in FY 2019 by the MCH Pyramid of Services (i.e., direct, enabling, and public health services and systems). For purposes of reporting to the Michigan legislature, “Children” in Table 1 is defined as children birth-9 years plus adolescents 10-19 years.

Table 1. LMCH Spending by MCH Pyramid of Services

MCH Category	Number of LHDs Selecting	Amount Expended	Number of Clients Served
Direct Services Children	16	$1,184,656	68,873
Direct Services Women	7	$241,622	5,204
Enabling Services Children	24	$960,251	72,682
Enabling Services Women	34	$2,054,570	33,185
Public Health Functions & Infrastructure	31	$1,945,828	14,967,435
Total		**$6,386,927**	**15,147,379**

For FY 2019, each LHD was encouraged to select at least one NPM in addition to SPMs and/or locally identified measures. Nine LHDs chose one performance measure, 20 chose two performance measures; 4 chose three performance measures, 8 chose four performance measures; 2 chose five performance measures; and 2 chose six performance measures. Table 2 summarizes the number of LHDs choosing each performance measure and the amount expended. This table reflects Michigan’s “original” NPMs and SPMs established in 2015, which were still applicable for LHDs in FY 2019.

Table 2. LMCH Spending by Performance Measure

Performance Measure	Number of LHDs selecting	Amount Expended	Number of Clients Served
NPM 1 (Well-woman Visit)	6	$305,146	6,068
NPM 3 (Risk-appropriate Perinatal Care)	1	$41,918	596
NPM 4 (Breastfeeding)	17	$618,812	8,801
NPM 6 (Developmental Screening)	1	$249,646	448
NPM 10 (Adolescent well-visit)	5	$159,272	1,339
NPM 11 (Medical Home)	0	$0	0
NPM 12 (Transition)	3	$56,158	429
NPM 13 (Preventive Dental Visit)	7	$162,163	23,594
SPM 1 (Lead Poisoning Prevention)	14	$748,784	11,404
SPM 2 (Safe Sleep Environment)	9	$496,513	9,198
SPM 3 (Depression across the Life Course)	9	$253,805	5,031
SPM 4 (Provision of Medical Services and Treatment for CSHCN)	3	$74,879	684
SPM 5 (Immunizations)	14	$1,152,747	65,156
Local Performance Measure defined by LHD	20	$2,037,085	15,014,631
TOTAL		**$6,386,928**	**15,147,379**

Form 5

Form 5 reflects the number and percent of the MCH population served by the Title V program in Michigan, as defined by both Title V funding and Title V state match. As reflected in Form 5a, the estimated total count of individuals served via direct and enabling services (i.e., the top two levels of the MCH Pyramid of Services) was 381,789. This count includes individuals who received a service funded by total Title V federal and non-federal state match dollars as reported on Form 2, line 8. For FY 2019 reporting, data on individuals served were collected from Local MCH, Nurse Family Partnership, Rural Home Visiting, 3rd grade sealants program, childhood lead support and education, safe sleep program, Family Planning, FASD, immunizations, Michigan Adolescent Pregnancy and Parenting Program (MI-APPP), Taking Pride in Prevention, a postpartum Long-Acting Reversable Contraceptive (LARC) project, and CSHCS medical care and treatment. Form 5b provides an estimate on the total percentage of populations who received a Title V supported service in each of the MCH population groups across all three levels of the MCH Pyramid of Services (i.e., direct, enabling, and public health services and systems). This estimate includes all individuals and populations served by the total federal and state match as reported in Form 2, line 8. As reported on Form 5b, the Title V program served an estimated 84% of pregnant women, 99% of infants, 46% of children, 46% of CSHCN and 4% of others which includes males and non-pregnant women of childbearing age. For more details, see the Form 5 field notes.

Michigan is exploring ways to expand the reach of Title V. For example, Regional Perinatal Quality Collaboratives (RPQCs) began work in one region of the state in 2015. Currently, RPQCs represent all ten of the Prosperity Regions in Michigan. In FY 2019, two RPQCs received direct financial support from Title V and three other RPQCs

utilized state match funds. The RPQCs supported NPM 3 activities and served as regional leaders for implementation of the Mother Infant Health and Equity Improvement Plan.

Payer of Last Resort

Michigan supports Title V regulations to use Title V funds as the payer of last resort. The comprehensive contract for each local health department includes contractual language which emphasizes this payment structure for programs that provide direct or enabling services to individuals such as LMCH, lead poisoning prevention, and CSHCS programs. The remaining Title V funds are used for systems-level work in infrastructure or related to the ten essential services which are non-claims related reimbursement.

Challenges

For many years, Title V supported a variety of MCH projects and served as a gap-filling funding source. With the Title V transformation and the 2015 five-year needs assessment, new state priorities were identified. Previous state priorities may not have reemerged as top priority needs, but still require funding to maintain the level of service provision. Likewise, some of the current state priorities are underfunded in relation to other emerging or priority needs. Some priorities rely on other funding sources such as state general funds and competitive grants.

III.D.2. Budget

Budget (FY 2021 Application Year)

Together with state general funds and other federal funds, the Title V MCH block grant is used to address the state's MCH priority needs, improve performance related to the targeted MCH outcomes, and expand systems of care for the MCH and CSHCN populations. Michigan's Title V Leadership Team—which includes the Title V MCH director, Title V CSHCN director, and key Title V administrative staff—meets on a regular basis to discuss all aspects of Title V, including the budget and how federal and non-federal funds are used to address the state's MCH needs. Table 1 illustrates projected Title V expenditures for FY 2021. Funding projections are primarily based on the state's legislatively approved Executive Budget.

Table 1. Title V Appropriations

Appropriation Name	FY 2021 Projected Expenditures
Local MCH Services (Local Health Departments)	$7,018,100
Medical Care and Treatment for CSHCN	$6,889,000
Family Planning Local Agreements	$1,672,700
Childhood Lead Poisoning Prevention Program	$1,079,800
Immunization Program	$640,200
MCH Special Projects	$598,600
Administration	$479,800
Dental Programs	$335,400
Sudden Infant Death Syndrome Prevention	$321,300
Pregnancy Prevention Services	$185,500
Bequests for Care and Services	$105,200
Indirect	$90,300
Total	**$19,415,900**

As previously discussed, Michigan's 2020 Title V needs assessment identified a new set of state priority needs and performance measures. Through both state-level work and local health department activities, it is anticipated that Title V appropriations will be used to directly support activities related to the following National Performance Measures (NPMs) in FY 2021:

- NPM 4 (Breastfeeding)
- NPM 5 (Safe Sleep)
- NPM 9 (Bullying)
- NPM 12 (Transition)
- NPM 13 (Preventive Dental Visit)

At the state level, NPMs 2, 4 and 12 do not have direct Title V allocations in FY 2021. This is in part due to the most critical MCH needs being addressed by Title V funding, and the need to fill funding gaps that would otherwise exist without Title V funding. These NPMs—which are housed within the Division of Maternal and Infant Health (NPMs 2 and 4) and CSHCS Division (NPM 12)—currently have program staff designated to the associated state-level work, and therefore Title V is active in a leadership and implementation role. In FY 2021, the Title V program will revisit these NPMs to determine whether additional Title V support is needed in the future.

Upon preliminary analysis, health departments have identified program work at the local level for all “continuing” NPMs in FY 2021. Due to the COVID-19 pandemic, many LHDs have not had the opportunity to consider realigning work in their LMCH plan to address NPM 2 and NPM 9, which were added to Michigan’s NPMs based on the 2020 needs assessment. FY 2021 is a transitional year for LHDs as the format of the LMCH plan and workplan changed to better align with federal Title V requirements. Sample workplans for each national and state performance measure were developed and distributed to all LHDs. This technical assistance was intended to provide ideas and examples on how LHDs might operationalize activities. Additional technical assistance on integrating new performance measures into LMCH plans will occur in FY 2021.

At both the state and local level, Title V funds will also be used to directly support the work of Michigan’s six State Performance Measures (SPMs):

- SPM 1 (Lead Poisoning Prevention)
- SPM 2 (Immunizations—Children)
- SPM 3 (Immunizations—Adolescents)
- SPM 4 (Medical Care and Treatment for CSHCN)
- SPM 5 (Intended Pregnancy)
- SPM 6 (Developmental, Behavioral, and Mental Health)

At the state level, all SPMs have line item allocations in the FY 2021 Title V budget. Local health departments will also be implementing work on the SPMs, as indicated in LMCH workplans. Preliminary analysis indicates LHDs have identified program work for all six state performance measures.

The programs and activities that will support work on the above NPMs and SPMs in FY 2021 are detailed in the individual state action plans. The 2017 LMCH Needs Assessment results informed the creation of FY 2021 LMCH plans for each local health department, including a focus on the state’s identified NPMs and SPMs as well as distinct local priorities and needs. At the writing of this application, FY 2021 LMCH plans were submitted and are currently under review.

30/30/10 Requirement

Michigan’s commitment to adhere to the 30/30/10 Title V legislative requirement was discussed in the preceding Expenditures section. For FY 2021, this commitment is again reflected in Form 2 (Lines 1A, 1B, and 1C) in the Application Budgeted. For FY 2021, 33.6% of the total Title V budget is designated for preventive and primary care for children; 36% is designated for Children with Special Health Care Needs; and 3.2% is designated for administrative costs. Title V leadership will hold budget discussions throughout the fiscal year (in coordination with the MDHHS Budget liaison) to assure that the budget and spending are on track, and to address any new or unplanned MCH needs.

Form 2

MDHHS meets and monitors the required Title V state match which is a $3 match in non-federal funds for every $4 of federal Title V funds expended. Michigan exceeds the required match in expenditures and budgeting. Michigan’s “State MCH Funds” (Form 2, line 3) of $42,008,500—which is considered the state’s applied Maintenance of Effort for Title V—is composed of state general funds for the following appropriations: medical care and treatment for CSHCN; health and wellness initiatives; Family Planning local agreements; prenatal care and outreach; CSHCS administration; non-emergency medical transportation; and bequests for service. The majority of this match (approximately 80%) is related to medical care and treatment for CSHCN and other CSHCS-related funds. Along with other federal funds, these state MCH dollars provide a critical component of Michigan’s MCH infrastructure. In

Form 2, line 5, “Other Funds” reflects income from the Children with Special Needs (CSN) Fund. Michigan’s “Program Income” (Form 2, line 6) includes Newborn Screening follow-up. Other federal funds anticipated in FY 2021 are indicated in Form 2, line 9.

Form 3a and 3b

Each year, Michigan’s Title V administrative staff also completes an extensive assessment of “Types of Individuals Served” and “Types of Services” provided by Title V funding at the state and local level, as reflected in Form 3a and 3b, respectively. Title V block grant funds support essential services as identified in the Title V MCH Pyramid of Services (i.e., direct services, enabling services, and public health services and systems).

New in FY 2021, LHDs will be required to report expenditures by the Pyramid of Services in a “Types of Services” table in their annual plan and year-end report. The table mirrors the federal Form 3 table. As described in the Expenditures section, EGrAMS budget categories previously reflected the Pyramid of Services categories. In 2020, the LMCH program convened a workgroup (consisting of LHDs and state LMCH and Title V staff) to make changes to FY 2021 EGrAMS to be more manageable for LHDs and in better alignment with Title V. Budget categories in EGrAMS were reduced from five LMCH projects to two projects to create clearer alignment with the Title V 30-30-10 rule. The two projects use population classifications instead of pyramid of services; the latter will be captured through the new Types of Services table.

For state level activities, Title V budgets and expenditures are assessed to determine where activities fall in the Pyramid of Services. For example, Michigan’s Title V state priority need to “Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they live and learn” aligns with the top level of the pyramid (direct services) through SPM 4, which focuses on medical care and treatment for CSCHN. The state priority need to “Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities” aligns with the middle (enabling services) of the pyramid through NPM 4 (Breastfeeding). State level activities for NPM 4 focus on breastfeeding education and support to help improve breastfeeding initiation and duration rates. State level activities for NPM 2 (Low-risk Cesarean Delivery) focus on the state priority need to “Develop a proactive and responsive health care system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity.” Systems level work is being implemented through Regional Perinatal Quality Collaboratives and other systems work that focuses on core public health services.

III.E. Five-Year State Action Plan

III.E.1. Five-Year State Action Plan Table

State: Michigan

Please click the links below to download a PDF of the Entry View or Legal Size Paper View of the State Action Plan Table.

State Action Plan Table - Entry View

State Action Plan Table - Legal Size Paper View

III.E.2. State Action Plan Narrative Overview

III.E.2.a. State Title V Program Purpose and Design

Partnership and Leadership Roles

MDHHS has a longstanding history that aligns with the Title V goal to "promote and improve the health and well-being of the nation's mothers and children, including children with special needs, and their families." The Title V program is administered by the Division of Maternal and Infant Health (DMIH), which is housed in the Bureau of Health and Wellness within the Public Health Administration. The Children's Special Health Care Services (CSHCS) Division, which is housed in the Bureau of Medicaid Care Management and Customer Service within the Medical Services Administration, serves as the Title V CSHCN program. The Title V leadership team includes the Title V MCH director, the Title V CSHCN director, the Child and Adolescent Health Division director, and Title V administrative staff. A Title V steering committee includes managers and program staff who represent each of Michigan's national and state performance measures. Title V activities and services in Michigan align with the broader national purpose of Title V, including:

- Assuring access to quality MCH services for mothers and children
- Reducing the infant mortality rate
- Increasing the number of children appropriately immunized against disease
- Providing access to services for children who need specialized medical care and treatment
- Providing prenatal, delivery, and postpartum care for low-income, at-risk women
- Providing preventive and primary care services for low-income children

To achieve these and other MCH goals, Michigan's MCH programs serve as coordinators and conveners of initiatives and partnerships that support and guide the MCH work. For example, the DMIH hosts quarterly Mother Infant Health and Equity Collaborative (MIHEC) meetings in rotating locations throughout the state. The purpose of the MIHEC is to convene cross-sector stakeholders, community members, and families in group discussion and sharing to align maternal and infant health goals and strategies, facilitate collaboration and networking, and provide guidance on achieving health equity.

MCH program areas within MDHHS also coordinate the Michigan Alliance for Innovation in Maternal Health, Michigan Collaborative for Contraceptive Access Project, Michigan Oral Health Coalition, Safe Sleep Advisory Council, Michigan Home Visiting Advisory, Michigan Home Visiting Annual Conference, Michigan Breastfeeding Network, Child & Adolescent Health Advisory, Michigan Model for Health Steering Committee, and many other program-specific initiatives. The DMIH also funds and coordinates Regional Perinatal Quality Collaboratives. The Division of Child and Adolescent Health provides funding and oversight to the state's Child and Adolescent Health Centers and oversees comprehensive school health education through its regional School Health Network.

CSHCS provides leadership and coordination for the CSHCS Advisory Committee (CAC) and the Family Center for Children and Youth with Special Health Care Needs (Family Center). The CAC is comprised of professionals and family members involved in the care of children with special needs. The CAC makes policy recommendations and promotes public awareness of CSCHS. The Family Center is housed within the CSHCS Division and provides a family-centered and parent-driven approach to informing Michigan's CSHCN work. The Family Center contributes to CSHCS programs and policies; supports the statewide Parent-to-Parent Network; maintains the statewide Family Leadership Network; and administers the Family Phone Line, which provides support and information to families of children with special health care needs.

In addition to these initiatives, the Title V program works with a broad range of partners including community health

service systems, such as local public health; Federally Qualified Health Centers and health systems; the private sector; managed care plans; nonprofit organizations; MCH advocates; faith-based organizations; schools; and universities. Within MDHHS, program and policy activities are coordinated with Medicaid, MIChild, mental health and substance use, chronic disease, communicable disease, injury prevention, child welfare, public health preparedness and others. Title V is also part of the interdepartmental Great Start Operations Team (GSOT) to address early childhood services integration and coordination. The GSOT convenes MDHHS, the Department of Education, the Early Childhood Investment Corporation and other partners to provide strategic direction and systems-building expertise for programs that serve Michigan's young children and their families.

Title V Framework

Michigan’s Title V program recognizes that a wide range of factors shape health outcomes, including health and social context. Therefore, our work to achieve optimum health for all Michigan families requires developing and applying a health equity lens; recognizing the impact of social determinants of health; implementing evidence-based programs and practices; addressing behavioral and physical health; focusing on outcomes; and engaging families and consumers. The life course model, which emphasizes that early life experiences have a lasting impact on health and development, is also recognized. While each MCH program area concentrates on its respective stage of the life course, programs also coordinate with and complement adjacent life stages. As discussed throughout this application, MCH programs work with an array of partners across state and local systems, including early childhood, behavioral health, child welfare, Medicaid, and local health departments.

Foundation for Family and Community Health

The Title V program’s commitment to the MCH population is broad-based and aligns with the MDHHS vision to “deliver health and opportunity to all Michiganders, reducing intergenerational poverty and health inequity.” The Title V program also supports several of the department’s strategic priorities identified in 2020, which include improving maternal and infant health outcomes; reducing disparities; reducing childhood lead exposure; expanding the state’s safety nets; addressing social determinants of health; integrating services to serve the whole person; reducing opioid deaths; and utilizing evidence-based solutions.

The public health functions of assessment, policy development, and assurance are shared between MDHHS and local health departments. Legal and legislative requirements support quality services through codification (the Michigan Public Health Code) and MCH fiscal obligations are supported through the annual budget process. The Title V program supports coordinated, comprehensive systems of care at the state and local levels, as described in the Health Care Delivery System section. The creation of MDHHS in 2015—which resulted from a merger of the Departments of Community Health and Human Services—reflects the state’s commitment to effective, customer-focused systems that support physical and behavioral health and safety.

The state’s MCH efforts utilize research and evidence-based practices and rely on the national care standards from the American College of Obstetrics and Gynecology, American Academy of Pediatrics, American Dental Association, the Centers for Disease Control and Prevention, and others. Our commitment to continuous quality improvement is reflected in the monitoring of population data; investigation of health issues, such as the current COVID-19 outbreak and previous outbreaks of Hepatitis A and measles; and education and empowerment around public health issues such as safe sleep, breastfeeding, and immunizations. To assure assessment across population groups, especially those negatively impacted by health and social disparities, monitoring of subpopulation groups is conducted to capture data by geography, race, ethnicity, age, and other demographics. The MCH program also recommends and develops policy; promotes best practices and service models among local public health and clinical care systems; advocates for increased capacity within communities to provide high quality,

accessible, culturally competent services; and supports the MCH workforce.

III.E.2.b. Supportive Administrative Systems and Processes

III.E.2.b.i. MCH Workforce Development

The Title V program recognizes the critical need to build and maintain a strong workforce, which is the backbone of public health. To best serve the MCH population, the workforce must include personnel with MCH content expertise as well as program management expertise. Michigan's MCH programs include a range of personnel—including public health consultants, epidemiologists, departmental analysts and specialists, and program managers—who carry out the state's MCH work. Assessment of workforce trends and the evolving MCH landscape help to identify areas of need. For example, expertise in health equity and outcomes-based programming has been an emerging need in MCH. Additional details related to the MCH workforce are included in the Needs Assessment Summary.

Recruitment and Retention of MCH Staff

As discussed in the Needs Assessment Summary, the Title V program includes a robust group of staff who work on Title V in addition to other MCH programs and initiatives. Key positions that support Title V include the following:

- **Director, Division of Maternal and Infant Health**, serves as Title V MCH director and directs other key maternal and infant health programs including Title X, Maternal Infant Health Program, safe sleep, and Regional Perinatal Quality Collaboratives.
- **Director, Children's Special Health Care Services Division,** serves as Title V CSHCN director and provides oversight for the Family Center, CSHCN program and policy, and provision of medical care and treatment for CSHCN.
- **Director, Family Center for Children and Youth with Special Health Care Needs,** leads a statewide comprehensive family resource center utilizing a family-centered care model, in which all Family Center staff are parents of a child(ren) with a special health care need.
- **CSHCS Policy and Program Development Section Manager**, provides oversight to staff responsible for medical transition services, specialty clinics, insurance premium payment benefit and billing assistance.
- **Director, Division of Child and Adolescent Health,** provides management and direction for programs and services related to child, adolescent, and school health; early childhood; home visiting; local MCH (supported by Title V funding); and oral health.
- **MCH Nurse Consultant and Public Health Consultant**, two positions provide oversight and coordination of local MCH services funded through 45 local health departments.
- **Title V MCH Block Grant Coordinator,** coordinates all activities related to Title V, including oversight of grant application and reporting activities across the department.
- **Adolescent School Health Epidemiologist,** provides epidemiological and data support to the Title V program, including needs assessment activities and annual reporting.

Many other MCH staff—including program staff, managers, epidemiologists, public health consultants, and budget and contract specialists—support Title V activities and implementation of Title V state action plans. Local health departments can also use Title V funding to support critical MCH positions in their community (e.g., public health nurse, health educator or epidemiologist).

To recruit and retain qualified MCH staff, MCH programs work with MDHHS Human Resources to announce hard-to-fill positions more broadly through MCH listservs or Indeed.com. To help the workforce deliver services that are informed by equity-related knowledge and practices, MDHHS has developed the Diversity, Equity, and Inclusion (DEI) Plan recognizing that a "diverse workforce will be an essential asset for developing and providing health and human services that are culturally proficient to address existing and emerging health and social issues." The plan is being implemented in the areas of Leadership, Culture and Climate, Recruiting and Hiring, Training and Professional

Development, and Service Delivery. To help coordinate these efforts, MDHHS plans to appoint a DEI Officer.

The MDHHS Public Health Administration is concurrently launching a Diversity in Hiring Initiative (DHI). The DHI was modeled after a successful pilot that established a race equity team to assist hiring managers with the process of screening, interviewing, scoring and selecting job candidates in an equitable way. Race equity team members will receive relevant training, and a representative will be appointed to each hiring panel to work with the hiring manager and participate on interview panels. The goal of the DHI is to develop an equitable hiring protocol, create accountability through an objective scoring rubric, and ultimately have a workforce that is more reflective of the diversity of the state.

Training and Growth Opportunities

Opportunities for Title V program staff, including family leaders from the Family Center, are continuously assessed to identify areas for professional development. In 2018-2019, opportunities included the Health Equity Learning Labs and Guiding NEAR training. Three MCH divisions and CSHCS participated in a multi-session Health Equity Learning Lab series in which program areas assessed existing policies, procedures, hiring practices, and informal processes to determine whether they are reflective of health equity and social justice principles. Staff then identified areas for growth and convened small teams to work on actionable items to ensure that internal processes and policies reflect a focus on health equity and reducing health disparities. The learning labs continue to be available as new staff are hired.

The Guiding NEAR training provides a deep dive into NEAR science (neuroscience, epigenetics, ACEs and resilience) and its application. It is designed for emerging leaders in state government who will apply the learning to state policy and practice. The goal is to work with stakeholders to design programs and services that interrupt the progression of adversity for Michigan residents. Leaders from MCH, chronic disease, behavioral health, Children's Service Agency, Children's Special Health Care Services and staff from the Department of Education (MDE) and Department of Corrections attended this interdepartmental training and have been meeting quarterly. After the initial training, Family Center staff participated in the Guiding NEAR training and an abbreviated version of the training was provided during CSHCS local health department annual meetings.

Health Equity and Social Justice workshops are also periodically offered and available to staff. Trainings include "Inside Our Mind: Hidden Biases" designed to help staff better recognize and reduce the impact of biased decision making so MDHHS can provide more inclusive and equitable services to families. In 2019, several staff also attended a two-day learning lab focused on applying a root cause analysis to a health equity project. CSHCS has created a Health Equity 101 training for new employees and revised the Personnel Policy Guide to include Health Equity. In 2019, CSHCS was accepted into the 2020 cohort learning opportunity through the National MCH Workforce Development Center. As part of the cohort, CSHCS leadership, staff and an expanded MDHHS team will receive access to a range of tools and resources to address a specific project. CSHCS's team will focus on conducting a comprehensive program evaluation utilizing a health equity and family-centered lens to ensure the CSHCS workforce is well equipped to employ data-driven decision-making processes.

The DMIH is also providing training and technical assistance to support health equity efforts in the MCH workforce, including:

- Training and consultation to internal staff and partner networks on equity principles and strategies (e.g., Maternal Mortality Surveillance, Fetal and Infant Mortality Review, Infant Safe Sleep reviews, and statewide breastfeeding staff).
- Training and consultation to the MCH workforce in local communities through Regional Perinatal Quality Collaboratives.

- Special clinician training throughout the state on implicit bias with a focus on the use of best practices to enhance the patient-provider relationship (e.g., Medicaid Health Plan partners and health systems).

Beyond these trainings, MCH staff participate in a wide range of conferences and professional development opportunities. For example, MDHHS hosts annual conferences attended by MCH staff and statewide partners, including Moving toward Solutions: Addressing Teen Pregnancy Prevention in Michigan, WIC Conference, Michigan Home Visiting Conference, Teen Parent Summit, and Maternal Infant Health Summit. MCH staff participate in the Mother Infant Health and Equity Collaborative (MIHEC). In FY 2019, Michigan also offered two trainings on family partnership for MCH staff. An MCH team from Michigan (including a family leader) participates in the annual AMCHP conference. MDHHS also launched "Introduction to Health Equity" and "Systemic Racism" online trainings in 2019 for all staff. The Family Center continues to host an annual meeting for the Family Leadership Network. Each year, the CSHCS Division also invites a parent to attend a Division meeting to share their family's story with staff, which is a powerful way for staff to see the impact of their work. CSHCS provides regular workforce development opportunities for LHDs through annual meetings, regular technical assistance, monthly calls and the CSHCS LHD Advisory Committee.

Staffing Structures and Workforce Financing

Michigan utilizes innovative financing mechanisms to support administrative and program staff who work on a variety of MCH initiatives. For example, administrative match is leveraged for state staff working on Medicaid-financed programs including the Child and Adolescent Health Centers (CAHCs), Local Health Department Medicaid Outreach, Maternal Infant Health Program and others. Additional administrative match opportunities are being considered by MSA including a directed payment for behavioral health services offered through CAHCs (school-based health centers). Shared positions between MDHHS and MDE have enabled a funding structure to support staff that benefit both agencies including Michigan's State School Nurse Consultant and a state-level Mental Health Consultant. MCH funding also supports epidemiology staff who are housed in the Bureau of Epidemiology and Genomics but directly support and work with MCH programs.

MDHHS also has a unique partnership with the Michigan Public Health Institute (MPHI). MPHI is a non-profit corporation established by Public Act 264 of 1989 to advance health in the state. Services include project management, program development, evaluation, and research. Several of Michigan's MCH programs work closely with MPHI, especially via the Center for Healthy Communities and the Center for Health Equity Practice. Projects have included the 2020 Title V needs assessment, the 2017 local health department needs assessment, Health Equity Learning Labs, and the Maternal Infant Early Childhood Home Visiting evaluation. MPHI also partners with the Family Center to host online education modules for transition and parent mentor trainings. More broadly, MDHHS has partnered with MPHI on the State Innovation Model and the State Health Assessment, which is currently underway.

III.E.2.b.ii. Family Partnership

The five-year needs assessment reinforced the importance of family and consumer partnership in MCH programs. Across population domains, stakeholders identified the need to work with clients, families, and communities to identify and address needs and solutions, as reflected in the Title V pillar to "Intentionally and routinely find opportunities to seek the knowledge and expertise of communities and families in all levels of decision-making to build trust and create policies and programs that align with family and community needs." This pillar aligns with the MDHHS value of Human Dignity which is demonstrated by "showing empathy, kindness and respect for one another and those we serve." Effective family partnership includes respecting a person's culture and language and considering those factors in program development and service provision. Ultimately, understanding unique family and community needs helps to eliminate service barriers and improve outcomes.

Strategies to partner with families and clients are discussed within the Title V state action plans. Additional examples within Michigan's MCH programs include the following:

- The Early Hearing Detection and Intervention (EHDI) program utilizes the Michigan Hands and Voices (MHV) Guide By Your Side™ (GBYS) program. GBYS enables families who recently learned of an infant's or child's hearing loss to meet with parents of a child who is deaf or hard of hearing. Arabic and Spanish speaking guides are also available to meet with families. MHV recently initiated Deaf/Hard of Hearing (D/HH) mentor and family guide programs. Families are involved in updating EHDI materials, which are available in Spanish and Arabic. Efforts to promote health equity include diverse parent representation on advisory committees and members who are D/HH, along with parents of infants and children who are D/HH. Parents share their family stories at EHDI hospital site visits, trainings and early intervention meetings. Parents are engaged with two EHDI learning collaboratives to share their unique perspectives. EHDI also sponsors an annual scholarship for a parent to attend the national EHDI conference.

- MDHHS provides funding to local health departments (LHDs) and the Inter-Tribal Council of Michigan to develop and implement community-based infant safe sleep activities. LHDs routinely involve parents as parent educators and speakers. The MDHHS Infant Safe Sleep (ISS) Program will release new educational materials in FY 2020. The development of these materials was informed by focus groups and family and community feedback. In addition, the ISS Program is supporting a project being implemented by First Candle. First Candle is convening Community Task Forces comprised of public health providers, social service agencies, doulas, WIC, religious leaders and parents to host listening sessions to explore families' barriers to adopting safe sleep guidelines.

- The Parent Leadership in State Government (PLISG) initiative is an interagency effort to recruit, train and empower parents to be change agents who help shape programs and policies at the state and local level. When parents are engaged as partners and leaders, programs and services better meet family needs, make services more effective, increase fiscal responsiveness and lead to more equitable outcomes. Since 2007, several state agencies (including MDHHS) have collaboratively funded the PLISG, which currently includes Title V funding. The PLISG Advisory Board includes representatives from funding agencies plus at least 51 percent parents of children ages birth-18 who have been or are eligible to utilize specialized public services. A primary role of the PLISG is to deliver the "Parents Partnering for Change" leadership training (PPC). Training topics include leadership skills; how to use your voice to tell your story; effective meetings; and handling conflict. Since 2008, 1,405 parents have participated in the training. In 2019, PPC participants reported utilization of the following MCH-related services: WIC 60.7%; food assistance 52.4%; Healthy Kids 27.4%; Healthy Kids Dental 34.5%; MI Child 46.4%; and home visiting 14.3%.

- The MDHHS Home Visiting Unit has integrated parent and caregiver involvement into federally funded

(Maternal, Infant, and Early Childhood Home Visiting) and state-funded home visiting initiatives. Communities convene a home visiting Local Leadership Group (LLG) which is comprised of representatives from Head Start, substance abuse, child abuse and neglect councils, public health, mental health, education, Great Start Collaborative staff, and parents, who have participated in home visiting. Parents participate in quality improvement teams within LLGs and local home visiting programs to help ensure the consumer voice is part of decision-making and policy development. Michigan has also recently initiated and convened a Home Visiting Advisory, a broad stakeholder group, designed to advise on building a comprehensive and coordinated home visiting system. At least 20% of members must be parents of children ages five or younger who have or who are currently receiving evidence-based home visiting services.

Children's Special Health Care Services (CSHCS) uses a multifaceted approach to make certain that services reflect the needs of the population served. A critical component to administering services is the intentional involvement of families of children and youth with special health care needs (CYSHCN) in decision making. To achieve this goal, CSHCS works closely with the Family Center for CYSHCN and the CSHCS Advisory Committee (CAC). The CAC is comprised of professionals and family members who are involved in the care for children with special needs. The CAC makes policy recommendations to the CSHCS Division and promotes awareness to assure that services reflect the voices of CYSHCN and their families. The primary responsibilities of the CAC are to support and maintain clarity of the mission, philosophy and service goals of CSHCS; promote public awareness of the CSHCS program; and identify strengths and gaps in services.

The Family Center provides families with an even greater opportunity to contribute to CSHCS programs and policies. The Family Center's primary purposes are to help shape CSHCS policies and procedures by bringing a family perspective and to help families in Michigan navigate the systems of care for CYSHCN. Through its statewide Parent-to-Parent Support Network, the Family Center also provides emotional support and information to families of children with special needs. Families can access support through the Family Phone Line, which is a service provided to any family that has a child with special needs. Parent Consultants within the Family Center offer immediate help to families navigating systems of care which includes identifying needs; referral to resources; and connecting parents to educational and emotional supports. The Family Center's statewide Family Leadership Network provides a diverse community-based perspective on programs and policies as well as a platform for the development of new family leaders. The Family Leadership Network also functions on a regional level to inform families of resources and services. The Family Center works in partnership with many statewide and local organizations, including the Michigan Family to Family Health Information Center and Michigan Family Voices.

CSHCS offices within local health departments have established in-person and/or virtual parent support groups. The Family Center supports these efforts by providing annual small grant opportunities for local health departments to hire parents to facilitate these support groups. The groups connect parents and family members of CYSHCN to resources and support from other families.

As illustrated by this discussion, parent and family engagement is integrated in many MCH programs. To further support family partnership, in 2017 the Title V program conducted a survey of state-level MCH programs to obtain information about engagement efforts and to identify priority areas for increased support. Extended results of the survey were included in the FY 2018 and FY 2019 Title V applications. The survey provided insight into levels and types of engagement, the benefits of engagement, and barriers. Survey respondents indicated an array of benefits from engagement, with the majority (80%) indicating an increased awareness or understanding of family/consumer issues and needs.

The top identified training or technical assistance needs identified in the survey were "Strategies to recruit and engage culturally diverse, underrepresented, or underserved families" (43.2%) and "Opportunities to build partnerships with family/consumer organizations" (37.8%). In response to these identified needs, Title V partnered

with two organizations in FY 2019 to present workshops for approximately 30 MCH program staff. The first workshop, presented by Patient and Family Partnerships, focused on effective engagement across the service population and strategies for recruitment and retention. The second workshop was presented by Michigan Family Voices. Participants learned about Family Voices, opportunities for partnership, and strategies for authentic partnership with parents and families.

III.E.2.b.iii. States Systems Development Initiative and Other MCH Data Capacity Efforts

Michigan's goals and objectives for the State Systems Development Initiative (SSDI) project align with state priorities to enhance data and analytic capacity to identify priorities; inform program resource allocation, needs assessment and program evaluation; and provide MCH programs and state and local workgroups with in-depth data analysis and interpretation to guide efforts to improve health among MCH populations.

Michigan's SSDI activities are primarily aimed at building on existing coordination with the state Title V program and capitalizing on MCH epidemiology resources to inform the Title V block grant. The MCH Epidemiology Section Manager meets regularly with core Title V staff to ensure that epidemiologic needs are being met. Epidemiologists within the MCH Epidemiology Section work closely with Title V staff to provide epidemiologic support to ongoing Title V needs assessment activities and regularly review and update performance measures and annual objectives. The MCH Epidemiology Section took on an expanded role for the five-year needs assessment. MCH Epidemiology staff pulled current data for a multitude of MCH indicators, developed criteria for prioritizing indicators, and presented data for these prioritized indicators at the Title V needs assessment population domain workgroup meetings. These activities helped to lay the groundwork for establishing Michigan's new Title V state priority needs, national performance measures, and state performance measures for the next five-year grant cycle. The MCH Epidemiology Section will also assist in evaluating these newly selected performance measures and will provide recommendations to the Title V program regarding if or how these measures should be modified.

Having direct and timely access to MCH health data is another important component of the Title V performance monitoring process. Michigan Vital Records files (Live Birth, Fetal Death, linked infant death/live birth files, linked Maternal Mortality Files) and other data sources housed in the Division for Vital Records and Health Statistics (DVRHS), such as the Michigan Birth Defects Registry and Michigan Inpatient Database, remain important data sources for monitoring maternal and child health, as well as providing adequate Title V performance monitoring. The MCH Epidemiology Section has established a data sharing agreement with DVRHS which allows for direct access to these data files. The Michigan Pregnancy Risk Assessment Monitoring System (PRAMS) is housed within the MCH Epidemiology Section and is routinely used for performance monitoring within Title V, as well as the *Mother Infant Health and Equity Improvement Plan*. Furthermore, access and use of national survey data in conjunction with state and program data has steadily improved over the course of the SSDI project.

As part of the Michigan SSDI project, the MCH Epidemiology Section routinely assesses its access to needed MCH data linkages. The MCH Epidemiology Section Manager meets with MCH program staff on a routine basis to discuss other data that could further support the Title V program. Barriers that currently prevent these linkages from being established will be documented and discussions with data owners scheduled to resolve barriers.

To monitor progress toward Title V performance objectives, trends and subgroup analyses must be analyzed, interpreted and communicated not only to Title V staff, but to MCH stakeholders working to improve maternal and infant health outcomes in their communities. To aid this process, the MCH Epidemiology Section Manager routinely evaluates MCH Epidemiology Section staff position descriptions to ensure there is adequate support for the continued analysis, interpretation and evaluation of the Title V state and national performance measures. To further communicate current Michigan data to MCH stakeholders, MCH Epidemiology Section staff has made several data presentations to each of the Regional Perinatal Quality Collaboratives located throughout the state and posts updated MCH data to the MDHHS MCH Epidemiology website to assure timely data is readily available to MCH partners.

Even with the large number of linked data files that are currently available to the MCH Epidemiology Section, there is always room to expand data capacity. The MCH Epidemiology Section is currently working to establish several new MCH-related data linkages, including Birth Defects Registry data linked to Medicaid, CSHCN, and PRAMS as well

as Medicaid data linked to Vital Records and Immunizations. The MCH Epidemiology Section will continue to work with the DVRHS to improve the timeliness of the link between Birth Defects Registry and birth certificate data. Two emerging focus areas for the MCH Epidemiology Section are neonatal abstinence syndrome (NAS) and maternal mortality. Through an agreement between MDHHS and the Michigan Health and Hospital Association, the MCH Epidemiology Section has direct access to the linked birth record and Michigan Inpatient Database (MIDB) data file that contains information related to NAS. The MCH Epidemiology Section analyzes NAS data from this data file in accordance with Title V and MCH program needs. Furthermore, SSDI supports the MCH Epidemiology Section Manager's role in managing the data component of the Michigan Maternal Mortality Surveillance (MMMS) project. The Michigan Title V Program also supports the MMMS Project Coordinator and Case Abstractor in their maternal death case identification, case summary development, and committee activities.

III.E.2.b.iv. Health Care Delivery System

MCH programs and the Medical Services Administration (MSA), which administers the Michigan Medicaid Program (Medicaid), have a longstanding collaborative relationship to provide quality care and services to Michigan residents and share the common goal of improving the health and well-being of the MCH population. This partnership allows Michigan to effectively utilize federal and state resources and create efficiencies to help ensure that women and children are provided with preventive and chronic health services, treatment and follow-up care.

As of April 2020, 1,781,758 Medicaid beneficiaries were enrolled in the Medicaid Health Plans (MHPs) and 436,687 beneficiaries were enrolled in fee for service. Medicaid employs a population health management framework to maximize the health status and experience of beneficiaries and to lower cost. MHPs achieve these goals through evidence- and value-based care delivery models; health information technology; strategies to prevent chronic disease; and coordination of care along the continuum of health that includes assessing social determinants of health such as transportation, housing, and food access. The Managed Care Plan Division (MCPD) in MSA requires MHPs to annually report the Healthcare Effectiveness Data and Information Set (HEDIS) and employs a Pay for Performance Incentive Program that includes access, process and outcome metrics for all managed care populations, including women and children. Each MHP's governing body must either have a minimum of 1/3 representation of Medicaid enrollees *or* the plan must establish a consumer advisory council that reports to the governing body. The council must include at least one Medicaid enrollee, one family member or legal guardian of an enrollee and one consumer advocate. In addition, MHPs must actively attempt to recruit CSHCS beneficiary parents/guardians to participate in its non-compensated governing bodies or consumer advisory council.

Key areas in which MCH collaborates with Medicaid, MHPs, local public health departments, and community providers include the following areas: maternal and infant care and services; adolescent health; perinatal and postpartum care; well-child care including developmental screening and referral; Children's Special Health Care Services (CSHCS); foster care; dental care; and home visiting programs.

MCPD requires all MHPs to ensure home visiting for pregnant and new moms in managed care. MHPs meet this requirement by leveraging several home visiting programs in Michigan. One of the largest programs is the Maternal Infant Health Program (MIHP), Michigan's largest population-based home visiting program available to all Medicaid-eligible pregnant women and infants up to age one. In FY 2019, MIHP provided services to 14,870 women and 18,990 infants. The goal of MIHP is to promote healthy pregnancies, positive birth outcomes and healthy infant growth and development with the long-term goal of reducing infant mortality and morbidity. MIHP is jointly managed by the Division of Maternal and Infant Health (DMIH), the MCPD, and the Medicaid Policy and Program Division. DMIH is responsible for developing MIHP procedures, certifying and monitoring providers, and providing technical assistance to providers. The Medicaid Policy and Program Division is responsible for promulgating Medicaid policies, and the MCPD is responsible for helping providers implement Medicaid policies, monitoring contracts with MHPs and making payments to Medicaid providers. MIHP has shown favorable effects on prenatal care, birth outcomes (e.g., prematurity, low birth weight), postpartum care, and well-child visits during the first year of life.

Since FY 2013, most individuals with both CSHCS and Medicaid coverage are enrolled in an MHP. As of March 2020, 24,292 of the 40,577 CSHCS enrollees were dually enrolled in an MHP. MHPs are responsible for the medical care and treatment of CSHCS members while assistance with community-based services beyond medical care and treatment is provided through the local health department (LHD) CSHCS office. MHPs are responsible for coordinating and collaborating with LHDs and Children's Multidisciplinary Specialty Clinics to make a wide range of essential health care and support services available to enrollees. MHPs are also responsible for the coordination and continuity of care for enrollees who require integration of medical, behavioral health and/or substance abuse services. A Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey for special populations including CSHCS has been included in the MHP Performance Bonus, and CSHCS integration has been a

component of the MHP onsite compliance review process. In 2018, CSHCS completed site visits separate from the Managed Care Plan Division. In 2019, CSHCS representatives joined the Managed Care Plan Division. In 2020, CSHCS will complete separate site review visits focusing on transition, family engagement, durable medical equipment, and grievance and appeal. In 2019, CSHCS's contract with MHPs included added language encouraging MHPs to discuss medical transition with clients transferring from pediatric to adult health care. Resources were added to the website for MHPs.

MDHHS implemented the Healthy Kids Dental (HKD) program for children enrolled in Medicaid and CHIP. HKD provides a wide range of dental coverage and support services to qualifying individuals including infants, children and pregnant women under the age of 21. Effective October 1, 2018, eligible beneficiaries are offered a choice of two statewide HKD dental health plans (DHPs). In July of 2018, MDHHS expanded managed care dental coverage for non-Healthy Michigan Plan Medicaid eligible pregnant women. This managed care dental benefit is intended to provide greater access to dental services and comprehensive prenatal care. MCH and MSA coordinate oral health outreach and engagement efforts via multiple avenues including MIHP and other home visiting networks. Healthy Michigan Plan beneficiaries receive dental benefits through the MHP's dental provider network.

Other MCH collaborative efforts have included: improving standardized developmental screening rates through cross-agency collaboration between MCH, Medicaid and the Michigan Department of Education (Part C Early Intervention Program), health systems, and local public health; clarifying standardized screening payment codes to allow increased numbers of screenings per day; modifying payment policies for preventive services to improve data quality; reinforcing evidence-based guidelines by aligning Medicaid policy with American Academy of Pediatrics guidelines for preventive services; and collaborative MHP activities to improve lead screening rates.

MCH and Medicaid also actively collaborate on quality improvement initiatives, such as:

- *Adult Medicaid Quality: Improving Maternal and Infant Health Outcomes in Medicaid and CHIP.* This grant collects and reports data on the "Use of Contraceptive Methods in Women" measure. The project goal is to increase the use of effective methods of contraception among all women in Medicaid and CHIP to improve pregnancy planning and birth spacing.
- *Medicaid Low Birth Weight (LBW) Health Equity Pay for Performance Project*. In 2017, Medicaid identified racial disparities in LBW as a multi-year MHP Pay for Performance Project. The MCPD identified LBW rates for black women and babies in Medicaid managed care to be between 12-14% in the same regions where white women and babies in Medicaid managed care saw a rate of 6-8%. The initiative requires MHPs within specified regions to collaboratively address the racial disparity in that region, regardless of health plan membership of the beneficiaries.
- *Michigan Collaborative for Contraceptive Access (MICCA) Demonstration Project*: In October 2018, Michigan Medicaid began reimbursing for immediate postpartum LARC devices in addition to the standard DRG-based payment for childbirth services. DMIH is supporting a multi-hospital initiative to implement immediate postpartum LARC services. The two-year collaborative supports hospitals by providing evidence-based tools and strategies, technical assistance and coaching. The goals are to improve prenatal contraceptive counseling rates, increase access to immediate postpartum LARCs and ensure exceptional patient experience of care.

In 2017, Title V leadership met with MDHHS legal counsel to review the existing Title V/Medicaid agreement that is contained within the Medicaid State Plan (specifically Section F. Medical Assistance and Title V Projects). It was determined that the existing document broadly outlines the relationship between the two entities, which are both housed within the same state department (MDHHS).

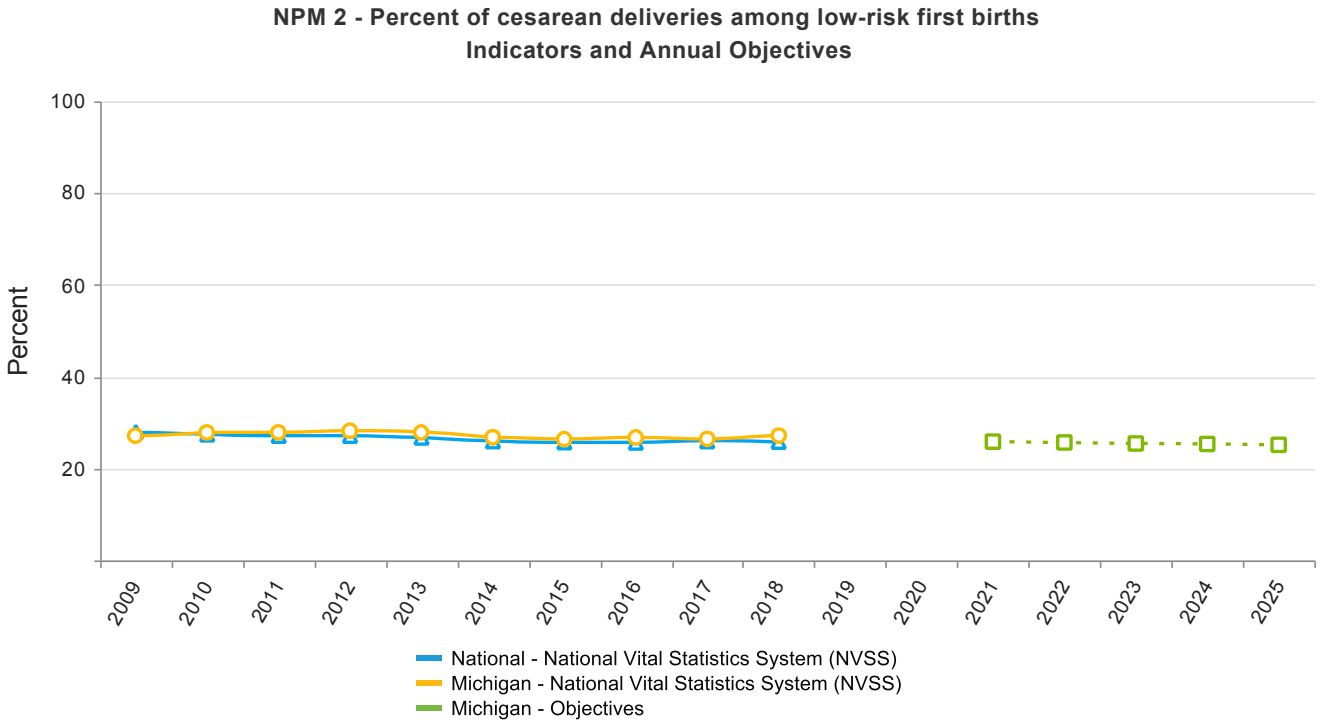
III.E.2.c State Action Plan Narrative by Domain

Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2017	69.2	NPM 1 NPM 2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2014_2018	16.2	NPM 1 NPM 2
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2018	8.5 %	NPM 1
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2018	10.0 %	NPM 1
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2018	25.2 %	NPM 1
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2017	6.6	NPM 1
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2017	6.8	NPM 1
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2017	4.5	NPM 1
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2017	2.3	NPM 1
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2017	280.9	NPM 1
NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy	PRAMS-2015	6.2 %	NPM 1
NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births	SID-2017	8.0	NPM 1
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2017_2018	8.9 %	NPM 13.1
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2017_2018	88.6 %	NPM 13.1
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2018	15.8	NPM 1
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth	PRAMS-2018	16.4 %	NPM 1

National Performance Measures



Federally Available Data	
Data Source: National Vital Statistics System (NVSS)	
	2019
Annual Objective	
Annual Indicator	27.3
Numerator	9,510
Denominator	34,845
Data Source	NVSS
Data Source Year	2018

Annual Objectives					
	2021	**2022**	**2023**	**2024**	**2025**
Annual Objective	25.9	25.7	25.5	25.4	25.2

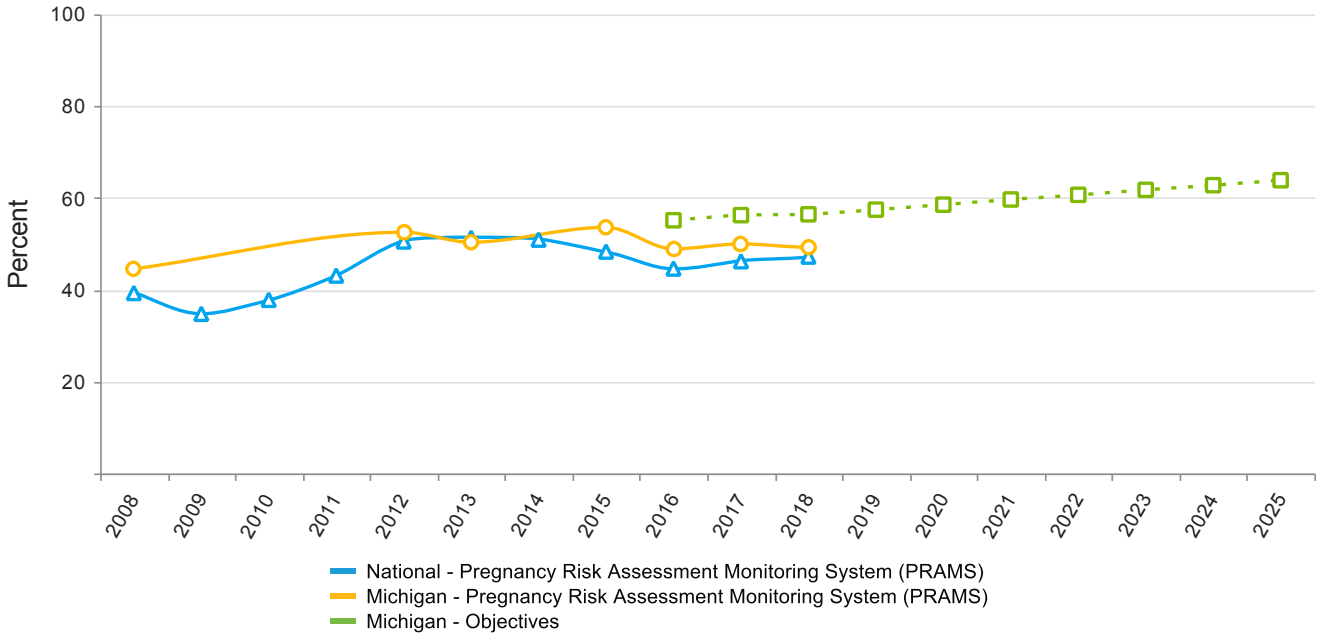
Evidence-Based or –Informed Strategy Measures

ESM 2.1 - Number of birthing hospitals participating in Michigan AIM

Measure Status:	Active
State Provided Data	
	2019
Annual Objective	
Annual Indicator	68
Numerator	
Denominator	
Data Source	Michigan AIM
Data Source Year	2019
Provisional or Final ?	Final

Annual Objectives					
	2021	**2022**	**2023**	**2024**	**2025**
Annual Objective	72.0	74.0	76.0	78.0	80.0

NPM 13.1 - Percent of women who had a preventive dental visit during pregnancy
Indicators and Annual Objectives



Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	55.1	56.2	56.4	57.4
Annual Indicator	50.3	53.6	49.8	49.2
Numerator	54,731	57,883	53,356	51,874
Denominator	108,763	108,083	107,079	105,470
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2013	2015	2017	2018

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	58.5	59.6	60.6	61.7	62.7	63.8

Evidence-Based or –Informed Strategy Measures

ESM 13.1.1 - Number of medical and dental professionals who receive perinatal oral health education through MDHHS

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective			390
Annual Indicator	636	648	401
Numerator			
Denominator			
Data Source	FY2017 MDHHS Tracking Database	FY2018 MDHHS Tracking Database	FY2019 MDHHS Tracking Database
Data Source Year	FY2017	FY2018	FY2019
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	410.0	430.0	450.0	470.0	490.0	510.0

ESM 13.1.2 - Percent of pregnant women who receive at least one oral health service through Medicaid during the perinatal period

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	40.0	41.0	42.0	43.0	44.0

State Performance Measures

SPM 5 - Percent of women who had a live birth and reported that their pregnancy was intended

Measure Status:	Active

State Provided Data	
	2019
Annual Objective	
Annual Indicator	57.2
Numerator	59,915
Denominator	104,673
Data Source	PRAMS
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	59.8	60.9	61.9	63.0	64.0

State Action Plan Table

State Action Plan Table (Michigan) - Women/Maternal Health - Entry 1

Priority Need
Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity

NPM
NPM 2 - Percent of cesarean deliveries among low-risk first births

Objectives
A) By 2025, reduce the percentage of cesarean deliveries among low-risk births to 26%
B) By 2025, reduce the percentage of low-risk cesarean births in African American women, American Indian women and Asian/Pacific Islander women to 27.6%, 29.1% and 28% respectively

Strategies
A1) Educate the Regional Perinatal Quality Collaboratives (RPQCs) regarding low-risk Cesarean data A2) Regional representatives to share ongoing information with RPQCs regarding the Obstetrics Initiative (OBI) and Alliance for Innovation on Maternal Health (AIM) bundle on safe reduction of primary cesarean birth A3) Continue co-leading the American College of Obstetricians and Gynecologists (ACOG) Alliance for Innovation on Maternal Health (AIM) and work through MI-AIM to increase the number of birthing hospitals participating in Michigan AIM
B1) Include bias and equity training as part of the MI-AIM hospital designation criteria B2) Partner with MPHI to train 100 clinicians on bias and equity B3) Provide ongoing bias and equity training to MI-AIM Steering and Operations Committee members B4) Launch Maternal Infant Health (MIH) Health Equity Action Committee B5) Provide ongoing education and training regarding bias and equity for the Michigan Maternal Mortality Surveillance committee members

ESMs	Status
ESM 2.1 - Number of birthing hospitals participating in Michigan AIM	Active

NOMs

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

NOM 3 - Maternal mortality rate per 100,000 live births

State Action Plan Table (Michigan) - Women/Maternal Health - Entry 2

Priority Need

Improve oral health awareness and create an oral health delivery system that provides access through multiple systems

NPM

NPM 13.1 - Percent of women who had a preventive dental visit during pregnancy

Objectives

A) Increase the number of medical and dental providers trained to treat, screen and refer pregnant women and infants to equitable oral health care services

B) Increase the number of socioeconomically disadvantaged pregnant women receiving oral health care services

Strategies

A1) Offer and evaluate training for medical and dental professionals A2) Create and disseminate updated Perinatal Oral Health Guidelines and promotional and educational materials that feature health equity

B1) Develop a plan from the PRAMS racial and ethnic healthcare data to address oral health and health equity issues B2) Provide education to women via the Perinatal Oral Health WIC Module B3) Collaborate with diverse partners to facilitate alternative models of care for integrating oral health into pregnancy

ESMs	Status
ESM 13.1.1 - Number of medical and dental professionals who receive perinatal oral health education through MDHHS	Active
ESM 13.1.2 - Percent of pregnant women who receive at least one oral health service through Medicaid during the perinatal period	Active

NOMs

NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

State Action Plan Table (Michigan) - Women/Maternal Health - Entry 3

Priority Need

Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity

SPM

SPM 5 - Percent of women who had a live birth and reported that their pregnancy was intended

Objectives

A) Increase the percent of females aged 15 to 44 who use a most or moderately effective contraceptive method from 77% to 82% by 2025

B) Increase the percent of females aged 15 to 19 who use a most or moderately effective contraceptive method from 84% to 89% by 2025

C) Increase the percent of women who report ever having discussed reproductive life planning during a visit with a doctor, nurse, or other health professional from 58% to 63% by 2025

Strategies

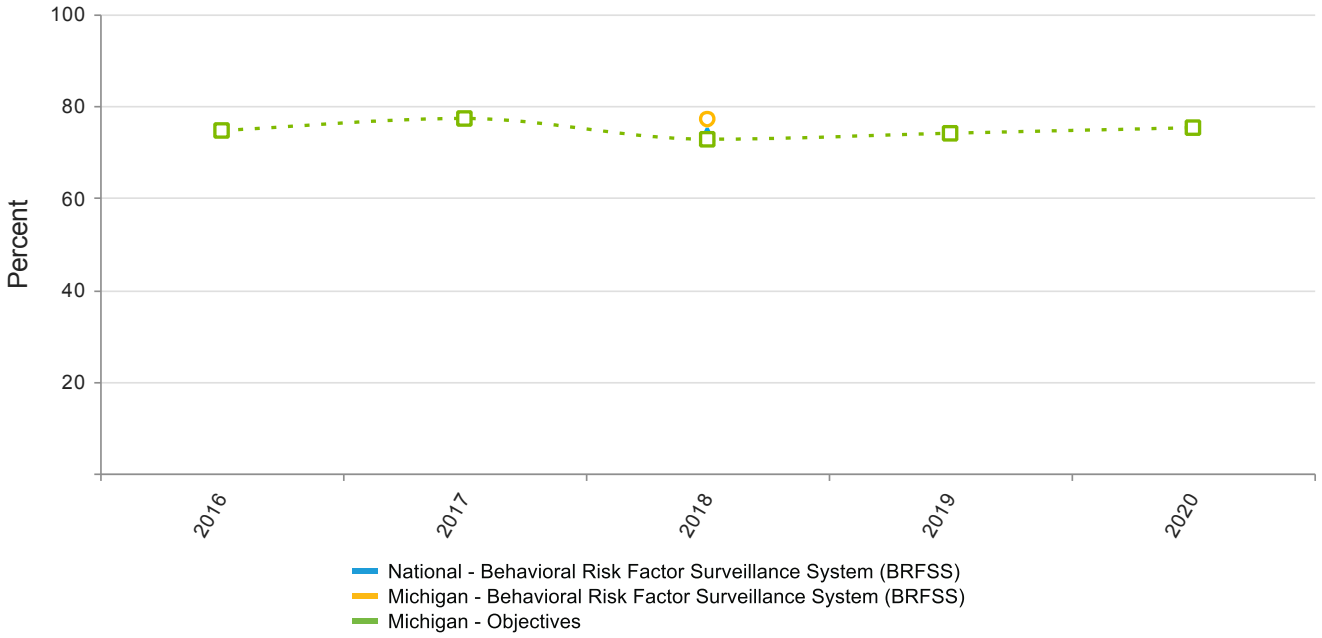
A1) Support the provision of contraception to low-income, uninsured, and underinsured women in the Family Planning Program A2) Host at least one clinical practicum on the insertion and removal of long-acting reversible contraceptives (LARC) for Title X and other health care providers A3) Pilot telehealth services across Family Planning's provider network A4) Facilitate regional learning sessions with women of reproductive age A5) Convene at least one implicit bias training for 50 health care professionals A6) Implement a statewide outreach campaign designed to reach low-income and uninsured individuals of reproductive age

B1) Support at least 10,000 minors' and young adults' (i.e., 18 to 21 years old) access to publicly funded contraception B2) Facilitate regional learning sessions with minors and young adults B3) Convene at least one continuing education opportunity for 100 adolescent and health care professionals

C1) Discuss reproductive life planning with at least 47,000 women in the Family Planning Program C2) Support the implementation of client-centered reproductive life planning across MDHHS-funded Home Visiting Programs C3) Engage fathers and males to support individual and familial management of reproductive and preventive health needs

2016-2020: National Performance Measures

2016-2020: NPM 1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year
Indicators and Annual Objectives



Federally Available Data				
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	74.6	77.2	72.7	74
Annual Indicator	69.0	68.2	69.1	77.2
Numerator	1,141,612	1,123,599	1,142,535	1,288,214
Denominator	1,654,185	1,648,059	1,652,472	1,668,506
Data Source	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2015	2016	2017	2018

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 1.1 - Percent of women aged 18-44 who have ever discussed reproductive life planning during a visit with a doctor, nurse, or other health professional

Measure Status:			**Active**	
State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective		61.3	62.3	63.3
Annual Indicator	60.3	64.3	66.2	58.4
Numerator	846,111	914,885	936,099	830,851
Denominator	1,404,213	1,423,068	1,413,029	1,422,036
Data Source	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste
Data Source Year	2015	2016	2017	2018
Provisional or Final ?	Final	Final	Final	Final

Women/Maternal Health - Annual Report

The following state action plans provide comprehensive information—including objectives, strategies, and performance metrics—on Michigan's Title V MCH priority areas. Per Title V requirements, the state action plans are organized within five population domains: women/maternal health; perinatal/infant health; child health; adolescent health; and children with special health care needs (CSHCN). Michigan also created a new measure within the optional cross-cutting domain. Within these population domains, the state action plans for FY 2021 focus on the following National Performance Measures (NPMs) and State Performance Measures (SPMs):

- NPM 2 (Low-risk Cesarean Delivery)
- NPM 4 (Breastfeeding)
- NPM 5 (Safe Sleep)
- NPM 9 (Bullying)
- NPM 12 (Transition)
- NPM 13.1 (Preventive Dental Visit—Women)
- NPM 13.2 (Preventive Dental Visit—Children)
- SPM 1 (Childhood Lead Poisoning Prevention)
- SPM 2 (Immunizations—Children)
- SPM 3 (Immunizations—Adolescents)
- SPM 4 (Medical Care and Treatment for CSHCN)
- SPM 5 (Intended Pregnancy)
- SPM 6 (Developmental/Behavioral/Mental Health)

These NPMs and SPMs were chosen based on Michigan's five-year needs assessment completed in 2020. States are also required to provide FY 2019 annual reports on all "retired" and "continuing" measures from the previous five-year cycle. Therefore, FY 2019 annual reports are provided for the following NPMs and SPMs:

- NPM 1 (Well-woman Visit)
- NPM 3 (Risk-appropriate Perinatal Care)
- NPM 4 (Breastfeeding)
- NPM 5 (Safe Sleep)
- NPM 10 (Adolescent Well-visit)
- NPM 12 (Transition)
- NPM 13.1 (Preventive Dental Visit—Women)
- NPM 13.2 (Preventive Dental Visit—Children)
- SPM 1 (Childhood Lead Poisoning Prevention)
- SPM 2 (Immunizations—Children)
- SPM 3 (Immunizations—Adolescents)
- SPM 4 (Medical Care and Treatment for CSHCN)

Annual reports are based on previous state action plans and may contain different objectives and strategies than current plans. Domain overviews are also provided to give a broader context to the overall population domain. Lastly, methodologies for determining the NPM annual objectives are included in the Supporting Documents.

Women/Maternal Health Overview

The health of women and mothers is a key focus of the Division of Maternal and Infant Health, which oversees the Reproductive Health Unit and Michigan's Title X program. Title V funds directly support several programs and

services designed to improve women's pre- and inter-conception health, particularly family planning. Title V funds are also used to understand and address women's health issues more broadly, especially as they relate to maternal mortality and factors such as race, class, and gender inequity that drive disparities. For example, Title V funding supports Michigan's Maternal Mortality Surveillance activities and PRAMS. To address additional health needs of women, Michigan leverages other federal funds, such as the Preventive Health and Health Services Block Grant (CDC), and partners with the chronic disease, cancer prevention, substance abuse prevention, and injury and violence prevention programs within MDHHS. Additional partnerships that impact women's health include local health departments (LHDs), the Michigan Council for Maternal and Child Health, Family Planning service providers, and the Michigan Primary Care Association.

At the local level, LHDs expended Title V funds on activities to support well-woman visit (NPM 1), oral health for women (NPM 13) and former SPM 3 (Depression across the Life Course). Six LHDs expended approximately 4.8% of total LMCH funds on NPM 1 by providing gap-filling direct services for reproductive services, cancer screening, STD testing and reproductive education. LHDs also completed outreach, media campaigns and surveys to community partners related to postpartum visits. Two LHDs expended 0.2% of LMCH funds on oral health services for women by educating clients on oral health benefits and referring for services. LHDs expended 1.7% of funds on mental health initiatives including staff development and gap-filling depression screening for women.

Michigan's approach to women's health emphasizes improving access to health services for this population, including reproductive and oral health services, based on the concept that access to care can be preventative across a variety of health needs. In 2018, Black mothers in Michigan experienced nearly twice the risk of severe maternal morbidity (277.5 per 10,000 delivery hospitalizations) than White mothers (144.3 per 10,000) (MDHHS, 2018). Similarly, maternal mortality (11.5 per 100,000 live births, MDHHS, 2016) is lower in Michigan than the national average (16.9 per 100,000, CDC, 2016) but the risk among Black women (20.4 per 100,000) is much higher than among White women (8.6 per 100,000). The disparity in the rate that Black and White Michigan mothers undergo low-risk cesarean births has moved from parity (in 2013) to 11% higher in Black mothers (MDHHS, 2018). Black mothers were also 1.8 times as likely as White mother to report their most recent pregnancy was mistimed or unwanted (PRAMS, 2018). These disparities have led Michigan to place greater focus on understanding and addressing the conditions that place non-Hispanic Black women at greater risk for adverse health outcomes, including disease and death before and after childbirth.

Although surveillance data tends to focus on indicators of a healthy pregnancy and healthy infant, wellness in pregnancy and at birth reflect women's health status prior to conception. While 8.3% of US infants (NVSS) reported in 2017 were born with a low birth weight, 14.6% of babies born to non-Hispanic Black mothers in Michigan had a low birth weight. Similarly, while 10.2% of US infants (NVSS) reported in 2017 were born preterm, the percentage was much higher among Michigan's non-Hispanic Black mothers (14.8%) (MDHHS). These data suggest that Michigan is far from achieving equity in health among women; improving women's health status must focus on addressing the conditions that lead to disparate outcomes for Black women and their infants. Another trend in Michigan is the dramatic rise in rates of infants born with neonatal abstinence syndrome, which increased from 2.0 per 1,000 in 2008 to 7.6 per 1,000 in 2016 (which represents a slight decline from the 2015 peak of 8.5 per 1,000) (MDHHS). Partners at the state and local level have been designing and implementing strategies to understand and address this crisis.

Well-Woman Visit (FY 2019 Annual Report)

In 2019, MDHHS focused on strategies to improve the quality of family planning counseling and access to long-acting reversible contraceptives (LARC) through provider/practitioner professional development and outreach. The Michigan Collaborative for Contraceptive Access supported six hospitals with implementing best practices for

peripartum contraceptive care, increasing LARC access for approximately 350 post-partum moms. During FY 2019, MDHHS held a clinical practicum on the insertion and removal of Paragard, a LARC, with 11 local providers, increasing network access to a highly effective reversible non-hormonal method.

MDHHS worked with family planning providers to improve quality of services and access to women in need. Family Planning collaborated with state and local programs to promote the evidence-informed PATH counseling model for pregnancy intention assessment and preconception counseling across a diverse array of providers and public health practitioners. During the FY 2019 Open Enrollment Period, local Family Planning agencies assisted and enrolled clients in Medicaid or Medicaid Health Plans or the Marketplace or referred clients to an entity with the capacity for enrollment assistance. Local agencies continued to connect Family Planning clients to primary care providers within the community, as needed. MDHHS continued to find opportunities for local Family Planning agencies to foster relationships with Medicaid Health Plans. The Family Planning Program engages consumers by soliciting their feedback through state and local client satisfaction surveys and participation on state and local Advisory Boards. Youth voice is incorporated into policies, programs, and practices by collaborating with Michigan Youth Voice, a statewide youth council coordinated by the Michigan Organization on Adolescent Sexual Health. During 2019, 98% (n=701) of statewide survey respondents strongly agreed (85%) or agreed (13%) the Title X services provided met their needs at the time of their visit. The quality of contraceptive care is assessed by monitoring local agency quality assurance mechanisms (e.g., abnormal pap follow-up) and improvement efforts (e.g., PDSA cycles).

In 2019, MDHHS staff spent considerable effort implementing the 2019 Title X Final Rule, which escalated physical and financial separation requirements for abortion providers, prohibited disclosure of abortion providers and referrals, and tightened mandated reporting policy and documentation requirements. Due to these regulatory changes, Michigan's largest Title X sub-recipient, Planned Parenthood of Michigan (PPMI), exited the program in September 2019. Within Michigan, PPMI was the sole Title X provider in five counties and the City of Detroit and worked in tandem with another Title X sub-recipient in 10 counties to serve 42,000 clients. To address this challenge, MDHHS staff conducted numerous outreach presentations and held meetings with interested providers. MDHHS successfully recruited three new providers for two counties (Oakland and Washtenaw) and the City of Detroit. MDHHS has focused on outreach to other healthcare providers across the state to fill contraceptive access gaps left from Planned Parenthood's program exit.

Objective A: Increase the percent of females aged 15 to 44 who use a most or moderately effective contraceptive method from 81% to 84% by 2020.

Having access to a broad range of effective contraceptive methods allows each woman the opportunity to choose the method that is right for her to successfully delay or prevent pregnancy. In 2019, 77% of female Family Planning clients aged 15 to 44 years old chose a most (i.e., sterilization, vasectomy, or LARC) or moderately effective (i.e., pills, patch, ring, cervical cap, or diaphragm) method, with 16% choosing LARC. Most or moderately effective (MME) method use peaked at 86% for Family Planning in 2016 and has declined approximately two percentage points each year while LARC use (12%, 2016) has increased by the same amount each year for this age group. To increase contraceptive access to individuals at greater risk of unintended pregnancy, a number of local agencies have integrated their Family Planning and STD clinics, which has resulted in more comprehensive services for men and women. At the same time, this has also resulted in an increase of females aged 15 to 44 who report male condoms as their primary method of contraception. In FY 2019, MDHHS worked toward increasing access to MME methods while balancing individuals' contraceptive needs and preferences.

To promote Michigan's Title X network, MDHHS implemented a statewide outreach/media campaign from January 2019 to April 2019. The statewide media campaign was designed to raise awareness of Family Planning clinics and to direct individuals to MDHHS's Family Planning website to find a clinic location near them. The campaign was

administered in high infant mortality communities (above the state rate) and targeted low-income, uninsured, men and women aged 20-35 years old, with an emphasis on reaching Latinx and African Americans. Multiple modalities were used such as audio streaming (e.g., Spotify), Digital (e.g., mobile web/Hispanic mobile), and Google Adwords. Based on Google Analytics, MDHHS's Family Planning website traffic increased significantly during the campaign period. The click-thru-rate for most of the modalities exceeded industry standards. Over 80% of clicks were from women 20 to 24 years old.

From April 2018 to September 2018, MDHHS facilitated a Contraceptive Access Learning Collaborative (CALC) with six local agencies to measure performance and conduct quality improvement (QI) on two contraceptive care measures (i.e., most or moderately effective methods and LARCs) endorsed by the National Quality Forum. Evaluation results from Michigan's CALC project demonstrated a 16.7% increase in LARC use among females aged 15 to 44 from baseline (6%) to endpoint (7%) for participating sub-recipients. The four agencies that provided LARC on-site experienced a 37.5% increase from baseline (8%) to endpoint (11%) and the two agencies that provided LARC by paid referrals maintained 3% LARC use from baseline to endpoint. During this project, one of the sub-recipients that offered out-county paid LARC referrals learned none of the providers within their community performed LARC insertions, including hospital systems. As a result, LARC access has been elevated as a county-wide need. Lessons learned and success stories were shared with the network at the 2018 Family Planning Update (September 2018) and during the 2019 Coordinators meeting (June 2019). The Family Planning Program has chosen not to replicate this project at this time, as all sub-recipients with the capacity to provide LARC on-site do so now.

During FY 2019, MDHHS's Family Planning Program supported healthcare providers' and public health professionals' education regarding Medicaid's immediate post-partum LARC policy change, which took effect on October 1, 2018. During FY 2019, Title V funds supported the Michigan Collaborative for Contraceptive Access (MICCA), a statewide learning collaborative to assist hospitals with implementing best practices for peripartum contraceptive care, including immediate post-partum LARC. In FY 2019, four of the six participating MICCA hospitals inserted approximately 350 LARC devices during the peripartum period. Of the two hospitals not currently offering LARC, one is finalizing internal procedures and provider training and the other is working through internal concerns regarding the cost-effectiveness. MICCA project staff have supported hospitals by providing ongoing implementation and evaluation support. MICCA plans to recruit an additional three to five hospitals for FY 2020.

To increase Title X provider professional development, a clinical practicum on the Paragard intrauterine device was held on September 10, 2019 in Traverse City in conjunction with MDHHS's annual Family Planning Update conference. Eleven mid-level clinicians attended the session. Dr. Brent Davidson, MD, Chief of Women's Health at Henry Ford Health System and MDHHS Family Planning Program Medical Director, served as the practicum trainer. All 11 attendees agreed the information was relevant, and the trainer was knowledgeable and effective. The advantage of a clinical practicum focused on a non-hormonal LARC is that it broadens the range of contraceptives available in Michigan's Title X network and improves access to a highly effective reversible method, especially for clients interested in non-hormonal contraceptives. The hands-on component of the practicum supports provider confidence with insertion, which often drives on-site provision.

Objective B: Increase the percent of women who report ever having discussed reproductive life planning during a visit with a doctor, nurse, or other health professional from 64% to 65% by 2020.

This objective is also Michigan's ESM for the well-woman visit performance measure. Based on data from the Behavioral Risk Factor Surveillance System (BRFSS), Michigan's FY 2019 reporting data indicates 58.4% of women discussed reproductive life planning during a visit with a doctor, nurse, or other health professional. This was a decrease from the previous reporting year, which was 66.2%, a peak year. To continue to make progress on this

objective, the Family Planning Program worked to expand the use of pregnancy intention assessment and preconception health education within state and local programs. Family Planning staff presented to MDHHS's Behavioral Health Program at their October 2018 staff meeting. The presentation covered all FDA-approved contraceptive methods, medical condition considerations for contraception, and the shared decision-making model for contraceptive counseling. Case manager and client-friendly resources were also included within the presentation. Family Planning staff also assisted the Maternal Infant Health Program (MIHP) in aligning its Family Planning Plan of Care with national standards and contraceptive best practices. The Plan of Care was updated to assess pregnancy intention, discuss future goals (e.g., school, career, lifestyle), and include client-friendly contraceptive resources. MIHP also posted the client-friendly resources on their provider network website.

Family Planning partnered with MDHHS's STD Program for a Learning Pilot to examine a sub-set of clinics that have integrated both programs. One aspect of this pilot is learning about client identification practices and client fit for pregnancy intention and contraceptive counseling. Pilot findings and program recommendations will be shared through written guidance and at the annual 2020 Family Planning Update conference. Family Planning staff consulted on Medicaid's Contraceptive Counseling pilot with OB/Gyn and Family Practice clinics where quality improvement methodologies will be used to incorporate or refine pregnancy intention and contraceptive counseling for female clients aged 18 to 44.

During FY 2019, the Family Planning Program was unable to find a clinical conference where pregnancy intention assessment and preconception health aligned with the theme and/or clinical topic area(s) of interest. Rather, this strategy shifted to utilizing MDHHS's conference platforms as a mechanism to promote evidence-informed PATH questions, developed by Patti Cason, an Assistant Clinical Professor at the UCLA School of Nursing. These questions are one client-centered approach to assessing **P**arenthood/Pregnancy **A**ttitude, **T**iming, and **H**ow important is pregnancy prevention. PATH can be used with clients of any gender, sexual orientation, or age. PATH is designed to facilitate listening and efficient client-centered conversations about preconception care, contraception, and fertility, as appropriate. Four Family Planning Program staff became Master Trainers. During the 2019 annual Family Planning Update conference, Patti Cason delivered a keynote *Patient-Centered Reproductive Goals and Contraceptive Counseling* and facilitated, along with three Family Planning Master Trainers, an applied PATH skills practice breakout session. Most session attendees (n=46) agreed the breakout session information was relevant, and the trainers were knowledgeable and effective. To reach a more diverse audience of providers and public health practitioners this counseling model will be a repeated breakout session at MDHHS's 2020 Maternal Infant Health Summit. The session will be co-facilitated by two Family Planning Master Trainers and a lead teacher from a Detroit community-based organization. This session will explore application of the PATH counseling model within non-Title X clinical settings and programs that serve mothers and infants aged zero to five.

Pregnancy intention and preconception health messages were disseminated on MDHHS's Facebook and Twitter accounts in FY 2019. Messaging during national health observances such as National Minority Health Month, Maternal Health Awareness Week, National Women's Health & Fitness Day, and National Birth Control Day was promoted on MDHHS's Facebook and Twitter accounts. One of the unforeseen challenges with using MDHHS's social media accounts is the approval process for messages and notification of release days/times, which makes it difficult to notify and/or share content with local agencies. Another challenge is competing health observances and preventive health messaging. While MDHHS has a large reach on Facebook (24,098 followers) and Twitter (13,700 followers), engagement (e.g., likes, comments, retweeting) is typically low on both platforms. With low engagement, it has been difficult to evaluate MDHHS's social media accounts as a tool for program promotion and community awareness. To assist with mitigating the noted internal and external communications challenges, a Communications Plan has been developed for FY 2020.

Objective C: Increase the percent of women with a past year preventive medical visit from 68% to 85% by 2020.

This objective is Michigan's National Performance Measure for the Women/Maternal Health domain. Based on the Behavioral Risk Factor Surveillance System (BRFSS), Michigan's FY 2019 reporting data indicates that 58.4% of women aged 18-44 years old had a preventive visit in the past year. This was a decrease from the previous reporting year, which was 66.2%. To continue making progress on this objective, in FY 2019 Medicaid outreach opportunities were promoted among local Family Planning agencies. During the Open Enrollment Period, local Family Planning agencies assisted and enrolled clients in Medicaid or Medicaid Health Plans, the Marketplace, and other health insurance plans. For agencies without on-site enrollment, clients were referred to appropriate organizations in the community. Local agencies also participated in enrollment events by distributing health insurance brochures and related educational materials. During 2019, 31% (n=16,897) of Family Planning clients reported utilizing public health insurance such as Medicaid or Healthy Michigan Plans (i.e., Medicaid Expansion).

Local Family Planning agencies were reviewed and monitored on the development of medical and social service referral agreements and collaboration at the local level, as well as their assessment of client needs for primary care or other services. Agencies are required to assess client access to a primary care provider and make appropriate referrals as needed. Of the agencies reviewed during FY 2019, 100% had incorporated asking clients whether they were in need of primary care services into their Electronic Health Record systems and had current referral agreements with primary care providers within their community. Referrals to primary care providers were promoted on an as-needed basis.

During FY 2019, MDHHS used several tactics to assist local Family Planning providers in fostering relationships with Medicaid and Medicaid Health Plans. Local agencies are encouraged to establish formal arrangements with Health Plans. If that is not possible, agencies are encouraged to foster informal relationships. MDHHS also focused efforts on receiving regular Medicaid updates, providing input on Medicaid's common formulary, and providing 340B prices on medications (i.e., antibiotics and contraceptives) to set reimbursements. In FY 2019, regular Medicaid updates were received during Family Planning's statewide Advisory Council. Local Family Planning agencies had the opportunity to provide input on the common formulary on a quarterly basis, and 340B medications prices were provided to Medicaid on a quarterly basis.

Well-woman and preventive health messages were disseminated on MDHHS's Facebook and Twitter accounts in FY 2019. Messaging during national health observances such as Cervical Health Awareness Month, Teen Health Week, STD Awareness Month, Sexual Assault Awareness Month, Men's and Women's Health Weeks, and National Breast Cancer Awareness Month was promoted on MDHHS's Facebook and Twitter accounts. The messaging challenges noted above also applied to well-woman and preventive health messaging.

Oral Health – Women (FY 2019 Annual Report)

The MDHHS Oral Health Program (OHP) provides population-based oral health prevention efforts and effective utilization of the dental workforce in implementing and improving oral health access. With the increased awareness of the impact of oral health to overall health, the OHP has continued to increase its collaborations with community partners to improve oral health through prevention activities and direct access programs. This remains evident in the activities of NPM 13 in FY 2019.

Objective A: Increase the number of medical and dental providers trained to treat, screen, and refer

pregnant women and infants to oral health care services.

During FY 2019, the Perinatal Oral Health Action Plan continued to be implemented to support better health status for women and girls. A main strategy continued to be the training and education of Michigan health professionals, particularly those who practice in and serve communities and women adversely impacted by health disparities. The ESM for this NPM is the number of medical and dental professionals who receive perinatal oral health education through MDHHS. In FY 2019, the Perinatal Oral Health Program trained 401 health professionals in the medical and dental fields through lectures, webinars, conference calls and other training events. This number does not include the hundreds of additional professionals trained by partners and coalitions. Michigan-specific Perinatal Oral Health Guidelines continue to be promoted, along with other educational materials. A partnership to teach a lecture on perinatal oral health to Nurse Midwifery and Nurse Practitioner students continues with the University of Michigan School of Nursing, with lectures occurring each semester as part of the curriculum. This course contains a hands-on component as well as practical application in how to integrate oral health within your future practice. In addition, an interactive piece called “Why is Grace in the Emergency Room” helps initiate discussion on the social determinants of health and health equity. Positive student feedback continues to be measured at 99% with over 325 advanced practice nurses trained to date.

Objective B: Increase the number of pregnant women receiving oral health care services.

In FY 2017, MDHHS awarded grant funds to the University of Detroit Mercy (UDM) School of Dentistry to implement a dynamic medical dental integration program. The project officially launched in FY 2018 and established itself with expansion in FY 2019 through funds from external partners. This partnership with the University of Detroit Mercy School of Dentistry, the Michigan Primary Care Association (MPCA) and the OHP has expanded from 6 sites to 10 sites across the state. This model of care, which places a dental hygienist directly within an OBGYN unit in an FQHC has provided 14,255 encounters during this reporting period. These services include 4616 education visits by the hygienist and 1208 cleanings for pregnant women. Evaluation began in 2019 with key informant interviews as well as interviews with participating patients and consumers. Additional efforts are underway to utilize electronic medical health records to track referrals and determine if the “referral loop” is being closed. Due to this project occurring within federally qualified health centers, a diverse population is being serviced in both rural and urban areas and includes women and children of all ethnicities and socioeconomic backgrounds.

In FY 2019, the wichealth.org module was utilized not only in Michigan but other states that participate with wichealth.org. Wichealth.org provides stage-based, client-centered, WIC nutrition education and an anticipatory guidance model in which WIC clients could complete educational lessons in English or Spanish to receive their WIC benefits. During the FY 2019 reporting period, 3,232 lessons were completed within Michigan with thousands more nationwide. WIC serves a diverse population and targets those within a lower social economic demographic. By developing education in partnership with WIC, the Oral Health Program has been able to reach populations that may have the most need and may experience the most health disparities. The module has also been developed in Spanish to better serve WIC clients and continues to be utilized by Spanish speaking clients.

In FY2019, customizable promotional materials were developed to inform the public of the new Medicaid dental benefit for pregnant women. These materials were posted online and distributed to the participating Medicaid health plans for their use. In addition, health departments and other clinics were also given the materials to customize for their use. Other educational efforts to promote this benefit included presentations with health departments and home visiting organizations. These materials featured plain language and simplistic but attractive format to reach all audiences.

Low-risk Cesarean Delivery (FY 2021 Application)

The state priority need to develop a proactive and responsive health care system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity was selected for the Women/Maternal Health domain, as a result of the needs assessment process. The percent of cesarean deliveries among low-risk births (NPM 2) was selected as one measure to address this priority need.

For some medical indications, cesarean births can be a life-saving measure. However, for most low-risk pregnancies, a cesarean delivery can lead to preventable risks of maternal mortality and morbidity outcomes. Such outcomes include mortality due to hemorrhage or morbidities such as infection, uterine rupture, cardiac arrest and anesthesia complications. In Michigan from 2012-2016, 15.3% of pregnancy-related deaths were due to hemorrhage and 15.3% were due to infection or sepsis. Overall, 52.4% of pregnancy-related deaths in Michigan from 2012-2016 were deemed preventable[1]. In 2018, there were 28.7% low-risk cesarean deliveries among all live births[1] in Michigan. The 2018 percentage of low-risk cesarean deliveries (28.7%) is above both the Healthy People 2020 goal of 24.7% and the 2018 average for the United States (US) which was 25.9%.

As with other birth outcomes, racial disparities are evident in low-risk cesarean births. In 2018, of all live births, 31% of black women had low-risk cesarean deliveries, as did 32.6% of American Indian women and 31.5% Asian/Pacific Islander women, compared to 28% of white women[1]. In addition to the data portraying disparities in low-risk cesarean deliveries, anecdotal qualitative data suggest that black women may feel coerced into delivering via cesarean section. Research has long documented the negative feelings and self-perception that can be experienced when birth plans go awry. This can further contribute to experiences of post-traumatic stress disorder and postpartum depression and anxiety. The Michigan Maternal Mortality Surveillance committee recognized the common themes across maternal deaths and drafted recommendations which included increasing education for providers related to culturally competent care, reducing stigma, bias and barriers, as well as integrating a health equity framework to address systemic inequities. The ESM and additional strategies for this NPM will work to reduce the number of low-risk cesarean deliveries, as well as the racial disparity that exists in this delivery method.

Each of Michigan's 10 prosperity regions are represented by a Regional Perinatal Quality Collaborative (RPQC) making up the Michigan Statewide Perinatal Quality Collaborative. The RPQCs are focused on improving perinatal outcomes for moms, babies and families. They are tasked with leading implementation of data-driven quality improvement projects, authentic engagement with families and community members, convening regular meetings with diverse, cross-sector stakeholders, conducting systems change work and implementation of evidence-based interventions. This work is also inclusive of addressing disparities in birth outcomes. The RPQCs are well-respected and comprised of clinical and community leaders, community-based organizations, families and community members. To help create culturally appropriate and community-informed services, authentically engaging families is a priority of the RPQCs and will apply to efforts directed at reducing low-risk cesarean births.

Objective A: By 2025, reduce the number of cesarean deliveries among low-risk births to 26%.

Three strategies will be used to address low-risk cesarean deliveries. The first strategy is to provide information and data related to this NPM with the Regional Perinatal Quality Collaboratives (RPQCs). Increasing the knowledge of the RPQCs related to poor outcomes associated with low-risk cesarean delivery will create broad baseline understanding across many different agencies, organizations and health systems. Voices of families, especially those with lived experience, will enrich the understanding and stimulate discussion on efforts and interventions that can be implemented to address the growing trend of utilizing cesarean delivery for low-risk births.

The second strategy addresses continual updates to RPQC membership by regional representatives related to the Obstetrics Initiative (OBI) and the Alliance for Innovation of Maternal Health (AIM) bundle. These national initiatives are evidence-based and recognized as best practices for safely reducing low-risk, primary cesarean births. RPQC members are well-versed in these initiatives and will be a great asset in providing education, related to data and implementation, and technical assistance. In addition to assistance with implementation of these initiatives, RPQCs can work to provide unconscious bias training for providers. The unconscious bias education and training is vital given Michigan's disparities in rates for low-risk cesarean deliveries.

Continued shared leadership in the Michigan AIM (MI AIM) is the third strategy in reducing the number of primary low-risk cesarean deliveries. Partnering with stakeholders and professional organizations has allowed Michigan to work toward improved maternal morbidity and mortality outcomes, as well as reduction in disparities of adverse maternal outcomes. Several staff from the Michigan Department of Health and Human Services are working directly with MI AIM, including the Michigan Title V Director who serves as co-chair of MI AIM. Currently 68 birthing hospitals in Michigan have implemented AIM safety bundles (i.e., hypertension and obstetric hemorrhage), but MDHHS is planning to engage all birthing hospitals in these efforts. MDHHS will work with AIM members to support and encourage birthing hospitals to participate in MI AIM. The number of birthing hospitals participating in Michigan AIM is the ESM for this measure.

Objective B: By 2025, reduce the percentage of low-risk cesarean births in African American women, American Indian women and Asian/Pacific Islander women to 27.6%, 29.1% and 28% respectively.

As mentioned above, Michigan has disparities in the number of low-risk cesarean delivery by race. Five strategies, via different avenues, will be used to increase the number of providers trained in unconscious bias and equity to begin to address the disparities that exist in this birth outcome measure. The first strategy is to include bias and equity training as an annual criterion for MI AIM hospital designation. Every year Michigan birthing hospitals are assessed for their level of participation and commitment to implementing the AIM safety bundles and thus, improving maternal birth outcomes. Including bias and equity training in the criteria ensures it becomes and remains a priority area of focus for birthing hospital staff, eventually creating sustained change in policies and care for women of all races and ethnicities.

Partnering with the Michigan Public Health Institute (MPHI) to train 100 clinicians in bias and equity topics is the second strategy. MPHI is a non-profit organization that employs teams of process and content experts who partner with healthcare providers, state and local government and community-based organizations to improve the health and well-being of all Michigan residents. Staff within the Center for Equity at MPHI will provide bias and equity trainings to at least 100 clinicians in Michigan. This training will be in addition to any health system or hospital-based trainings in which these clinicians may already participate. Continuous training further expands understanding of these topics with the intention to create change within individual clinical practices, as well as within health systems and hospitals.

Providing ongoing bias and equity training for MI AIM Steering and Operational committee members is the third strategy. These two committees are comprised of practicing obstetric and gynecologic providers throughout Michigan who are leaders in the field and committed to improving maternal outcomes. The goal of ensuring these leaders are engaged and knowledgeable in the arena of health equity, including the root causes of disparate outcomes, is to increase knowledge and change within their health care organizations.

The fourth strategy is to launch the Mother Infant Health (MIH) Health Equity Action Committee. In 2019, Michigan released the Mother Infant Health and Equity Improvement Plan (MIHEIP), which is the next iteration of the previous Infant Mortality Reduction Plan. The MIHEIP is focused on maternal, infant and family improvement efforts and outcomes. A component of the MIHEIP are the Action Committees, which will be focused on deliverable outcomes

and improvements in the priority areas highlighted in the plan. It is expected that through the work of the Health Equity Action Committee changes will be seen in relation to enhanced access to the social determinants of health; systemic inequities will be identified and actionably addressed; and resources will be more equitably distributed. In addition, the committee will work to assure data driven interventions are aimed at addressing disparities and working to remove obstacles to health. Therefore, efforts of this committee are expected to create powerful and impactful change, bringing Michigan closer to achieving the MIHEIP strategic vision of 'Zero Preventable Deaths. Zero Health Disparities.'

The fifth strategy will focus on providing ongoing education and training for Michigan Maternal Mortality Surveillance (MMMS) committee members. This committee is a team of providers, epidemiologists and other content experts who review Michigan's annual maternal deaths. The team reviews the circumstances surrounding each death, categorizes the death as either 'pregnancy-related' or 'pregnancy-associated, not related', and determines if the death was preventable. Recently the MMMS committee has released recommendations specific to the broad categories of maternal deaths. The intention is that if these recommendations are followed, and changes are made by providers and health systems, more maternal deaths will be prevented. To ensure unconscious bias and health equity remain at the forefront of this committee when reviewing cases and creating recommendations, it will be necessary to implement ongoing education and training in these areas.

Oral Health – Women (FY 2021 Application)

The Title V needs assessment identified oral health as a continuing need among Michigan's MCH population. This need was evident in feedback received from focus groups, and the system capacity assessment indicated that the MCH system has gaps in dental services for certain populations such as young children under three and pregnant women. Focus group respondents felt there was a need for more standardized care practices for dental professionals to offer treatment options in an equitable manner as well as an overall shortage of dental providers that will accept Medicaid. As a result, a state priority need was established to "Improve oral health awareness and create an oral health delivery system that provides access through multiple systems."

Leadership for Michigan's MCH oral health programs and initiatives is located within the Oral Health Unit. The Oral Health Unit and Perinatal Oral Health Initiative is housed within the Bureau of Health and Wellness in the Population Health Administration, allowing for significant collaboration, particularly on issues related to women's oral health. The Perinatal Oral Health Initiative partners not only with state programs such as the Maternal Infant Health Program and WIC, but also with Michigan medical and dental schools, nurse practitioner programs, community organizations and local health departments. These partnerships focus on serving populations with the highest level of need and promoting health equity. The Perinatal Oral Health Initiative also partners with Medicaid in the new, enhanced dental benefit for pregnant women.

In FY 2021, the Perinatal Oral Health Initiative will continue to maintain educational efforts for the health community and expecting mothers while also exploring additional data to help implement new programs that further address oral health disparities and access to care issues. Current PRAMS data indicate that disparities exist. The proportion of women having their teeth cleaned before pregnancy decreases nearly 10 percent during pregnancy. Over half of mothers (60.3%) who did not have a cleaning during pregnancy had dental insurance, indicating that education and awareness remain challenges. In addition, significant racial inequalities persist. African American or Latino women are less likely to have a dental visit than white women. Existing strategies that educate providers as well as new strategies that focus on alternative practice models and recent Medicaid enhancements will be harnessed to address disparities. Mapping where oral health disparities are located and assessing available oral health services will help identify where the highest needs exist to better achieve equitable health outcomes for women.

Objective A: Increase the number of medical and dental providers trained to treat, screen and refer pregnant women and infants to equitable oral health care services.

In FY 2021, the MDHHS Oral Health Program will continue to expand efforts to train and educate the medical and dental communities on the importance of perinatal oral health, as well as methodologies and best practices to integrate perinatal oral health into practice. Data collected from a statewide provider survey indicates that many medical providers (82%) acknowledged that perinatal oral health was an important consideration for optimal obstetric management; however, only one-fifth (22%) of providers stated that they routinely examined the patient's oral cavity during pregnancy. Routine oral health assessments by a dentist were also infrequently recommended (28%). These data indicate a need to promote the practices of oral health screening and referral for preventive and restorative dental services among perinatal care providers. In addition, there is continued need to provide resources that assist in facilitation of referrals.

The Evidence-based or -informed Strategy Measure (ESM), which is the number of medical and dental professionals who receive perinatal oral health education through MDHHS within a 12-month period, is part of this objective. Departmental trainings and workshops will increase provider knowledge of perinatal oral health as well as provider comfort in discussing the importance of oral health with patients. Trainings include components including but not limited to disparities in access to care and cultural competency. A database of training records is utilized, with the output defined as the number of medical and dental professionals trained by MDHHS. The goal is to train 430 professionals in FY 2021. The Perinatal Oral Health Initiative will continue to encourage provider feedback and engagement regarding these trainings. This strategy aligns with other statewide efforts through its focus on early, comprehensive prenatal care.

Another strategy is dissemination of the Perinatal Oral Health Guidelines as well as promotional and educational materials. This effort aligns with the MIHIEP by addressing the need to screen for preexisting conditions and target those most at risk for adverse health outcomes. Together with a variety of medical and dental professionals and other stakeholders, MDHHS developed Perinatal Oral Health Guidelines to create a unifying voice that emphasizes the importance of perinatal oral health to perinatal care and dental providers. The guidelines provide state-specific resources and tools; provide a summary of the issues surrounding perinatal oral health; and promote the consistent delivery of medical and dental service. In FY 2021, these guidelines will be updated and further promoted across the state. Additions to the guidelines will focus on health equity and proposed recommendations as to how to begin to address health inequities and access to care issues with providers.

MDHHS will continue to develop and distribute promotional and education materials that promote dental visits during pregnancy and infant oral health to health entities across the state. These materials will continue to be developed in partnership with community stakeholders and distributed to local health departments, Federally Qualified Health Centers (FQHCs), WIC clinics, dental offices, medical offices (including obstetric providers) and other entities. The promotion of these materials has been a successful strategy and with consistent requests for more materials, this strategy will continue in FY 2021. Any new materials created will be viewed with a health equity lens and materials will begin to reflect that lens.

The final strategy will include the continuation of communication efforts for dental health providers surrounding changes in Medicaid benefits for pregnant women. MDHHS allotted funds to increase the adult dental Medicaid benefit for pregnant women within the state. This increase in benefit carved dental benefits into Medicaid health plans and increased the availability of dental providers, addressing a critical need in access to care and increasing the number of pregnant women with a dental visit. Challenges occurred in relation to the rollout of this benefit and so continuing communication efforts will be made in FY 2021 to help educate the public and professionals. In addition, a new ESM will be enacted, which is the number of pregnant women on Medicaid who have at least one dental

encounter during the perinatal period. Through a data use agreement and IRB with CHEAR (Child Health Evaluation and Research Center at the University of Michigan) the oral health program will be able to obtain data on an annual basis. CHEAR has access to the data warehouse and the technical ability to analyze this data. Medicaid utilization data will become available in FY 2021 to help measure the impact of the benefit and guide further educational efforts. This strategy aligns with the MIHIEP by focusing on data-driven solutions, addressing the need for comprehensive care, and reducing poor health outcomes.

Objective B: Increase the number of pregnant women receiving oral health care services.

In FY 2021, the OHP will analyze PRAMS data to assess disparities in healthcare access by race and ethnicity. In addition, PRAMS data from new questions added in FY 2020 will be analyzed to determine the scope of access issues and provide further data to the OHP with a published data brief. These data will be examined by geographic area as well, which will help to determine targeted interventions. The targeted interventions will be viewed through a health equity lens and will be adjusted according to the population and groups they address. Efforts will be made to integrate community voice as data efforts move forward. This strategy aligns with the statewide focus on data integration and population identification components.

In FY 2021, the Michigan Initiative for Maternal and Infant Oral Health (MIMIOH) will continue to expand to new sites. Its continued goal is to improve the oral health of mothers and children in under-served areas and to examine alternative models of care. The MDHHS grant-funded effort began as a one-year project at six sites in partnership with the University of Detroit Mercy School of Dentistry and the Michigan Primary Care Association, with the aim to examine the feasibility and impact of placing a registered dental hygienist in an OBGYN medical clinic. In FY 2021 the project will expand to 10 sites. This collaborative model of care also allows for feedback and engagement not only from providers but from the patients served. Obtaining feedback from patients via conversations with the dental hygienist provides an important opportunity to create more culturally and linguistically appropriate educational materials and outreach strategies. In addition, an evaluation effort will conduct key informant interviews following a standardized protocol with patients participating in this project. These efforts will be continued in FY 2021 while also looking to expand into the pediatric departments of the FQHCs and exploring the possibility of integration directly within family practice settings.

In FY 2021, the MDHHS Oral Health Program will continue to provide education to women via the Perinatal Oral Health WIC Module. This module (delivered through wichealth.org) has served as a training mechanism to mothers across Michigan and on a national level. Wichealth.org provides stage-based, client-centered, WIC nutrition education and an anticipatory guidance model in which WIC clients can successfully complete educational lessons in English and Spanish, with women completing lessons to receive their WIC benefits. Women receive personalized feedback and educational materials as well as nurse follow up on any questions raised during the training. This model allows for consumer engagement and feedback from participants. By partnering with WIC, the Oral Health Program can target a diverse range of women who may struggle with health disparities. This strategy will continue to be evaluated through the number of women who complete the perinatal oral health module. Since its inception, over 20,000 lessons have been completed nationally. Developing the modules in other languages or being able to provide the interpretative services will continue to help with addressing language barriers of other populations.

Intended Pregnancy (FY 2021 Application)

The percent of women who had a live birth and reported their pregnancy was intended was selected to address the priority need to “develop a proactive and responsive health care system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity” in the Women/Maternal Health domain. According to Michigan’s Pregnancy Risk Assessment Monitoring System

(PRAMS), 57.2% of pregnancies were intended in 2018. All Michigan women deserve access to high-quality, client-centered care that is free from bias, racism, and coercion.

For most women, their first encounter with the health care system is driven by reproductive health needs, with nearly three decades spent avoiding an unintended pregnancy (Sonfield, Hasstedt, & Gold, 2014). Equipping women and their partners, regardless of life circumstances or ability to pay, with knowledge and access to reproductive health services can improve health outcomes and reduce health care costs over the life course when delivered equitably. Title V needs assessment results indicated Michiganders' health outcomes are negatively affected by systemic racism, poverty, and trauma. Transportation impeded access to health care systems and services (e.g., routine, follow-up) particularly for low-income and rural individuals. Quality of care was found to be influenced by health care providers' implicit or explicit bias of clients' race, class, insurance status/type, and sexual orientation. Maternal and child health service systems were found to assume need rather than intentionally seek input from the entire community to inform programs, policies, and practices. Stakeholders also indicated that women's health policy is oftentimes contentious and routinely restricts or removes access to needed health education and services.

FY 2021 objectives are concentrated on improving 1) contraceptive access and 2) preconception and interconception health. Strategies seek to address the Title V needs assessment findings noted above and Michigan's Title V pillars: 1) equitable health outcomes, 2) seeking the knowledge and expertise of communities and families, and 3) delivering culturally, linguistically, and age appropriate health education. Strategies that can drive improved performance include listening sessions with individuals of reproductive age across the state, piloting telehealth services in the Family Planning Program, provider training on implicit bias and cultural competency, supporting minors' and young adults (i.e., 18 to 21 years old) access to publicly funded contraception, expanding reproductive life planning into home visiting programs, and engaging males and fathers. Additionally, this state action plan directly supports related key priorities indicated in MDHHS's Mother Infant Health & Equity Improvement Plan and Maternal Infant Health Strategy Plan, as well as the Governor's "Healthy Moms Healthy Babies" plan. MDHHS supports contraceptive access at local agencies through a variety of funding sources, including Title X Family Planning. Title V funding helps to support contraception access through local clinics with a focus on serving minors and young adults (i.e., 18 to 21 years old) at no or low cost.

Objective A: Increase the percent of females aged 15 to 44 who use a most or moderately effective contraceptive method from 77% to 82% by 2025.

Contraception is a highly effective clinical preventive service that assists women in achieving their reproductive health goals, such as preventing unintended pregnancy and achieving healthy spacing of births. While there is no single method of contraception that is right for everyone, the type of contraceptive method used by a woman is strongly associated with her risk of unintended pregnancy. Having access to a full range of effective contraceptive methods allows each woman the opportunity to choose the method that is right for her to successfully delay or prevent pregnancy. In 2019, 77% of female Family Planning clients aged 15 to 44 years old chose a most (i.e., sterilization, vasectomy, or LARC) or moderately (i.e., pills, patch, ring, cervical cap, or diaphragm) effective method, with 16% choosing LARC.

The first strategy—support the provision of contraception to low-income, uninsured, and underinsured women in the Family Planning Program—will focus on providing client-centered counseling and a broad range of FDA-approved contraceptive methods to reproductive aged women at no-cost or low-cost. A focus will be working to ensure that Michigan's Family Planning network of 34 local agencies and 93 clinical sites offer contraceptive services in accordance with *Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of Populations Affairs*. Family Planning providers are required to have a broad range of contraceptives available, including LARCs. In FY 2021, MDHHS will monitor local agency provision of contraception through comprehensive

site visits and semi-annual Family Planning Annual Report (FPAR) submissions. MDHHS collects Family Planning client input annually through a statewide consumer survey administered at each clinic site. The results of the statewide survey will be presented at the program's Advisory Council meeting and shared with partners. Local Family Planning agencies routinely collect consumer input for continuous quality improvement.

The second strategy—host at least one clinical practicum on the insertion and removal of LARC for Title X and other health care providers—will focus on supporting on-site access to provider-dependent FDA-approved contraceptive methods. Stocking all methods, such as LARC, is necessary to ensuring full access to care, given a large percentage of clients do not return for follow-up visits. Clients who receive their method of choice are more likely to use it consistently and correctly, be more satisfied, and continue with it. In FY 2021, MDHHS's Family Planning Program will assess providers' LARC training needs and coordinate event marketing, logistics, and evaluation. Additionally, MDHHS's Family Planning Program can assist local providers by connecting them with pharmaceutical companies for individual or regional trainings.

The third strategy—pilot telehealth services across Family Planning's provider network—will focus on increasing access to reproductive health services within communities where transportation is a barrier to accessing care. Removing transportation barriers assists clients (particularly rural and low-income) with timely management of their reproductive health care needs, such as consistent contraceptive use or preventive health screenings. In FY 2021, MDHHS will identify local agencies with an interest and community need for family planning telehealth services; evaluate agency performance; and share lessons learned. MDHHS will disseminate key findings to state and local partners and stakeholders.

The fourth strategy—facilitate regional learning sessions with women of reproductive age—will focus on gathering adult women's lived experiences navigating their sexual and reproductive health needs to inform health education, clinical, and case management services. Achieving equitable health outcomes for women begins with incorporating their knowledge and expertise into the programs designed to serve them. In FY 2021, MDHHS will develop a listening session protocol, coordinate session logistics, and summarize session findings. MDHHS will disseminate key findings to state and local partners and stakeholders.

The fifth strategy—convene at least one implicit bias training for 50 health care professionals—will focus on addressing unconscious attitudes or stereotypes providers may exhibit during the clinical encounter. To achieve equitable reproductive health outcomes providers must understand their role in creating and sustaining inequities in clinical settings, consciously or unconsciously. Provider factors such as bias, discrimination, racism, and coercion influence clients' access to services, quality of services (client-centered), and decision-making about reproductive health. In FY2021, MDHHS will coordinate event marketing, logistics, and evaluation.

The sixth strategy—implement a statewide outreach campaign designed to reach low-income and uninsured individuals of reproductive age—will focus on raising Michiganders' awareness of Family Planning clinics' high-quality reproductive health care services at no or low cost. While Medicaid expansion has provided more Michiganders with a medical home, an estimated 15% of Michigan adults do not have a personal health care provider (Michigan BRFSS, 2017). That percentage increases to 49% for uninsured adults compared to insured adults (12%) (Michigan BRFSS, 2017). Clinics have historically relied on promotion via word-of-mouth and referrals from other health professionals in the community. To reach Michiganders who could benefit most from Family Planning services, outreach efforts that can reach a broader audience are needed. In FY 2021, MDHHS will partner with a communications agency to develop content, identify communication modalities, and create a media campaign timeline.

Objective B: Increase the percent of females aged 15 to 19 who use a most or moderately effective

contraceptive method from 84% to 89% by 2025.

In Michigan, sexually active adolescents encounter multiple barriers to accessing affordable contraception. Contraception is critical because it protects against unintended pregnancy, disease transmission, and future reproductive health. An estimated 171,780 sexually active women <20 years old need publicly supported contraception (Guttmacher Institute, 2014). In 2017, 64% of sexually active high schoolers did not use a most effective reversible method (i.e., IUD or implant) or moderately effective method (i.e., shot, pills, patch, or ring) and 15% reported not using any methods to prevent pregnancy at last intercourse (Michigan YRBS, 2017). The teen birth rate for 15- to 19-year-old females was 16.4 per 1,000 in 2017, which is a historic low. However, premature birth and low-birthweight babies to 15- to 19-year-old mothers worsened the past five years (MDHHS Division of Vital Records & Health Statistics, 2017). Despite improvements in Michigan's teen birth rate, minors and young adults (i.e., 18 to 21) have unmet reproductive and related preventive health needs. During 2019, 20% of Family Planning clients were teens (i.e., <15 to 19 years old), with 84% of female clients aged 15 to 19 years old choosing a most or moderately effective method and 13% choosing LARC.

The first strategy to achieve this objective—support at least 10,000 minors' and young adults' access to publicly funded contraception—will focus on providing client-centered counseling and a broad range of FDA-approved contraceptive methods to sexually active adolescents (i.e., ≤15 to 21 years old) at no-cost or low-cost. Removing financial barriers to contraception assists young people in deciding if, when, and under what circumstances to get pregnant and have a child. In FY 2021, MDHHS will monitor local Family Planning providers' provision of contraception through comprehensive site visits and semi-annual clinical service delivery data submissions. Service delivery is routinely informed by youth voice for continuous quality improvement.

The second strategy—facilitate regional learning sessions with minors and young adults—will focus on gathering adolescents' lived experiences navigating their sexual and reproductive health needs to inform health education, clinical, and case management services. Achieving equitable health outcomes for young people begins with incorporating their knowledge and expertise into the programs designed to support them. In FY 2021, MDHHS will develop a listening session protocol, coordinate session logistics, and summarize session findings. MDHHS will disseminate key findings to state and local partners and stakeholders.

The third strategy—convene at least one continuing education opportunity for 100 adolescent and health care professionals—will focus on creating culturally responsive programs, policies, and practices to improve the health, well-being, and resiliency of young people. Adolescents deserve access to high-quality youth-friendly health education and services that are age and developmental stage-appropriate. In FY2021, MDHHS will coordinate event marketing, logistics, and evaluation.

Objective C: Increase the percent of women who report ever having discussed reproductive life planning during a visit with a doctor, nurse, or other health professional from 58% to 63% by 2025.

Family Planning providers and other health care professionals recommend women and men of reproductive age who want to achieve or prevent a pregnancy consider making a reproductive life plan. Reproductive life plans help individuals think about when and under what conditions they would like to become pregnant or, conversely, think about how pregnancy will be prevented, with the primary focus on increasing the overall health and well-being of the individual regardless of reproductive intentions. Intentionally including male partners and fathers in systems of care and decision-making—such as when and if to have a child—actively considers men's health needs and priorities, improves their health awareness, and increases partner support all of which has the potential to foster healthier relationships. According to the 2018 Michigan BRFSS, 58.4% of Michigan women aged 18 to 44 reported ever having discussed reproductive life planning during a visit with a doctor, nurse or other health professional.

The first strategy—discuss reproductive life planning with at least 47,000 women in the Family Planning Program—will focus on determining clients' need for contraception and preconception health services by assessing when they would like to become pregnant, the number of children they would like to have, and how long they want to wait to become pregnant. Clients are asked a version of these questions at each encounter as documented in the medical record. In FY 2021, MDHHS will monitor local agency assessment of clients' reproductive life plans through comprehensive site visits.

The second strategy—support the implementation of client-centered reproductive life planning across MDHHS-funded Home Visiting Programs—will focus on training home visitors to counsel clients on pregnancy intention, being healthy prior to pregnancy, and pregnancy spacing for optimal health. Additionally, home visitors will be able to make the appropriate contraceptive care referrals for pregnancy prevention. Ideally, this intervention will be integrated into existing service delivery components with minimal disruption to the fidelity of evidence-based or evidence-informed service models. In FY 2021, Family Planning staff will provide training and technical assistance to the Maternal Infant Health Program on integrating client-centered reproductive life planning into existing case management processes.

The third strategy—engage fathers and males to support individual and familial management of reproductive and preventive health needs—will focus on creating equitable service delivery systems where fathers and males are valued and actively engaged in supporting the health and well-being of themselves and their family. Service delivery systems have traditionally focused on women and children, which omits the health and well-being of men and the important role fathers and men play in supporting their partner and familial unit, which extends far beyond economic support. In FY 2021, MDHHS will proactively engage father and males through reproductive health outreach and fatherhood initiatives. MDHHS will disseminate lessons learned and promising practices to state and local partners and stakeholders.

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[1] Michigan Resident Live Birth Files; MDHHS Division of Vital Records and Health Statistics

Perinatal/Infant Health

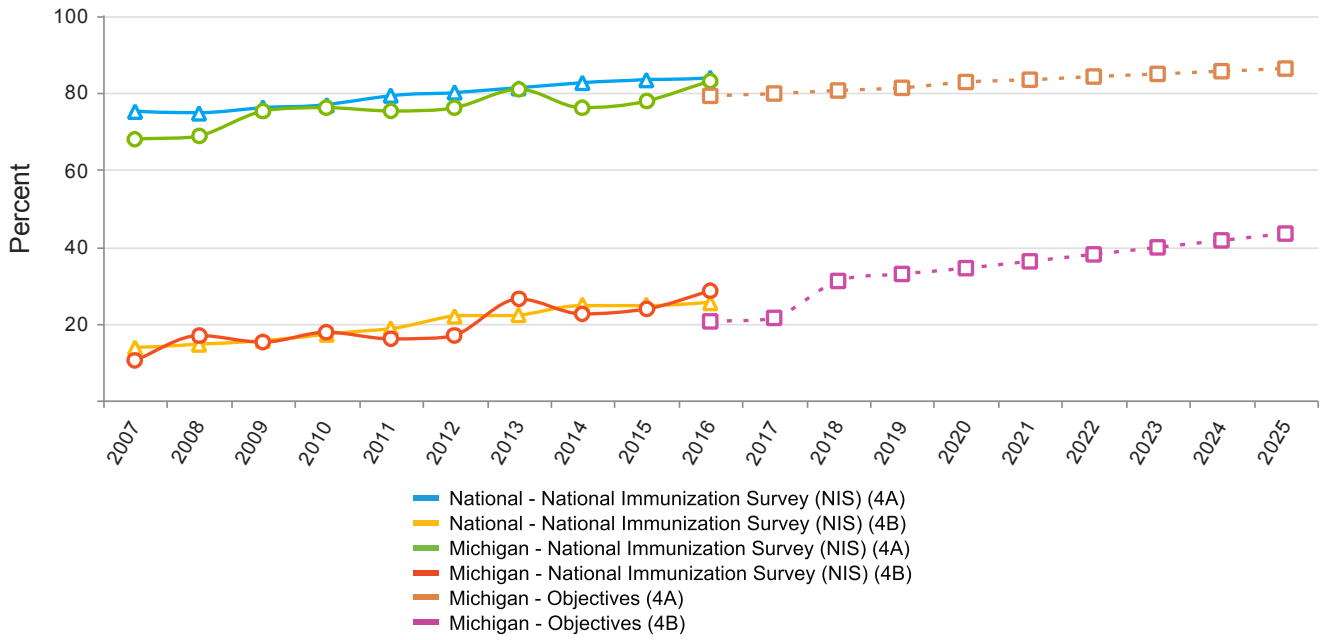
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2017	6.6	NPM 3
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2017	6.8	NPM 3 NPM 4 NPM 5
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2017	4.5	NPM 3
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2017	2.3	NPM 4 NPM 5
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2017	280.9	NPM 3
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2017	80.8	NPM 4 NPM 5

National Performance Measures

NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Indicators and Annual Objectives



NPM 4A - Percent of infants who are ever breastfed

Federally Available Data				
Data Source: National Immunization Survey (NIS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	79.1	79.7	80.5	81.2
Annual Indicator	80.8	75.9	77.7	83.0
Numerator	82,892	86,976	88,168	86,380
Denominator	102,591	114,556	113,401	104,098
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	82.7	83.3	84.1	84.8	85.5	86.2

NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data				
Data Source: National Immunization Survey (NIS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	20.6	21.5	31.1	32.9
Annual Indicator	26.6	22.6	23.9	28.4
Numerator	25,900	25,415	25,921	28,764
Denominator	97,537	112,351	108,464	101,206
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	34.4	36.2	38.0	39.8	41.6	43.4

Evidence-Based or –Informed Strategy Measures

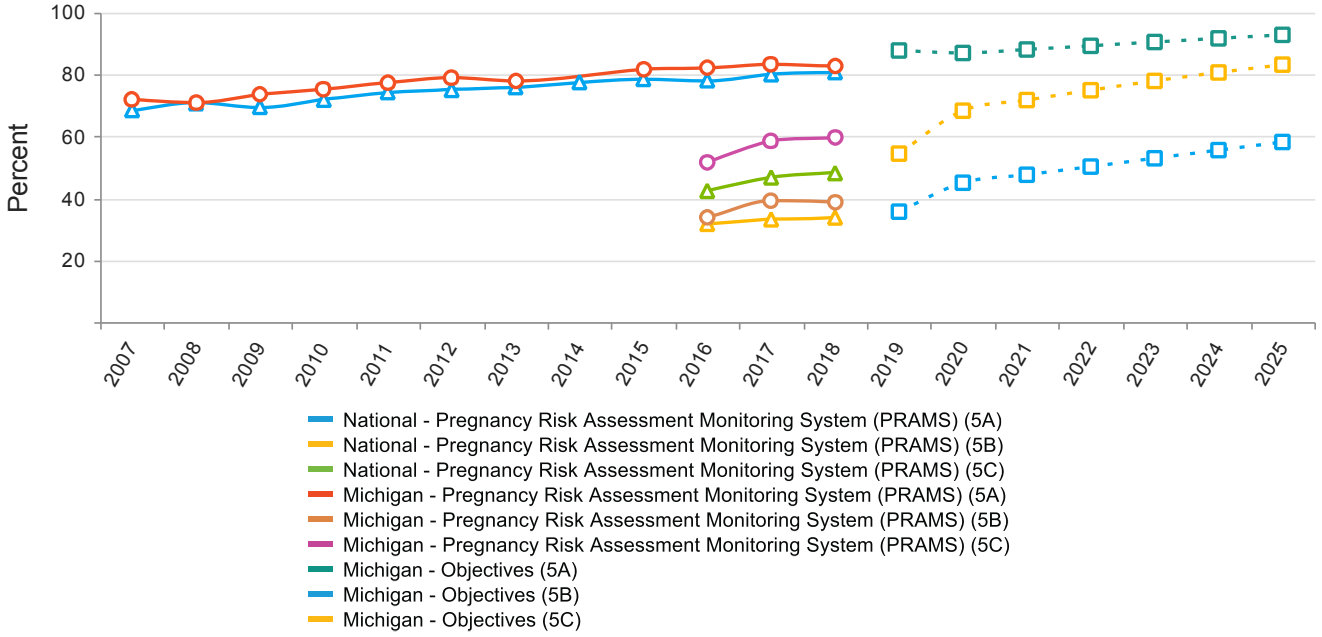
ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		17	20	23
Annual Indicator	14.3	14.5	19.5	18.8
Numerator	12	12	16	15
Denominator	84	83	82	80
Data Source	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	26.0	29.0	31.0	33.0	35.0	35.0

NPM 5 - A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding
Indicators and Annual Objectives



NPM 5A - Percent of infants placed to sleep on their backs

Federally Available Data			
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)			
	2017	**2018**	**2019**
Annual Objective			87.6
Annual Indicator	81.4	83.3	82.5
Numerator	86,585	87,247	85,511
Denominator	106,318	104,718	103,596
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2017	2018

State Provided Data			
	2017	2018	2019
Annual Objective			87.6
Annual Indicator	81.9	83.5	82.5
Numerator	87,760	87,247	85,511
Denominator	107,091	104,517	103,596
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2016	2017	2018
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	86.8	87.9	89.1	90.3	91.5	92.6

NPM 5B - Percent of infants placed to sleep on a separate approved sleep surface

Federally Available Data		
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)		
	2018	**2019**
Annual Objective		35.7
Annual Indicator	39.2	38.9
Numerator	39,142	38,781
Denominator	99,861	99,669
Data Source	PRAMS	PRAMS
Data Source Year	2017	2018

State Provided Data			
	2017	**2018**	**2019**
Annual Objective			35.7
Annual Indicator	74.7	34	39.2
Numerator	77,520	34,751	39,142
Denominator	103,790	102,182	99,861
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2016	2017
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	45.0	47.6	50.2	52.9	55.5	58.1

NPM 5C - Percent of infants placed to sleep without soft objects or loose bedding

Federally Available Data		
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)		
	2018	**2019**
Annual Objective		54.4
Annual Indicator	58.3	59.8
Numerator	58,277	59,314
Denominator	99,994	99,167
Data Source	PRAMS	PRAMS
Data Source Year	2017	2018

State Provided Data			
	2017	**2018**	**2019**
Annual Objective			54.4
Annual Indicator	74.6	51.8	58.3
Numerator	78,063	52,803	58,277
Denominator	104,629	101,994	99,994
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2016	2017
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	68.2	71.6	74.8	77.8	80.5	83.0

Evidence-Based or –Informed Strategy Measures

ESM 5.1 - Increase the number of Maternal Infant Health Program agencies that have staff trained to use the concepts of motivational interviewing with safe sleep

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective			85
Annual Indicator			83
Numerator			
Denominator			
Data Source			Maternal Infant Health Program (MIHP) staff
Data Source Year			2019
Provisional or Final ?			Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	84.0	84.0	84.0	84.0	84.0	84.0

ESM 5.2 - Increase the number of agencies that have implemented or revised/updated a safe sleep policy/protocol

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	10.0	20.0	30.0	40.0	50.0

ESM 5.3 - Increase the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	2.0	4.0	6.0	8.0	10.0

State Action Plan Table

State Action Plan Table (Michigan) - Perinatal/Infant Health - Entry 1

Priority Need
Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities

NPM
NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Objectives
A) Increase the percent of infants who are breastfed exclusively until 6 months to 41.1% by 2025
B) To impact breastfeeding disparity, increase percent of non-Hispanic black women who initiate breastfeeding from 74.4% to 78.4% by 2025

Strategies
A1) Publish and promote the updated Michigan State Breastfeeding Plan A2) Increase the number of home visitors and other maternal and infant health program staff trained on breastfeeding support and best practices A3) Promote access to breastfeeding support professionals and peer counseling services in programs serving families A4) Increase the number of Baby Friendly Hospitals in Michigan from 18.8% to 20%
B1) Increase training opportunities to improve the number, availability, and racial and cultural diversity of breastfeeding professionals B2) Promote culturally responsive breastfeeding promotion campaign messages for MDHHS and local agency use B3) Facilitate community efforts in one community to impact low breastfeeding rates among women of color

ESMs	Status
ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan	Active

NOMs

NOM 9.1 - Infant mortality rate per 1,000 live births

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

State Action Plan Table (Michigan) - Perinatal/Infant Health - Entry 2

Priority Need

Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities

NPM

NPM 5 - A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Objectives

A) Increase the percent of infants put to sleep on their backs to 92.6% by 2025

B) Increase the percent of infants put to sleep on a separate approved sleep surface to 58.1% by 2025

C) Increase the percent of infants placed to sleep without soft objects or loose bedding to 83.0% by 2025

D) Increase the percent of non-Hispanic Black infants put to sleep on their backs, put to sleep on a separate approved sleep surface, and put to sleep without soft objects or loose bedding

Strategies

A1, B1, C1, D1) Support safe sleep activities of local health departments and the Inter-Tribal Council of Michigan

A2, B2, C2, D2) Support providers to implement safe sleep policies/ protocols/programming to ensure families receive infant safe sleep education and access to resources

A3, B3, C3, D3) Explore legislative/regulatory change to increase the number of babies that are safely sleeping

A4, B4, C4, D4) Develop and share tools with providers, families, and workers regarding having client/patient centered conversations regarding safe sleep

A5, B5, C5, D5) Promote protective factors (i.e., smoking cessation, breastfeeding, immunizations) and evidence-based programs (i.e., home visiting) to enhance the overall health and well-being of moms and babies

A6, B6, C6, D6) Engage hospitals in areas with a high rate of sleep-related infant deaths and disparities to explore needed policies and resources to ensure families of NICU infants are practicing safe sleep behaviors after discharge

ESMs	Status
ESM 5.1 - Increase the number of Maternal Infant Health Program agencies that have staff trained to use the concepts of motivational interviewing with safe sleep	Active
ESM 5.2 - Increase the number of agencies that have implemented or revised/updated a safe sleep policy/protocol	Active
ESM 5.3 - Increase the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU	Active

NOMs
NOM 9.1 - Infant mortality rate per 1,000 live births
NOM 9.3 - Post neonatal mortality rate per 1,000 live births
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

2016-2020: National Performance Measures

2016-2020: NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
Indicators and Annual Objectives

Federally available Data (FAD) for this measure is not available/reportable.

State Provided Data				
	2016	2017	2018	2019
Annual Objective	89.4	90.1	91.6	91.5
Annual Indicator	89.2	88.9	86.7	89.5
Numerator	1,547	1,511	1,462	1,315
Denominator	1,735	1,699	1,687	1,470
Data Source	2015 Michigan Resident Live Birth File	2016 Michigan Resident Live Birth File	2017 Michigan Resident Live Birth File	2018 Michigan Resident Live Birth File
Data Source Year	2015	2016	2017	2018
Provisional or Final ?	Final	Final	Final	Final

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 3.1 - Number of CenteringPregnancy sites in Michigan

Measure Status:			**Active**	
State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective		12	12	12
Annual Indicator	14	12	14	15
Numerator				
Denominator				
Data Source	Centering Health Institute	Centering Health Institute	Centering Healthcare Institute	Centering Healthcare Institute
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Perinatal/Infant Health Overview

Perinatal and infant health is a central focus of the Division of Maternal and Infant Health (DMIH), which supports programs designed to ensure infants are born healthy and ready to thrive. The Women and Maternal Health and Perinatal and Infant Health Sections within DMIH oversee many programs including the Regional Perinatal Quality Collaboratives, Maternal Infant Health Program (MIHP), Infant Safe Sleep, Fetal Infant Mortality Review, Safe Delivery, and the Early Hearing Detection and Intervention program. MIHP provides Medicaid-funded home visits to women while pregnant and infants in their first year of life, and other infant health services focused on needs such as infant mortality prevention, safe sleep, and vision and hearing screening. Title V funds a variety of programs and initiatives related to perinatal and infant health, including projects related to sudden infant death syndrome, prenatal care outreach, PRAMS, and infant and maternal mortality reduction. MCH program staff also support regional perinatal quality collaboratives that use quality improvement methods to test strategies for improving maternal and infant health. Other federal funding is used to identify and meet the needs of this population, such as WIC (USDA), Universal Newborn Hearing Screening and Intervention (HRSA), and PRAMS (CDC). Perinatal and infant health is promoted through a network of partnerships, including those with health care providers, labor and delivery hospitals, universities, the Mother Infant Health and Equity Collaborative, and the Michigan Association for Infant Mental Health.

At the local level, local health departments (LHDs) expended Title V funds in three performance measures. One LHD selected NPM 3 (risk-appropriate perinatal care), expending 0.7% of LMCH funds, by collaborating with local birthing hospitals to coordinate care and refer to local programs. For breastfeeding (NPM 4) activities, 17 LHDs expended 9.7% of LMCH funds to facilitate breastfeeding support through groups, lactation consultants, staff development and breastfeeding promotion. Nine LHDs selected safe sleep (NPM 5), accounting for 7.8% of LMCH funds. LHDs provided safe sleep education before and after delivery, through faith-based liaisons and community outreach, and provision of safe sleep environments (e.g., pack-n-play).

Michigan’s approach to perinatal and infant health emphasizes implementing strategies that prevent maternal and infant morbidity and mortality, which are critical indicators of the degree to which a community takes care of its women and children. Focus areas include safe sleep and breastfeeding. In Michigan, the infant mortality rate has decreased from 7.5 deaths per 1,000 births in 2009 to 6.8 per 1,000 births (NVSS) in 2017. A similar trend has been documented nationwide. However, the risk doubles to 14.6 among non-Hispanic Black babies and is substantially greater (9.0) for babies born to mothers who are under 20 year of age. These data suggest that while the needs of women and children are being better prioritized in general, the needs of Black families and young families remain unmet. Another critical signal of wellbeing in the perinatal period and a factor in the health of infants is postpartum depression. From 2012 through 2017, the proportion of mothers reporting postpartum depression symptoms has remained constant at 13.5%, but this number jumped to 16.4% in 2018 (Michigan PRAMS). However, 20.1% of women with Medicaid prenatal care experienced depression symptoms postpartum compared to 12.7% for those without Medicaid, suggesting that women living with limited incomes face stressors around childbirth that women with greater resources are more protected from experiencing (PRAMS).

Risk-appropriate Perinatal Care (FY2019 Annual Report)

In FY2019, Michigan continued to build on its existing perinatal care system. These efforts included ongoing Regional Perinatal Quality Collaborative (RPQC) efforts in northern lower, west, southeast, southwest, Saginaw/Bay area, Thumb area and the Upper Peninsula of Michigan. Additionally, efforts began related to expansion into the Mid-Michigan and lower southeast areas of Michigan. Regional Perinatal Quality Collaborative efforts have served as the key drivers in addressing risk-appropriate care for mothers, infants and perinatal substance use. In FY 2019, Title V federal funding was used to support a portion of the Statewide Perinatal Quality Collaborative (PQC), as well as

additional statewide maternal and infant health efforts. Focus remained on linking families to evidence-based prenatal and postnatal care models of CenteringPregnancy and CenteringParenting, as well as evidence-based home visiting, all of which have been proven to improve birth outcomes.

The importance of comprehensive system linkages and quality improvement remain the driving force in Michigan's efforts to improve maternal, infant and family health. In FY 2019, partnerships and collaborations were solidified and strengthened with many maternal and infant health partners, such as: Healthy Start projects; WIC clinics; Maternal, Infant and Early Childhood Home Visiting (MIECHV) Programs; local health departments (LHDs) receiving Title V funding; families; and Community Based Organizations (CBOs), such as Black Mothers Breastfeeding Association.

Objective A: By 2020, support the implementation and evaluation of Regional Perinatal Care Systems in five pilot communities or regions.

In FY 19, Regional Perinatal Quality Collaborative projects expanded to include eight of the ten Michigan-designated Prosperity Regions. Perinatal Quality Collaboratives are now located in southeast, west, northern lower, southwest, the Saginaw/Bay area, Thumb area and the Upper Peninsula of Michigan. Each regional project is charged with utilizing data driven decisions and quality improvement methodology aimed at improving maternal and infant health. All regions are required to review their respective birth outcome data (stratified by race, ethnicity, age and socioeconomic status) to identify inequities and gaps in care; both of which shape the focus of each region's quality improvement project(s). Additionally, every region is to address the social determinants of health as the root cause of health inequity. Furthermore, each regional collaborative is to convene diverse cross-sector partners vested in improving maternal and child health outcomes, focus on relationship building with stakeholders and partners, and establishing authentic engagement of families and community members. Birthing hospitals, LHDs, Medicaid Health Plans, Healthy Start projects, evidence-based home visiting programs, Great Start Collaborative representatives, clinical care providers and community-based organizations are just a sample of the stakeholders and members of the Regional Perinatal Quality Collaboratives. The most important stakeholders, however, are the families residing in each region. Family input on the regional efforts, as well as barriers and inequities experienced, has been garnered in the form of focus groups, participation at regional collaborative meetings, as well as regional "town hall" meetings held in FY2019.

Southeast Michigan (inclusive of Wayne, Oakland and Macomb counties) is home to 24 of Michigan's 80 birthing hospitals. Of these 24 birthing hospitals in southeast Michigan, ten have neonatal intensive care units (NICUs) and represent just under half of the NICUs in Michigan. In calendar year 2018, 45,233 (41%) of the births in Michigan occurred in southeast Michigan. In an effort to address areas of high infant mortality, the team designed its quality improvement project around increasing referrals and utilization of evidence-based home visiting from two prenatal care clinics and a NICU in the City of Detroit. These clinics, NICU, and home visiting agencies serve areas of the City that experience high rates of infant mortality. Expansion of this project into additional counties is expected in FY2020.

West Michigan contains 13 rural and urban counties, nine LHDs, 12 birthing hospitals, two NICUs and a reported 19,218 births in calendar year 2018. This regional quality collaborative has divided into two workgroups: one to increase substance use screening and referrals in pregnant women and one to increase utilization of evidence-based home visiting services. Building on the successes in FY2018, the team was able to expand use of the screening tool to an additional clinic and pilot co-locating home visiting staff in a WIC clinic as a strategy to increase referrals. The populations of focus for these two workgroups were identified through stratification of data and identification of certain geographic areas of the region with poorer birth outcomes and more cases of infant morbidity.

Northern Lower Michigan is made up of 21 counties, eight birthing hospitals, and one NICU. In calendar year 2018, 4,541 live births were reported. This region continued their work to increase substance use screening in pregnant women through an electronic screening tool, ensure women with Perinatal Substance Use Disorder (PSUD) are linked to appropriate providers for treatment, increase the number of obstetric providers trained in medication assisted treatment (MAT) and increase referrals and utilization of home visiting programs. Northern Lower Michigan identified a need for PSUD screening, based on data related to smoking in pregnancy, rate of Neonatal Abstinence Syndrome cases, and after surveying prenatal clinics on their current use of screening tools.

The Upper Peninsula is 16,377 square miles, has 15 counties, eight birthing hospitals, and one NICU. In calendar year 2018, 2,539 live births were reported. Recent Neonatal Abstinence Syndrome (NAS) data reflects the highest rates in Michigan are still occurring in the Upper Peninsula. Given these results, along with the high number of women who smoke while pregnant, the team decided to focus their efforts on increasing substance use screening in pregnant women, increase care coordination of PSUD treatment and obstetric care, reduce stigma related to care of babies with Neonatal Abstinence Syndrome (NAS), implement nonpharmacologic treatment of babies with NAS, and implement the Society for Public Health Education (SOPHE) Smoking Cessation and Reduction in Pregnancy Treatment (SCRIPT) program at several agencies throughout the region.

Southwest Michigan is comprised of seven counties, eight birthing hospitals, and one NICU. In calendar year 2018, 8,915 live births were reported. In 2018, it was reported that only 57-72% of pregnant women began prenatal care in the first trimester. This data continues to be a key driver in the decision to work on increasing early entry into prenatal care in this region. Additionally, the team is exploring the implementation of universal referrals for home visiting services, in an effort to increase utilization of these services in the Region, and ensure all women and infants are linked to needed resources.

The Saginaw/Bay area is made up of eight counties, five birthing hospitals and one NICU. In calendar year 2018, 5,720 live births were reported. In the same year, 15-36% of pregnant women in this region reported smoking while pregnant, which are some of the highest numbers in the state. Given this data, the RPQC decided to focus their efforts on implementing SOPHE SCRIPT in several agencies throughout the Region. In addition, the team is exploring a CenteringPregnancy cohort for pregnant women with substance use disorder. The clinic where this cohort would receive care has an established CenteringPregnancy program and recently began offering the CenteringParenting program.

The Thumb area is made up of seven counties, eight birthing hospitals and two NICUs. In calendar year 2018, 8,792 live births were reported. In 2017, it was reported that this area of the state had the second highest NAS rates for Michigan at 1,936 per 100,000 live births. This data was a deciding factor in the Region’s efforts to implement an electronic substance use screening tool in two prenatal clinics, as well as ensure women who screened positive are linked to appropriate services and resources. It is expected that the Region will add additional areas of focus in FY2020, as the RPQC continues to grow.

Outreach to the Mid-Michigan and lower southeast areas in Michigan began in FY2019 with stakeholders in each region meeting to discuss operationalizing a Regional Perinatal Quality Collaborative. The Mid-Michigan area is comprised of three counties, two birthing hospitals and one NICU. In calendar year 2018, 4,972 live births were reported. Lower Southeast Michigan is made up of six counties, six birthing hospitals and two NICUs. In calendar year 2018, 10,035 live births were reported. These two areas of the state encompass the remaining prosperity regions not represented by an RPQC. Launching Regional Perinatal Quality Collaboratives in both the Mid-Michigan and lower southeast areas in Michigan ensures that all 10 prosperity regions are represented and therefore, will prove beneficial toward the overall improvement of maternal and infant health in Michigan.

Objective B: By 2020, increase Risk Appropriate Care for mothers and infants from baseline data indicators by 20%.

The ESM for this NPM, which aligns to this objective, is the number of CenteringPregnancy sites in Michigan. Ongoing support of this evidence-based strategy measure is a key component to assuring risk-appropriate care for Michigan mothers and infants. CenteringPregnancy is an evidence-based prenatal model that has proven health outcomes including reductions in preterm and low birth weight infants. The CenteringPregnancy model is patient-driven, resulting in a patient/clinician partnership that values the voices of women during pregnancy and interconception. MDHHS continues to be supportive of CenteringPregnancy, evidenced by the inclusion of the program into the state's Mother Infant Health and Equity Improvement Plan (MIHEIP). To date, 15 CenteringPregnancy sites and three CenteringParenting sites have been established in Michigan.

In calendar year 2018, 88.6% of low birth weight (LBW) babies were born at hospitals offering neonatal intensive care units (NICU) or special care nurseries (SCN). In 2018, 9,096 babies were born with LBW at a hospital and of those, 8,055 were born at a facility with a NICU or SCN. In the same year, 89.5% of very low birth weight (VLBW) babies were born at hospitals offering a NICU. There were 1,470 babies born with VLBW in 2018 at a hospital, and of those, 1,315 were born at a facility with a NICU.

NICUs of Michigan most closely correlate with Level III nurseries and SCNs of Michigan most closely correlate with Level II nurseries. Based on data received from MDHHS Vital Statistics, the majority of LBW and VLBW babies were born at hospitals that best medically meet their needs. However, a deeper dive into the data and case abstraction may provide information as to why 11.5% of LBW babies are born at hospitals without NICUs and SCNs, why 10.5% of VLBW babies are born at hospitals without NICUs, and how we can ensure that going forward all LBW and VLBW babies are born at hospitals that best meet their needs.

Objective C: By 2020, expand quality improvement efforts related to the prevention and response of Perinatal Substance Use.

The MDHHS-supported Michigan Collaborative Quality Initiative is a voluntary quality collaborative of approximately 20 Michigan birthing hospitals. In FY 2019, the Michigan Collaborative Quality Initiative held monthly webinars to share best practices, discuss collaborative efforts and collected data to monitor improvements regarding NAS of infants cared for in Neonatal Intensive Care Units. The group also discussed implementing non-pharmacologic treatment of babies with NAS in the NICUs.

The Regional Perinatal Quality Collaborative of northern lower Michigan, as mentioned above, implemented quality improvement efforts aimed at increasing the number of prenatal substance use screenings and conducted brief interventions and referrals via the innovative use of handheld technology while patients waited at prenatal appointments. These efforts expanded to additional clinics within the Region in FY2019, and are slated to continue, and further expand, in FY2020. The Thumb area began piloting the innovative screening technology, referenced above, in FY2019 and will continue into FY2020. The Upper Peninsula will begin implementation of the previously referenced screening technology in FY2020. West Michigan has implemented a paper version of an evidence-based screening tool at three clinics and plans to continue and expand the project in FY2020. All Regional Perinatal Quality Collaborative projects have also been instrumental in ensuring that education and outreach efforts to address Perinatal Substance Use have occurred in the forms of SOPHE SCRIPT training, use of Finnegan scoring of infants to identify NAS, nonpharmacologic treatment for infants with NAS and linking to supportive resources, such as evidence based home visiting programs.

MDHHS continues to work to align maternal and infant health efforts both internally and with external partners. These efforts have resulted in increased communication and more streamlined efforts to positively impact the lives of those

affected by Perinatal Substance Use Disorder (PSUD). Specifically, this partnership led the MDHHS Office of Recovery Oriented Systems of Care (OROSC) to provide funding for the Regional Perinatal Quality Collaborative in the Saginaw/Bay region, with the caveat that quality improvement efforts must focus on PSUD. As mentioned above, this area of the state has high NAS rates, as well as high rates of reported smoking in pregnancy. As MDHHS continues to build and strengthen partnerships, it is expected that additional opportunities and programs positively impacting those affected by PSUD will be supported and developed.

Breastfeeding (FY 2019 Annual Report)

Breastfeeding is a natural way to feed and provide nutrition to infants, and research shows that it provides many short- and long-term benefits to both mothers and babies. Michigan continues to promote and fund breastfeeding initiatives and education. Breastfeeding initiation continues to rise in Michigan. PRAMS data indicate that in 2004, 71% of mothers in Michigan initiated breastfeeding. By 2017, that rate increased to 87.7%. While initiation rates were stable from 2004-2009, from 2009-2017 sustained growth in initiation occurred, from 73.2% to 87.6% of mothers, gaining 14.5% across eight years. PRAMS 2018 data show a slight dip to 86.9% initiation rate.

From 2009-2014 initiation grew from 64.9% of black mothers to 77.3% (+12.4%), almost identical to the change from 74.5% to 86.3% among white mothers (+11.8%). However, from 2014 to 2017, initiation among black mothers has remained unchanged (77.3% to 77.2%) compared to increases among white mothers (86.3% to 90.1%). MDHHS continues to seek ways to better support breastfeeding and to increase initiation among non-Hispanic black mothers. Starting in 2016, PRAMS asked mothers why they did not initiate breastfeeding. Among mothers who chose not to initiate, the top reasons included not wanting to breastfeed, not liking breastfeeding and having other children to care for. Mothers completing the survey could choose multiple reasons. Non-Hispanic black mothers reported more reasons for not initiating than non-Hispanic white mothers.

Families and consumers have significant input into local breastfeeding activities through breastfeeding coalitions and peer support groups. For example, families and consumers were invited to participate in Regional Town Hall Meetings at which breastfeeding was discussed among other maternal and infant health topics.

MDHHS is currently operating under Michigan's first Breastfeeding State Plan published in the fall of 2017. The Plan set a common agenda necessary for a collaborative approach among an array of stakeholders: state, local and tribal government; health care professionals and organizations; employers; childcare providers and educational institutions; community organizations; and most importantly, individuals and families. The Plan's five key strategies to achieve breastfeeding goals are the elimination of disparities; advancing breastfeeding rights through education of policy makers and support of laws that protect breastfeeding families; building community support through the work of breastfeeding coalitions and increased access to breastfeeding support; changing organizational practices; and strengthening individual skills. In order to focus internal efforts and limited resources, MDHHS breastfeeding partners (i.e., WIC, maternal and infant health and obesity prevention) identified key strategies:

1. Increase training opportunities to improve the number, availability, and racial and cultural diversity of trained breastfeeding professionals.
2. Develop and promote interventions to address disparities in breastfeeding rates.
3. Increase the number of Baby-Friendly hospitals.

Challenges toward implementing the strategies outlined in FY 2019 Title V state action plan included staff turnover in the State Breastfeeding Coordinator position which is primarily responsible for implementing the plan. A new coordinator was hired in March 2019, six months into the fiscal year. The coordinator prioritized professional orientation and training and received her Certified Lactation Consultant (CLC) certification in Fall 2019.

Objective A: Increase percentage of Baby-Friendly designated birthing hospitals to 26% by 2020.

Michigan's evidence-based strategy measure (ESM) is the percent of Baby-Friendly designated hospitals. The purpose of the Baby-Friendly Hospital Initiative (BFHI) is to assist hospitals in providing mothers with information, confidence and skills needed to start and continue to breastfeed their babies. Progress toward meeting this objective has slowed. While the percent of Michigan birthing hospitals with Baby-Friendly status did increase from 14.3% in 2016 to 18.8% in FY 2019, it is unlikely to increase to 26% in 2020. While there is general support for the Baby-Friendly initiative in Michigan, our birthing hospitals struggle to move forward on the Baby-Friendly pathway due to time, cost and competing priorities. Not reflected in the percent of hospitals to achieve Baby-Friendly are the important steps Michigan hospitals are taking to improve breastfeeding-friendly practices outside of the designation.

The first strategy to achieve our goal was to determine each Michigan birthing hospital's individual goal to continue movement along the Baby-Friendly pathway. This strategy was not achieved due to staff turnover in the State Breastfeeding Coordinator position. The second strategy was to continue the work of QI Jumpstart, a collaborative network of hospitals working on quality improvement and training. The QI Jumpstart did continue to meet in FY 2019 without additional MDHHS funding and continues to provide a collaborative environment for hospitals to move along the Baby Friendly pathway.

The third strategy was to promote breastfeeding supportive practices in at least 20 birthing hospitals through trainings and support of the annual Mother Baby Summit. The Mother Baby Summit was held on November 8, 2019 and numerous MDHHS staff attended the meeting. MDHHS supports a breastfeeding webinar series that offers educational topics and training and continuing education for social workers, nurses, lactation consultants, and dieticians. Hospitals have participated in all twelve webinars held in FY 2019 with an average of 162 participants identifying as hospital staff. The MDHHS WIC Division hosted four Building Bridges trainings in FY 2019 with a cumulative 184 people attending. Building Bridges is a highly acclaimed training that promotes collaboration between hospitals, WIC programs and community partners in providing lactation support services. MDHHS also hosted the Maternal Infant Health Summit in March 2019 and included a presentation on Breastfeeding and Safe Sleep. Registration shows that 17 people attended the presentation including 12 that self-identified as nursing staff.

The fourth strategy focused on assisting key statewide partners who influence maternal and infant health to develop and implement one specific strategy that supports efforts to increase the number of Baby-Friendly hospitals. Coordinated effort on this strategy was hindered due to staff turnover in the State Breastfeeding Coordinator position. However, thanks to the work of statewide partners elevating the importance and positive outcomes from breastfeeding, breastfeeding support is being prioritized by several statewide partners. The Michigan Council for Maternal and Child Health (MCMCH) which has long advocated for breastfeeding support, continues to recognize its importance via its policy agenda. MCMCH and the Michigan Chapter of the American Academy of Pediatrics produced a maternal and infant health fact sheet which acknowledged the positive impact of breastfeeding.

Objective B: Reduce the disparity in breastfeeding initiation between non-Hispanic white women and non-Hispanic black women from an average of 12.1% to 11.9% by 2020.

According to PRAMS data, Michigan's gap in breastfeeding initiation between non-Hispanic white women and non-Hispanic black women has decreased from an average of 15.3% in 2009-2011, to 12.1% in 2013-2015. To further reduce the gap in disparities, Michigan worked to provide and promote training opportunities to improve the number, availability and racial and cultural diversity of trained breastfeeding professionals. MDHHS continued to work with state-administered programs to provide a base level of competency. The State Breastfeeding Coordinator convenes a state-level workgroup with representatives from various programs and departments including WIC, Safe Sleep, Home Visiting, Medicaid, Children's Special Health Care Services, Chronic Disease and others. The purpose of the

group is to coordinate breastfeeding related efforts and provide consistent breastfeeding information within MDHHS programs. Staff share training opportunities that can be promoted in statewide programs including the Great Lakes Breastfeeding webinars.

MDHHS partners with and provides support to the Great Lakes Breastfeeding webinar, a project of the Michigan Breastfeeding Network, which offers breastfeeding-specific information every month, at no cost to participants. The webinar provides contact hours for nurses, social workers, lactation consultants and dietitians. This free, easy-to-access education allows all providers the ability to receive advanced training, which diversifies and strengthens Michigan's lactation workforce. Topics have a strong health equity focus. FY 2019 topics were well-received with webinar attendance between 476 and 897 each and representing an average of 35 states. The webinars continue to be popular with WIC, hospitals, health departments and home visitors. In FY 2019, MDHHS worked with the Michigan Breastfeeding Network to obtain funding from maternal and child health partners in Region V (Ohio and Wisconsin) to support the webinars and to move toward regional collaboration.

Due to the staff turnover in the State Breastfeeding Coordinator position, MDHHS has just begun to refocus on building partnerships with communities that have lower breastfeeding rates among women of color. The Coordinator has started attending local breastfeeding collaboratives, Regional Town Hall meetings and Michigan Breastfeeding Network quarterly meetings to build relationships and learn more about the communities and their needs. MDHHS is hoping to explore projects to support specific communities in FY 2020.

Safe Sleep (FY 2019 Annual Report)

In Michigan's original five-year plan, the priority area to "Foster safer homes, schools and environments with a focus on prevention" was linked to promotion of infant safe sleep environments through the following two-part SPM:

1. The percent of infants put to sleep alone in their crib, bassinet or pack and play.
2. The percent of infants put to sleep without objects in their crib, bassinet or pack and play.

HRSA added two Pregnancy Risk Assessment Monitory Survey (PRAMS) measures to the original NPM, that previously only measured the percent of infants placed to sleep on their backs. Given this change, Michigan converted its original SPM to the new NPM for FY 2019. Michigan originally did not choose "infants being placed to sleep on the back" as a performance measure because it exceeded the Healthy People 2020 goal.

Michigan's safe sleep strategies and activities promote three key messages to parents and caregivers: infants should sleep 1) alone, 2) on the back, and 3) in a crib, bassinet or pack and play. These behaviors are critical to the prevention of sleep-related infant death. Of the leading causes of infant death, sleep-related causes are considered the most preventable. In FY2019, Title V federal funding was used for activities that support Michigan's safe sleep work, including PRAMS, infant mortality communication, Fetal Infant Mortality Reviews, and funding to local health departments to support community-based safe sleep efforts.

Data from PRAMS for birth year 2017 show that the percentage of mothers placing infants to sleep alone in their crib, bassinet, or pack and play and the percentage of mothers putting infants to sleep without objects in their crib, bassinet or pack and play has increased compared to 2016. Parents placing infants to sleep on their back remained relatively stable between 2016 and 2017.

In birth year 2017, 83.3% of Michigan mothers placed their infants to sleep on their backs; this is a stable trend as compared to 2016. In birth year 2017, 39.2% of infants were placed to sleep on a separate approved sleep surface, which has increased compared to 2016. Prior to 2016, this measure was based on only two sleep risk factors—does the infant sleep in his or her own crib and does the infant sleep with other people. Starting in 2016, this

measure is based on the combination of five different sleep risk factors: always or often 1) sleeps alone in own bed; 2) in a crib, bassinet or pack and play; 3) does not sleep on a twin or larger mattress; 4) does not sleep on couches, sofas, armchairs; and 5) does not sleep in a car set or swing. Asking whether infants sleep in a car seat or swing—a new question—has had an especially large impact on this measure. The proportion of infants sleeping with no soft objects (pillows, bumpers, blankets, toys) increased from 51.8% in 2016 to 58.3% in birth year 2017.

In FY 2019, MDHHS continued its work to identify the touchpoints where a family could and should receive infant safe sleep information. For example, MDHHS built upon connections with existing partners, such as the Women, Infants and Children (WIC) Program, home visiting programs, child welfare, and the Regional Perinatal Quality Collaboratives and explored ways to enhance partnerships with others such as Early On®, MDHHS Tobacco and Immunization Divisions, and Children's Special Health Care Services.

Challenges exist in ensuring that families receive consistent infant safe sleep messages at all potential touchpoints. For example, families may sometimes receive inconsistent messages from health care providers and family members, who may have been taught and used outdated infant sleep techniques.

While two distinct objectives for infant safe sleep have been identified, the strategies to address them are combined since the safe sleep behaviors are so closely related. Although infants being placed to sleep on their back was not singled out as a specific objective, all strategies and activities will promote the key messages to parents and caregivers: an infant sleeps alone and without objects on the back, in a crib, bassinet or pack and play.

Objective A: By 2020, increase the percent of infants put to sleep alone in their crib, bassinet or pack and play by 4%.

Objective B: By 2020, increase the percent of infants put to sleep without objects in their crib, bassinet or pack and play by 4%.

In FY 2019, activities occurred within six strategies for Objectives A and B:

1. Support safe sleep activities of local health departments and the Inter-Tribal Council of Michigan.
2. Support providers who educate families on safe sleep.
3. Develop and disseminate safe sleep messages based in best practices and families' experiences.
4. Develop and disseminate tools for providers to have effective, non-judgmental, and culturally sensitive conversations about safe sleep.
5. Support promotion of protective factors (i.e., smoking cessation, breastfeeding, immunizations).

To continue and further expand a program initiated in 2013, funding in the form of mini-grants was provided to 15 local health departments (LHDs) and the Inter-Tribal Council of Michigan in FY 2019. The LHDs and Inter-Tribal Council of Michigan represent Michigan communities with the highest numbers of Sudden Unexpected Infant Deaths (SUIDs). Grant funding is provided in the amount of $22,500 for all grantees, except for Wayne County ($45,000) and the City of Detroit ($90,000) due to the higher number of SUIDs in these communities. The mini-grants allow communities to develop local programming which is culturally relevant and informed by the community. For example, activities range from providing safe sleep education sessions at home or in a community setting; purchasing billboards; providing group classes; conducting community awareness events; creating public service announcements (PSAs); and promoting protective behaviors such as breastfeeding and smoking cessation. A portion of the grant funds can be used to purchase pack and plays or sleep sacks. In FY 2019, grantees provided infant safe sleep education to nearly 5,800 individuals (parents, caregivers, professionals and community members) through classes and workshops. Over 12,000 people were provided infant safe sleep information at community events such as health fairs. Analysis of pre/post test scores of people who attended classes and workshops

revealed that infant safe sleep knowledge and intention to practice safe sleep behaviors increased after attendance. Providing technical assistance to the infant safe sleep grantees is another critical component of this work, as the grantees provide education for local groups such as hospitals, home visiting collaboratives, childcare centers, and community agency staff.

The second strategy is to support providers who educate families on infant safe sleep, including continuing to facilitate collaborations with non-traditional partners. The faith-based collaboration that was initiated in FY 2016 in Detroit continues to be supported through cooperation between the Detroit Health Department, the MDHHS Infant Safe Sleep Program and the MDHHS Office of Community and Faith Engagement. In addition, Oakland County Health Division and Wayne County Health Department (serving out-Wayne County) expanded their faith-based work in FY 2019. At the end of FY 2019, 71 faith-based organizations in Detroit, Oakland County and out-Wayne County were involved in these efforts which included a variety of activities such as hosting infant safe sleep educational sessions, distributing safe sleep messages in church bulletins, holding prayer times for infants, attending safe sleep community events and receiving infant safe sleep educational materials to distribute and/or display.

The third strategy was to develop and disseminate safe sleep messages that are based in best practices and families' experiences. Much of this work was funded through a Michigan Health Endowment Fund grant awarded in December 2016. The results of focus groups with parents and individuals that provide support (e.g., grandmothers, aunts, uncles, and other caregivers) was the beginning of this work in FY 2018. In FY 2019, the Infant Safe Sleep Program contracted with the Inter-Tribal Council of Michigan (ITC) and the Greater Detroit Area Health Council (GDAHC) for additional community-based advising. With the results of focus groups with families, ITC expanded their infant safe sleep education to be more comprehensive. A series of five videos for the Power of Your Newborn training and a podcast, Serving Native American Families, will be available to the public and the ITC home visiting team.

GDAHC began by identifying some of the key agencies that provide services to families with high risk for experiencing infant mortality in southeast Michigan, to speak with staff about their experiences in working with this population. Next, a brief survey was created for clients regarding their preferences on messaging formats. GDAHC participated in several community events where the primary audience was parents and families of infants and toddlers. In addition, GDAHC hosted five focus groups with parents and grandparents. Feedback from the focus groups and the community venues served as the sources of data for the final safe sleep messages and materials.

The fourth strategy, to develop and disseminate tools for providers to have effective, non-judgmental, and culturally sensitive conversations about safe sleep, is part of ongoing programmatic efforts. Program staff provide in-person training at conferences and professional trainings. All trainings address challenges families have with following the safe sleep guidelines and how professionals can have open, non-judgmental conversations to support their efforts. An in-person and online version of a "Safe Sleep 201" training for home visitors and child welfare workers is available. This training is based on the principals of motivational interviewing and teaches professionals how to have more effective conversations with families around safe sleep: start where the family is at to address the challenges families face in following the guidelines, and reduce the risks in the sleep environment while educating families that following the AAP recommendations is the safest way for baby to sleep. The training also encourages professionals to include family members and other caregivers in the conversation to address the issue of when family members provide outdated advice.

In FY 2019, a new evidence-based or -informed strategy measure (ESM) was implemented to increase the number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep. As noted in the FY 2020 application, the ESM was changed to require the *Helping Families Practice Infant Safe Sleep (Safe Sleep 201)* training instead of the three-part motivational interviewing and safe sleep webinar

series. In FY 2019, 83 out of 85 MIHP agencies completed the training.

In addition, efforts to support birthing hospitals to educate families on infant safe sleep continue. The related ESM is to increase the number of birthing hospitals trained on infant safe sleep. When health care providers, including nurses, are educated on infant safe sleep, families are more likely to follow recommended infant safe sleep practices. In FY 2019, the MDHHS Infant Safe Sleep Program trained nearly 800 nurses and other hospital staff at 20 birthing hospitals in the state. Additionally, an Infant Safe Sleep Resource Book and Picture Ring was provided to staff at the 20 birthing hospitals, home visitors, WIC offices, school-based health centers, and Children's Protective Services workers. Challenges to providing training to birthing hospitals include connecting with the hospital to schedule the training and not reaching all staff due to turnover and scheduling conflicts. In addition, hospital administrative procedures may prevent staff from implementing best practices related to infant safe sleep.

In FY 2019, over 700 individuals attended an in-person safe sleep training and over 10,000 individuals completed one of the three online infant safe sleep trainings. Providers are also supported with access to free educational materials to use in their work with families; nearly 356,000 educational items were distributed by MDHHS in FY 2019. During FY 2017, an infant safe sleep email listserv for professionals was established and by the end of FY 2019 had grown to over 2,600 members. A quarterly webinar series on infant safe sleep was established in FY 2017 and has continued since that time.

The final strategy for this objective is to support promotion of protective factors related to infant safe sleep (i.e., smoking cessation, breastfeeding, immunizations). Outreach to other MDHHS programs that continued in FY 2019 included MDHHS Immunizations (to help ensure infants are immunized); WIC and MDHHS Breastfeeding (to ensure breastfeeding is supported); and MDHHS Tobacco (to help reduce smoking among pregnant mothers and families). Support for local health departments and other partners implementing the Society for Public Health Education (SOPHE) Smoking Cessation and Reduction in Pregnancy Treatment (SCRIPT) Program was also continued. In conjunction with MDHHS Tobacco, the MDHHS Infant Safe Sleep Program continued to host a quarterly call to support local health departments implementing SOPHE SCRIPT as well as other smoking cessation activities. In addition, the Infant Safe Sleep Program hosted a SOPHE SCRIPT training. Representatives from 14 agencies across the state attended and learned effective techniques to engage and assist pregnant and postpartum women in quitting and staying quit. In addition, resource materials on Smoking and Safe Sleep were created in conjunction with MDHHS Tobacco. These materials included a handout and bulletin board kit on how smoking affects a baby's health and increases the risk of sleep-related infant death. The bulletin board kits were provided to all WIC offices and nearly 300 other partners across the state.

Objective C: Reduce the gap between non-Hispanic white women and non-Hispanic black women in following safe sleep guidelines by 2020.

In FY 2019, activities occurred within three strategies for this objective:

1. Provide training and support to local health departments on health equity.
2. Dedicate at least one infant safe sleep webinar annually to the topic of health equity.
3. Send at least one message on the topic of health equity via the Infant Safe Sleep for Professionals list per quarter.

The intended outcome of reducing the gap between non-Hispanic white women and non-Hispanic black women in following safe sleep guidelines is to reduce the unacceptable racial disparity that exists in sleep-related infant deaths in Michigan. For each strategy noted above for Objectives A and B, the Infant Safe Sleep Program took steps to address health equity and racial disparities as part of those strategies. In addition, the Infant Safe Sleep Program implemented specific strategies to ensure health equity was kept at the forefront.

The first strategy is to provide training and support to LHDs on health equity. In FY 2019, a training session on health equity was provided to LHDs that received mini-grant funds. Continued training, technical assistance and support is planned for FY 2020 and beyond. The second strategy was to dedicate at least one infant safe sleep webinar annually to the topic of health equity. In May 2019, the Infant Safe Sleep Program hosted the webinar “Serving Native American Families.” A challenge with this strategy is to provide webinars that educate participants on health equity while also providing concrete strategies they can use in their work. The third strategy was to send at least one message on the topic of health equity via the Infant Safe Sleep for Professionals listserv per quarter. In FY 2019, six messages sharing information and resources on the topic of health equity, including training opportunities, were sent via the Infant Safe Sleep for Professionals Listserv.

Perinatal/Infant Health - Application Year

Breastfeeding (FY 2021 Application)

The American Academy of Pediatrics recommends all infants are exclusively breastfed for six months to support optimal growth and development. Breastfeeding has health benefits for infants and mothers. For infants, breastfeeding reduces risk of asthma, obesity, SIDS, diabetes, ear infections and some respiratory diseases. For mothers, breastfeeding can reduce feelings of anxiety and postnatal depression, reduction in post-partum hemorrhage and may be less likely to develop breast, uterine and ovarian cancers. Human milk remains the optimal source of nutrition for the first months of life. Additionally, the Title V needs assessment revealed that breastfeeding is still a critical MCH issue for Michigan's mothers and infants. Needs assessment themes showed that families want more breastfeeding support and education and that families are having difficulty accessing breastfeeding support professionals and providers that support breastfeeding. During the Title V needs assessment, stakeholders identified the priority need to "Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities" as an important way to achieve breastfeeding initiation and duration.

According to the National Immunization Survey (NIS), in 2015 Michigan's initiation rate was 77.7%. Epidemiological modeling shows that in 2018, Michigan's rate according to NIS will reach 79.5%. Michigan's breastfeeding exclusivity rate through six months was 23.9% and predicted to be 29.7% in 2018. Michigan's goal is to reach 41.1% by 2025.

PRAMS data 2018 tells a more complicated story with an initiation rate of 86.9%, above Healthy People 2020 goals and NIS projections. PRAMS has shown that Michigan's initiation rate has increased steadily from 2009-2017 gaining 14.5% across eight years from 73.2% to 87.6%. Disparities in breastfeeding initiation persist among non-Hispanic white women and non-Hispanic black women. According to PRAMS, while from 2009-2014 initiation rates grew among black women at the same rate as white women, from 2014 to 2017, initiation rates among black women have remained unchanged (77.3% to 77.2%) compared to increases among white mothers (86.3% to 90.1%). Initiation rates among black mothers continue to be about 13% lower than white mothers. Statistics from MDHHS Office of Vital Statistics also show slightly lower initiation rates among Hispanic and Native American women when compared to white women.

Based on the above disparity data, the state action plan continues to focus on reducing disparities in breastfeeding rates among women of color. The plan also focuses on increasing breastfeeding knowledge among maternal and infant health professionals who work with pregnant or postpartum women, offering breastfeeding educational opportunities statewide through a webinar series, and the update and release of the revised State Breastfeeding Plan to provide a framework for improving breastfeeding rates statewide. The evidence continues to support that babies born in Baby-Friendly designated hospitals are more likely to be breastfed; therefore, increasing the percent of Baby-Friendly hospitals in Michigan remains the Evidence-based Strategy Measure (ESM) for this NPM.

MDHHS receives community input on breastfeeding related issues through a statewide breastfeeding workgroup, discussions at the Town Hall meetings held in relation to the Mother Infant Health and Equity Improvement Plan and participation in local breastfeeding coalition meetings when able.

Objective A: Increase the percent of infants who are breastfed exclusively until 6 months to 41.1% by 2025.

Michigan's first State Breastfeeding Plan sunset at the end of 2019. MDHHS will revise and update the state plan for a release in late 2020 or early 2021. To obtain community input on the plan, MDHHS conducted a survey and

received feedback from over 140 participants. The plan will provide a framework for improving breastfeeding support in Michigan for the next few years. The completed plan will be promoted widely throughout the state and with breastfeeding stakeholders.

The second strategy is to improve knowledge of breastfeeding support among staff working in maternal and infant health programs, including home visitors. The best mechanism to improve knowledge will vary based on the program but may include educational materials and resources to use with clients, staff trainings or promoting existing training opportunities. The goal is for all program staff to have consistent and culturally sensitive information on breastfeeding and the ability to discuss breastfeeding, as appropriate, with the families they serve. This strategy, in tandem with the next two strategies, will help to achieve the state priority need by enhancing support systems that empower families, promoting care for self and child, and connecting families to resources in their communities.

Evidence shows that access to professional and peer support can increase breastfeeding duration. MDHHS will promote sources of breastfeeding support and disseminate the information to maternal and infant health programs and other partners to help families access these critical services. The fourth strategy will be to increase the percent of Baby-Friendly hospitals in Michigan. MDHHS will continue to work with birthing hospitals statewide and encourage, support and acknowledge hospitals achieving Baby-Friendly status. MDHHS will work to educate hospital staff and other health care professional staff on breastfeeding support through presentations, webinars and materials. This is Michigan's ESM for this NPM.

Objective B: To impact breastfeeding disparity, increase percent of non-Hispanic black women who initiate breastfeeding from 74.4% to 78.4% by 2025.

As discussed above, disparities in breastfeeding initiation persist among non-Hispanic white women and non-Hispanic black women. This objective seeks to achieve more equitable health outcomes by addressing this disparity. PRAMS data will be used to measure and track the objective. The first strategy is to support training opportunities that improve the racial and cultural diversity of breastfeeding professionals. One example is the Great Lakes Breastfeeding Webinar Series hosted by the Michigan Breastfeeding Network which provides monthly on-demand online training opportunities for health care professionals, home visitors, WIC staff and others who serve families. Not only do the webinars remove barriers such as travel and cost, but webinar topics have an intentional health equity focus. MDHHS will seek other opportunities in addition to the webinars that improve the diversity of breastfeeding professionals.

Results of the State Breastfeeding Plan survey referenced above indicated a strong need for breastfeeding promotion campaigns to normalize breastfeeding in culturally responsive ways. It is unlikely that a paid media campaign will be possible; however, at a minimum social media messages will be identified, used on MDHHS social media sites, and shared with local agencies for optional use. Additionally, MDHHS will monitor local social media messages and share on MDHHS pages as appropriate. MDHHS will also participate in and promote community activities that normalize breastfeeding among groups with lower breastfeeding rates such as Black Breastfeeding Week events.

The final strategy will be to support at least one community's efforts to impact low breastfeeding rates among women of color. Any efforts will be community driven and MDHHS will serve in a supporting role to help the community implement the approaches that it deems as most appropriate and relevant for women and families. This strategy supports the priority to intentionally seek the knowledge and expertise of communities and families to build trust and create initiatives that align with family and community needs.

Safe Sleep (FY 2021 Application)

Michigan's safe sleep strategies and activities promote three key messages to parents, caregivers and providers: infants should sleep 1) alone, 2) on the back, and 3) in a crib, bassinet or pack and play. These behaviors are critical to the prevention of sleep-related infant death, which out of the leading causes of infant death is considered the most preventable.

Significant progress toward these behaviors has been slow and difficult to achieve. In birth year 2018, data from the Michigan Pregnancy Risk Assessment Monitoring Survey (PRAMS) show 82.5% of Michigan mothers placed their infants to sleep on their backs. In birth year 2018, 38.9% of infants were placed to sleep on a separate approved sleep surface which is similar to 2017 (39.2%). In birth year 2018, 59.8% of infants were reported as sleeping with no soft objects (pillows, bumpers, blankets, toys) compared to 58.3% in 2017.

In addition to PRAMS, another important source of data is from the Centers for Disease Control and Prevention (CDC) Sudden Unexpected Infant Death (SUID) Case Registry. It is a statewide, population-based surveillance system that tracks all sleep-related infant deaths and contains comprehensive information about the circumstances associated with the infants' deaths as well as information about the case investigation. Data are collected through local, county-based Child Death Review teams. In Michigan, 1.3 sleep-related infant deaths occur per 1,000 live births (CDC, 2010-2017 SUID Case Registry, 2019). Between 2010 and 2017, an average of 142 babies died each year in Michigan due to sleep-related causes (n=1,136 total cases).

According to the SUID Case Registry, three in four sleep-related infant deaths in Michigan occurred in an unsafe sleep location, including adult beds (48%) and couches or chairs (15%). Only 21% of infants who died of sleep-related causes were placed to sleep in a crib, bassinet or portable crib. A crib, bassinet or portable crib was not present in the home in 15% of the deaths. Of the infants who die of sleep-related causes in Michigan, 58% of deaths occur while an infant is sharing a sleep surface with an adult(s), another child(ren), and/or an animal(s).

Significant racial disparities exist among sleep-related infant deaths. In Michigan, non-Hispanic Black (NHB) infants are 3.4 times more likely to die of sleep-related causes than non-Hispanic White (NHW) infants (2.7 sleep-related infant deaths per 1,000 live births for NHB infants compared to 0.8 per 1,000 live births for NHW infants, CDC 2010-2017 SUID Case Registry, 2019). Compared to NHW infants, infants whose race was categorized as Other (Other includes American Indian, Asian, Pacific Islander, and multi-racial infants) are more than twice as likely to die of sleep-related causes (1.8 sleep-related infant deaths per 1,000 live births when "Other" is listed as the race compared to 0.8 per 1,000 live births for White infants).

According to 2018 PRAMS data, there is a disparity gap of 17.6% for the behavior of infants usually being placed to sleep on their backs between NHW and NHB, 86.7% and 69.1%, respectively. NHW mothers also reported a higher proportion of infants sleeping on a separate approved sleep surface (41.0% for NHW as compared to 36.1% for NHB) and being put to sleep without soft objects or loose bedding (62.2% for NHW as compared to 55.2% for NHB). The resulting disparity gaps for being placed on a separate approved sleep surface and being placed to sleep without soft objects or loose bedding are 4.9% and 7.0%, respectively.

However, the difference in these sleep behaviors by White and Black infants does not account for all the difference in the Black and White sleep-related infant death rates. It is important to note that social determinants of health (SDOH) and systemic policies and practices rooted in racism and oppression drive these disparities. These systemic drivers of inequity interfere with a family's ability to consistently practice infant safe sleep behaviors and ultimately to achieve optimal health.

Finally, data show infants born pre-term and low birth weight are also at increased risk for sleep-related infant deaths. Pre-term infants, classified as infants born prior to 37 weeks gestation, experience a sleep-related infant death rate 2.5 times higher than infants born at 37 weeks or greater gestation (2.8 sleep-related infant deaths per

1,000 live births for infants born prior to 37 weeks gestation compared to 1.1 infant deaths per 1,000 live births for infants born at 37 weeks gestation or greater). Moreover, infants born with low birth weight, classified as infants born weighing less than 2,500 grams, have a 3.3 times greater risk of dying due to sleep-related causes as compared to infants with a birth weight of 2,500 grams or higher (3.3 sleep-related infant deaths per 1,000 live births for low birth weight infants compared to 1.0 sleep-related infant deaths per 1,000 live births for infants weighing greater than or equal to 2,500 grams).

Objective A: Increase the percent of infants put to sleep on their backs to 92.6% by 2025.

Objective B: Increase the percent of infants put to sleep on a separate approved sleep surface to 58.1% by 2025.

Objective C: Increase the percent of infants placed to sleep without soft objects or loose bedding to 83.0% by 2025.

Objective D: Increase the percent of non-Hispanic Black infants put to sleep on their backs, put to sleep on a separate approved sleep surface, and put to sleep without soft objects or loose bedding.

Michigan's safe sleep objectives all relate to how babies are put to sleep. The strategies to address these objectives are combined, since the safe sleep behaviors are so closely related. All strategies and activities will promote the key messages to parents, caregivers and providers—infant sleeps alone and without objects on the back, in a crib, bassinet or pack and play—and will continue to address ways to increase those behaviors by all families, while also addressing the disparity for non-Hispanic Black families. The strategies also strive to address the state priority need to create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities.

The first strategy is to support the safe sleep activities of local health departments (LHDs) and the Inter-Tribal Council of Michigan to increase the capacity of communities to implement infant safe sleep education, awareness and outreach activities. This strategy directly addresses the finding from the needs assessment: communities need support and education on safe sleep practices. This strategy will be accomplished by providing grants to communities identified as having high numbers of sleep-related infant deaths. In FY 2021, five LHDs and the Inter-Tribal Council of Michigan will be offered grants. These five LHDs account for 50% of the sleep-related infant deaths in the state and experience significant racial disparities among the deaths. Although the total number of LHDs provided funding will decrease from previous years, the selected LHDs will receive increased funding, greater levels of technical assistance, and increased opportunities to collaborate with state and local partners. More support will be provided to the LHDs to help them engage families and community members in their work to achieve authentic community engagement which was a recurring theme in the needs assessment. The needs assessment also highlighted the impact that SDOH have in contributing to poor infant outcomes. LHDs will be aided in exploring how to address SDOH impacting families they serve. For example, LHDs will be supported in developing plans involving internal and external partners that address SDOH. Additionally, this approach will ensure continuation of promising practices, such as implementing faith-based work. LHDs will continue using data-driven and culturally relevant strategies.

A new strategy is to support providers in implementing and updating existing safe sleep policies or protocols to ensure families receive infant safe sleep education and access to resources. A new evidence-based or -informed strategy measure (ESM) is being established to increase the number of agencies that have a safe sleep policy/protocol. This can have a number of positive effects: 1) staff are trained and more knowledgeable about safe sleep and how to educate and support parents; 2) families are receiving safe sleep education and the supports

needed to implement the guidelines; 3) families are referred to supportive programs such as home visiting; 4) agencies are better able to coordinate provision of needed resources to families (e.g., play yards, sleep sacks, educational materials) in the community; and 5) agencies address key issues documented in the needs assessment, which include the impact of implicit bias, SDOH and resulting health inequities. Lack of coordination of tangible resources and referrals to home visiting services were also a significant issue found in the needs assessment. As agencies develop and/or update policies, support will be provided on how to address these challenges in their community.

A finding of the needs assessment was the lack of awareness in the legislature around issues related to maternal and child health and more specifically sleep-related infant deaths. As part of the third strategy, the Infant Safe Sleep program will reach out to legislative affairs staff to explore how to address this lack of awareness. This strategy also includes identifying a possible legislative or regulatory change that would increase the number of babies safely sleeping. The first step will be to conduct a scan of regulations to determine where changes could be implemented.

A continued strategy is to develop and share tools with providers and family support workers on how to have client/patient centered conversations regarding safe sleep. This includes providers who work with pregnant and parenting families in programs such as home visiting, WIC, childcare, child welfare, CPS, and prenatal care. State and local staff will continue to provide training to these provider groups at state and local events, and a basic online training Infant Safe Sleep for Professionals Working with Families will continue to be available. A second online safe sleep training will also continue to be available and is a required training for licensing childcare providers.

A focus for FY 2021 is to continue to promote the Helping Families Practice Infant Safe Sleep (Safe Sleep 201) training and to incorporate tenets of this training into other educational venues. The key points are to address how to have more effective conversations with families around safe sleep by starting where the family is at, acknowledging the challenges a family may face in following the guidelines, and having honest and open conversations with the family around safe sleep. This involves creating a “safe space” where providers can educate on the safe sleep guidelines and help the family evaluate their current risk and explore strategies for risk reduction. This supports using a health equity lens when having conversations with families and understanding the impact of SDOH.

A continued ESM is to increase the number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use the concepts of motivational interviewing with safe sleep by requiring the Helping Families Practice Infant Safe Sleep (Safe Sleep 201). Increased skills by MIHP providers on how to have more effective conversations with families around safe sleep will increase the likelihood that families will follow the safe sleep guidelines. MIHP agencies serve approximately 20,000 pregnant moms and 13,000 infants on Medicaid annually. Targeting MIHP providers allows the most high-risk mothers and families to be reached.

Support for professionals will also be continued through the email listserv and quarterly webinars for professionals who work with families on infant safe sleep. This includes dedicating at least one infant safe sleep webinar annually and at least one listserv message quarterly on the topic of health equity. In addition to training, resources will continue to be available to professionals through the Infant Safe Sleep website and the MDHHS Clearinghouse.

Another strategy is to promote protective factors (i.e., smoking cessation, breastfeeding, immunizations) and evidence-based programs (i.e., home visiting) to enhance the overall health and well-being of moms and babies. A finding of the needs assessment was lack of referrals to home visiting programs and breastfeeding supports. In addition, smoking is a significant risk factor in sleep-related infant deaths and therefore smoking cessation promotion will be supported. Collaboration with other MDHHS programs will expand and will include Medicaid Health Plans (to help ensure prenatal care), MDHHS Immunizations (to help ensure infants are immunized), WIC and MDHHS Breastfeeding (to help ensure breastfeeding is supported), MDHHS Tobacco (to help reduce smoking among pregnant mothers and families) and MDHHS home visiting programs.

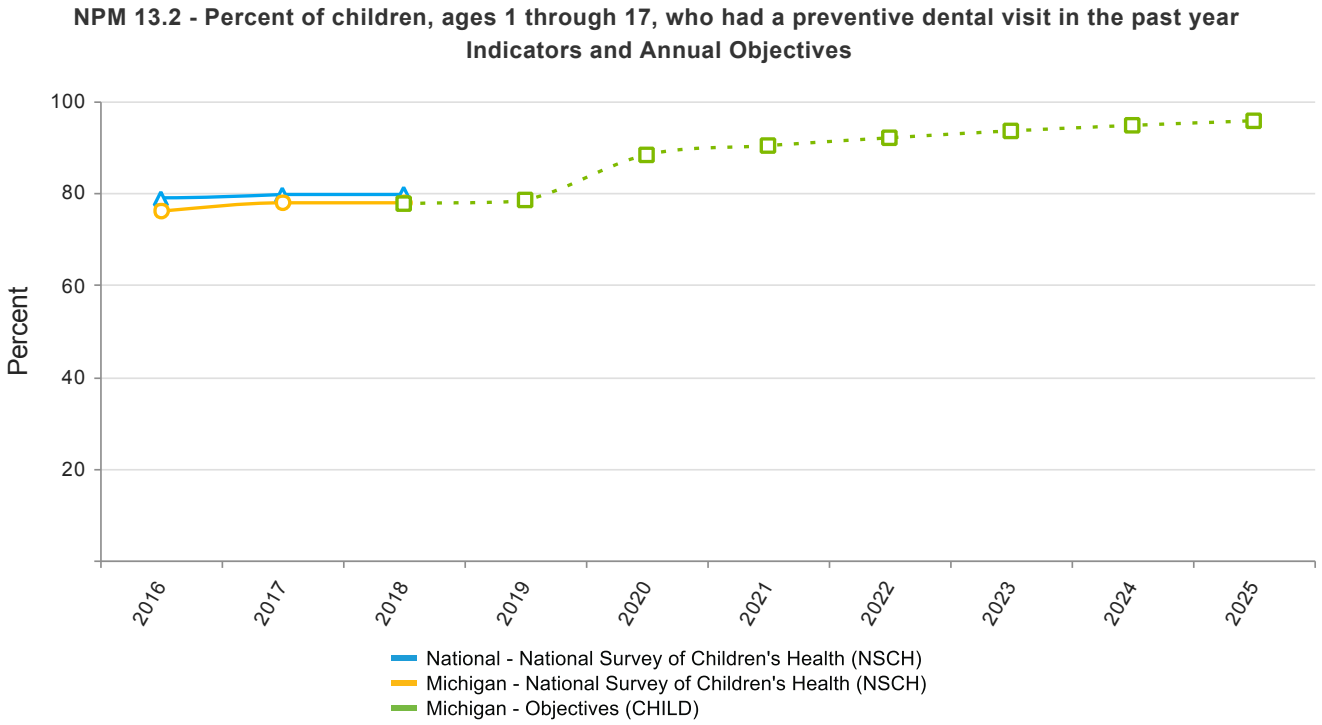
The final strategy is to engage hospitals in areas with a high rate of sleep-related infant and death and disparities to explore needed policies and resources to ensure families of NICU infants are practicing safe sleep behaviors after discharge. Infants in the NICU due to pre-term birth and low birth weight are at higher risk of sleep-related death. Current literature will be reviewed to determine best practices and identify a model NICU policy. Efforts will begin by identifying two hospitals in areas of the state that have a high rate of sleep-related infant death and disparity. The program will explore with each hospital ways they can educate and support families of NICU infants to ensure they are practicing safe sleep behaviors after discharge. A new ESM will be utilized to track the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU.

Child Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2017_2018	8.9 %	NPM 13.2
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2017_2018	88.6 %	NPM 13.2

National Performance Measures



NPM 13.2 - Child Health

Federally Available Data				
Data Source: National Survey of Children's Health (NSCH)				
	2016	**2017**	**2018**	**2019**
Annual Objective			77.6	78.4
Annual Indicator		76.1	77.9	77.7
Numerator		1,584,320	1,629,730	1,618,664
Denominator		2,082,991	2,092,116	2,083,849
Data Source		NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	88.2	90.2	91.9	93.4	94.6	95.6

Evidence-Based or –Informed Strategy Measures

ESM 13.2.1 - Number of students who have received a preventive dental screening through the SEAL! Michigan program

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		5,927	6,127	6,327
Annual Indicator	8,039	6,677	6,964	6,897
Numerator				
Denominator				
Data Source	SEAL Michigan Annual All Grantee Report	SEAL MI 2017 All Grantees Data Report	SEAL MI 2018 All Grantees Data Report	SEAL MI 2019 All Grantees Data
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Provisional	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	6,527.0	6,727.0	6,927.0	6,927.0	7,127.0	7,327.0

State Performance Measures

SPM 1 - Percent of children less than 72 months of age who receive a venous lead confirmation testing within 30 days of an initial elevated capillary test

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		22.1	24.6	27.1
Annual Indicator	23.6	25	43.4	45.8
Numerator	1,208	1,048	1,308	1,671
Denominator	5,116	4,190	3,017	3,646
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	29.6	32.1	34.6	37.1	50.0	55.0

SPM 2 - Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4313314 series)

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		76	77	75
Annual Indicator	74.7	75	74.1	74.1
Numerator	125,343	125,853	123,596	121,707
Denominator	167,778	167,842	166,746	164,167
Data Source	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	76.0	77.0	78.0	79.0	80.0	80.0

State Action Plan Table

State Action Plan Table (Michigan) - Child Health - Entry 1

Priority Need
Improve oral health awareness and create an oral health delivery system that provides access through multiple systems

NPM
NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

Objectives
A) Increase the number of students who have received a preventive dental screening within a school-based dental sealant program
B) Increase dental sealant placement on children enrolled in Detroit Public Schools (DPS)

Strategies
A1) Utilize the SEAL! Michigan database to track the number of students annually receiving a preventive dental screening A2) Promote dental sealant programs through school health professionals A3) Prepare and analyze the annual SEAL! Michigan all grantee reports to monitor for annual growth of students receiving a preventive dental screening A4) Examine ongoing trends to identify geographic areas experiencing a high burden of disease and identify populations that will benefit from an increase in dental sealant placement in proportion to disease and population
B1) Hire an Oral Health Coordinator (OHC) to oversee oral health related work in Detroit Public Schools B2) Organize parent and student focus groups B3) Increase reporting requirements from all DPS oral health providers

ESMs	Status
ESM 13.2.1 - Number of students who have received a preventive dental screening through the SEAL! Michigan program	Active

NOMs
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

State Action Plan Table (Michigan) - Child Health - Entry 2

Priority Need

Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems

SPM

SPM 1 - Percent of children less than 72 months of age who receive a venous lead confirmation testing within 30 days of an initial elevated capillary test

Objectives

A) By 2025, increase screening for lead exposure risk factors for children less than 72 months of age

B) By 2025, increase by 10% the percent of Medicaid-enrolled children less than 72 months of age that receive blood lead testing

C) By 2025, increase by 10% the percent of all children less than 72 months of age with an elevated blood lead level (EBLL) from a capillary test who receive a venous lead confirmation test

Strategies

A1) Flag, in the Michigan Care Improvement Registry (MCIR), children that need to be screened for blood lead risk factors A2) Conduct a range of provider education activities to encourage providers to screen all children less than 72 months of age for lead exposure risk factors A3) Partner with agencies to provide culturally appropriate lead education to at-risk populations

B1) Provide local health departments with monthly data reports of Medicaid-enrolled children that have not had blood lead testing B2) Conduct a range of provider education activities to encourage providers to provide blood lead tests to Medicaid-enrolled at the recommended times

C1) Provide local health departments with quarterly data reports C2) Conduct a range of provider education activities to encourage providers to order a venous test after an elevated capillary test

State Action Plan Table (Michigan) - Child Health - Entry 3

Priority Need

Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play

SPM

SPM 2 - Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4313314 series)

Objectives

A) By 2025, increase the percentage of children 19-36 months of age who receive recommended vaccines to 80%

B) Assist local health departments in targeting outreach to under-vaccinated populations in their jurisdiction

C) Implement the I Vaccinate Campaign

Strategies

A1) Use data in the Michigan Care Improvement Registry (MCIR) to identify all children 6-24 months of age who are overdue for a vaccine A2) Generate semi-annual letters to parents of children 6-18 months of age who are overdue for a vaccine A3) Conduct a root cause analysis for the City of Detroit to identify and assess racial disparities in vaccination rates in the City of Detroit A4) Partner with the City of Detroit health department to hold School Located Vaccine (SLV) clinics to assist with increasing the overall vaccination rates in Detroit

B1) Produce a quarterly report card for each county showing vaccination rates and rankings compared to other counties across the state for multiple age groups including children 19-36 months of age B2) Produce quarterly reports showing vaccination levels of infants' birth through 24 months showing vaccination drop off by series and vaccine B3) Produce county coverage levels by race for children 19-36 months of age and make them available to local health departments

C1) Secure funding for the implementation of the I Vaccinate campaign C2) Provide subject matter expertise to the website and messaging for social media and broadcasts

2016-2020: National Performance Measures

Child Health Overview

Meeting the health needs of children requires coordination and strategic action across multiple systems. The Division of Child and Adolescent Health (DCAH) provides leadership in this domain through the Early Childhood Health Section, Child and Adolescent School Health Section, and Oral Health Unit. Oversight of local MCH (LMCH) funding to local health departments is also located within this division. DCAH collaborates with the Michigan Department of Education, the Children's Service Agency, Division of Maternal and Infant Health, and the Children's Trust Fund to implement evidence-based home visiting and to strengthen early childhood systems at the state and local level. Through the Preschool Development Grant Birth through Five (PDG), Michigan is working to ensure smooth transitions for families throughout the early childhood system, including home visiting and Part C of IDEA. Michigan strongly supports Infant Mental Health, ensuring social emotional development of the child and family is considered as well as using a trauma-focused lens when working with families. Mental health consultation has been made available for early care and education providers and evidence-based home visiting providers. The Oral Health Unit also plays a key role in promoting children's health and expanding access to dental screening and services for young children as well as school aged youth. The Division of Immunization (housed in the Bureau of Infectious Disease Prevention) tracks immunization rates and improves access to immunization services. Title V supports programs for children that improve childhood lead screening, increase access to dental care, address fetal alcohol spectrum disorder, and improve immunization rates for children and adolescents. Other federal funding that improves children's health includes the Early Hearing Detection and Intervention Program (CDC), the State and Local Healthy Homes and Childhood Lead Poisoning Prevention Program (CDC), and the Maternal, Infant, and Early Childhood Home Visiting Program (HRSA). Title V and these other funding streams are implemented in partnership with a variety of state and local organizations, including the Early Childhood Investment Corporation, Great Start System, local health departments (LHDs), Part C of IDEA, Healthy Start, Head Start, the Michigan League for Public Policy, the Michigan Council for Maternal and Child Health, and many others.

At the local level, LHDs expended LMCH funds across four child health performance measures. Three LHDs supported oral health for children (NPM 13) and expended 1.7% of LMCH funds via oral health education, oral health messages in schools and teen health centers, and gap-filling dental services. One LHD selected NPM 6 (developmental screening, originally selected in Michigan's 2015 needs assessment), expending 3.9% of LMCH funds to provide gap-filling developmental screenings and to educate parents on developmental milestones. Fourteen LHDs worked on SPM 1 (childhood lead poisoning prevention) expending 11.7% of LMCH funds on gap-filling lead screening and case management, venous confirmation follow-up, and community education. Fourteen LHDs selected the original SPM for immunizations (which included child and adolescent immunizations) and expended a total of 18% of LMCH funds, which represents the largest collective expenditure. Agencies facilitated gap-filling immunization services, waiver education, media campaigns, and community and provider education.

Michigan's approach to improving child health under the Title V block grant emphasizes improving access to care and preventing blood lead poisoning; improving immunization rates; and improving oral health. The percentage of children under age 19 without health insurance declined between 2009 (4.35%, ACS) and 2017 (2.99%) in Michigan, as it has in the nation overall. However, American Indian children (12.03%, ACS 2018) are significantly less likely to have health insurance than any other group of Michigan children. While 88.6% of children are in excellent or very good health as reported by their parents, only 80.0% of non-Hispanic Black children and 73.3% of children living at or below the federal poverty limit are reported to be in excellent or very good health (NSCH, 2017-2018). Regarding vaccination coverage, the percent of children ages 19-35 months who have completed the seven-vaccine series has increased over time from 52.1% (NIS-Child) in 2009 to 70.5% in 2018. However, coverage is lower among non-Hispanic Black children (51.6%) and children living at less than 100% of the poverty level (60.4%). Oral health is also a concern in Michigan where 8.9% of children, including 5.1% of children under five years of age, have

tooth decay or cavities (NSCH, 2017-2018). Tooth decay is especially likely among children receiving Medicaid (11.3%), suggesting a lack of access to dental providers who accept this type of insurance, and among children living below the federal poverty line (13.7%). Asian children (27.7%) are also at greater risk of tooth decay. These key indicators of health status suggest that race, ethnicity, and income impact children's health in ways that are unjust and unfair.

Oral Health – Children (FY 2019 Annual Report)

The MDHHS Oral Health Program (OHP) provides population-based oral health prevention efforts and effective utilization of the dental workforce in implementing and improving oral health access. With the increased awareness of the impact of oral health to overall health, the OHP has increased its collaborations with community partners to improve oral health through prevention activities and direct access programs. The activities of NPM 13 in FY 2019, as discussed below, illustrate these strengthened partnerships. Additionally, Title V funding is used to support the activities of the SEAL! Michigan program, primarily through funding of school-based dental sealant programs.

Objective A: Increase the number of students who have received a preventive dental screening within a school-based dental sealant program.

SEAL! Michigan is a school-based sealant program that aims to educate children about dental health and to reduce decay rates. In FY 2019, SEAL! MI experienced challenges as well as several positive achievements. To provide context for FY 2019 activities, the challenges will be explained first.

Toward the end of FY 2018, the Oral Health Program experienced a loss of two significant federal grants (HRSA and CDC) and recovery from this loss impacted FY 2019. The loss of federal funds required the oral health program to find ways to maintain several key staff members to continue the important work. One of the lost funding sources had historically supported a 0.5 FTE water fluoridation coordinator. Although there was a loss of funding, a partnership was quickly formed with the then Department of Environmental Quality (DEQ)—now Michigan Department of Environment, Great Lakes and Energy (EGLE)—to provide funding for this part-time position. In the interim, Title V funding was used to help support this position and thereby ensure continuation of fluoridation oversight and services. Another challenge in FY 2019 due to the reduction in federal funding was a loss of SEAL! MI programs which decreased from 12 programs in FY 2018 to nine programs in FY 2019.

Despite these challenges, significant achievements can be illustrated through year-end data from FY 2019. Overall, the SEAL! MI program served 6,897 students in FY 2019 which was only a slight decrease from 6,964 students served in FY 2018. Additionally, in FY 2018 a total of 19,862 sealants were placed and in FY 2019 a total of 20,571 sealants were placed; thus, an increase in sealant placements occurred despite fewer programs. This achievement speaks to the success and commitment of the nine SEAL! MI programs that were active in FY 2019.

The SEAL! MI program continues to focus on schools with high needs as indicated by 50% or more of the student population participating in the Free and Reduced Lunch Program. Of students seen through SEAL! MI, nearly half (48.1%) had existing dental decay eliminating the possibility of a sealant placement, while 8% needed urgent dental care due to decay, abscess, pain or bleeding.

Of the population served, more than half were white,16.7% were Black and 12.6% were Multiracial. According to the US Census Bureau (July 1, 2018), the population in Michigan is 79.4% white, 14.1% Black and 6.5% combined other races. Therefore, the population served by SEAL! MI reflects Michigan's population. A quarter of students screened had special health care needs and 89.9% of students received a fluoride varnish treatment (a slight increase from FY 2018). There was a decrease from FY 2018 in the percent of students in need of urgent care, and this decline has been a positive trend (12.9% in FY 2016, 10.1% in FY 2017, 8.9% in FY 2018, 8.0% in FY 2019).

Over the last two reporting years, there was no change in the percent of students who had evidence of decay or filled first molars (6.9% in FY 2016, 8.0% in FY 2017, 6.5% in FY 2018, and 6.5% in FY 2019).

In FY 2016, 19.2% of students did not have dental insurance and 35.2% were on the state's Medicaid program, Healthy Kids Dental (HKD). In FY 2017 there was a decrease in children who did not have dental insurance (17.3%) and an increase in HKD (41.6%). In FY 2018, the number of students reporting no insurance (17.4%) and the number of children on HKD (41.4%) remained about the same as the prior year. However, in FY 2019, over half of the students seen were covered by HKD (56.3%) and 1.1% had Medicaid, whereas 16.5% reported no dental insurance. This trend continues to demonstrate that HKD is working to increase access to dental care to children seen in the school-based dental sealant program. This could be attributed to the program coordinators working with parents to get students enrolled in HKD as it is a component of the SEAL! MI parent education.

In FY 2019, the SEAL! Michigan program continued to reach the target population through family and consumer outreach and engagement. To reach families and consumers, the funded programs attended back-to-school nights, Parent Teacher Organization (PTO) meetings, and some schools allowed information to be distributed via social media. These settings provided an opportunity to share information and answer questions about oral health. Student consent forms were delivered home with an informational brochure on the SEAL! MI program and the benefits of dental sealants. It is shared anecdotally that when schools agree to send out consent forms at the beginning of the school year there is a much higher consent form return rate, and this will be encouraged in following years. A beneficial tactic learned in FY 2019 was to put a sticky "post-it-note" on the parental consent form. The notes are printed and briefly explain, in plain language, that it is important for the consent forms to be completed and returned to the school. This note added to the consent form made a significant impact in the number of returned forms in three of the programs, which experienced an increase of approximately 40% more forms returned. This success tip was shared with other programs and several have implemented the approach. Although not all returned forms are 'yes' consent, it is beneficial to receive the 'no' forms to know that guardians were able to make an informed decision.

There has been ongoing program management and high-level technical assistance from the School Oral Health Consultant at MDHHS. During FY 2019, the School Oral Health Consultant began working on a certificate in infection control through the Organization for Safety, Sepsis and Prevention (OSAP). The certificate is a brand-new process; to date all possible steps of the program have been completed, and the final step is scheduled to be available in early 2020. The investment in this process has led to the SEAL! MI programs operating in an even safer manner via school-based care. The OSAP organization has also recognized this effort and is sending the School Oral Health Consultant to teach on behalf of OSAP and SEAL! MI on Infection Control in Mobile Programs in February 2020 at the First Annual Mobile Dentistry Conference. Although infection control has always been a significant focus in SEAL! MI, it has been strengthened even further due to additional training established in FY 2019 in SEAL! MI programs related to water safety and routine testing of water lines to ensure patient safety.

Quality patient care and continual quality management continued to be a focus in SEAL! MI in FY 2019. Although funding is scarce for training opportunities, a goal has been set to provide at least one significant training to SEAL! MI providers annually via an in-person conference and via one webinar. These trainings have occurred since approximately 2010. Ongoing training provides the necessary tools to continually increase quality within each program. It also provides networking opportunities between the program coordinators where collaboration can take place and lessons learned can be readily shared.

Each August, coordinators working in SEAL! MI programs at the local level attend the Annual SEAL! MI Workshop. The day consists of face-to-face training on topics of interest focused on students, oral health care, and school-based services. At the August 2019 workshop, providers learned about airway issues in children, received an update on oral cancer screening in children, and had training on being prepared in the event of an active school-

shooter. Following the training, providers are now putting emergency preparedness plans into place for an active shooter, carrying “Stop the Bleed” kits, and are also prepared for other emergencies, such as tornado or fire. These are important precautions because the dental providers visit numerous schools each year and often multiple schools each week, thus the location, policies and procedures are different in each school. Course evaluations from the workshop showed that participants appreciated the education and feel more prepared to handle a school emergency, how to identify an airway issue, and how to identify and refer for suspicious lesions in the oral cavity. In addition to the Annual Workshop, all providers attend the Annual Training in late September via webinar. The training is a requirement for all existing and new staff working in SEAL! MI and covers important parts of the sealant program, such as infection control, data collection, and following up with students with urgent dental care needs.

To further support the growth and acceptance of school-based dental sealant programs, the MDHHS School Oral Health Consultant attended the Michigan School Nurse conference in both the Upper Peninsula and Lower Peninsula and submitted to present at both conferences in FY 2020. Another positive change was in the organizational structure at MDHHS. In FY 2019, the Oral Health Program was moved into the Division of Child and Adolescent Health (DCAH). The Child and Adolescent School Health Section is also located within the DCAH, which houses the consultants in both school wellness programs and school-based health centers, as well as the state School Nurse Consultant. This re-organization was immediately beneficial as now all school-health providers are in the same division and can more easily collaborate and meet monthly to discuss partnership opportunities. In FY 2019, a connection was also made with a Michigan Department of Education staff member focusing on school-nutrition, and the School Oral Health Consultant assisted with adding oral health language to a project focusing on creating written school health plans.

Lead Poisoning Prevention (FY2019 Annual Report)

The Michigan Childhood Lead Poisoning Prevention Program (CLPPP) has carried out mandated blood lead surveillance and lead poisoning prevention activities since 1998. Childhood lead poisoning has declined steadily in Michigan, but elimination has not yet been attained. In Michigan, a blood lead level of 4.5 micrograms per deciliter (µg/dL) or higher is considered an elevated blood lead level (EBLL). At a level of 4.5 µg/dL or greater, lead education, nursing case management, environmental investigations, and additional medical monitoring should be established to lower the blood lead level.

In 1998 (the first complete year of required reporting) among children under the age of six tested for lead, the percentage of children with EBLLs was 44.0% (29,165 of 66,204 children tested). In 2018, of the 142,356 children younger than six years of age that had a blood lead test, 2.9% (4,124) had elevated blood lead levels. This was a decrease from 3.1% (4,711 of 13,335) in 2017.

This report describes CLPPP activities undertaken in FY 2019 to improve testing in general and confirmatory testing specifically. The rate of confirmatory venous testing of EBLL capillary test results in 2018 was 45.8% (1,671 of 3,646 EBLL capillary tests), which was a slight increase from 44.8% in 2017.

Michigan’s CLPPP is within the Division of Environmental Health, which has overall responsibilities for addressing environmental hazards and for administering the state’s Lead Safe Home Program. Sitting within this division strengthens integration of the blood lead surveillance and epidemiology functions within MDHHS’s area of epidemiological, environmental, and lead abatement subject matter expertise. The three main focus areas of CLPPP include surveillance, outreach, and health services. Title V funding supports CLPPP outreach and health services. The surveillance activities allow for CLPPP to better target areas of needed outreach and health services. In FY 2019, CLPPP’s staff of 11 included a manager, data analysts, technicians, specialists, and epidemiologists. The CLPPP public health consultant and nurse consultant are supported by Title V. Their job responsibilities include

working with local health departments and state and federal lead poisoning prevention programs to increase testing rates, connecting families of children with elevated blood lead levels to resources and services, and providing expertise and education about lead poisoning prevention throughout the state.

Objective A: By 2020, increase by 20% from baseline data the percent of Medicaid-enrolled children under age 6 with an elevated blood lead level (EBLL) from a capillary test who received a venous lead confirmation test.

Objective B: By 2020, increase by 10% from baseline the percent of all children under age 6 with an EBLL from a capillary test who received a venous lead confirmation test.

All Medicaid-enrolled children are considered to be at high risk for lead exposure. Michigan Medicaid policy requires that all Medicaid-enrolled children are tested for blood lead at age 12 and 24 months of age, or between 36 and 72 months of age if not previously tested. Because of this policy, along with the available infrastructure and data, Medicaid-enrolled children remain a focus for increasing testing rates. In addition, all other children served by private insurance carriers or with no insurance coverage should be assessed to determine if they are at risk for lead exposure. Regardless of insurance status, all children with an elevated blood lead capillary test result should be followed up with a confirmatory venous blood lead test.

In an effort to increase capillary to venous testing rates, grants were awarded to local health departments in FY 2019. The Child Lead Poisoning Education & Outreach Grant was awarded to ten LHDs, with the expectation to develop and conduct educational activities for parents of children at risk of lead poisoning, with special attention to high-risk areas. Activities funded by these grants included:

- Educating and building relationships with primary care and pediatric physicians, Great Start collaboratives, WIC offices, Head Start & Early Head Start offices;
- Distributing materials and providing education at community events including health fairs, school meetings, and church gatherings;
- Developing and implementing a protocol to increase confirmatory testing rates by outreach and education to families of children with EBLLs; and
- Developing local awareness campaigns that include public service announcements on the radio and in movie theaters, billboards, and bus signs.

The Childhood Lead Poisoning Prevention Grant was awarded to nine LHDs, to focus prevention efforts in the highest risk communities in Michigan, including Adrian, Detroit, Grand Rapids, Lansing, Jackson, Flint, Hamtramck, Dearborn, Kalamazoo, Muskegon, Muskegon Heights, and Highland Park. These areas were targeted for this grant because they have older housing stock and high levels of poverty, which are risk factors for exposure to lead sources. Activities funded by these grants included:

- Educating and building relationships with area landlord and realtor associations;
- Distributing cleaning kits, lending HEPA vacuums, and providing education about how to safely clean a home with lead;
- Helping families that need home abatement fill out an application for financial assistance through the Lead Safe Home Program; and
- Providing nursing case management for children with an elevated blood lead level who are not enrolled in Medicaid, visits which are not covered under the Medicaid reimbursement program.

CLPPP hosts quarterly conference calls for grantees. Based on feedback from grantees, more in-person meetings

were requested to learn from one another. CLPPP hosted a day-long meeting for all grantees in June 2019. Grantees learned strategies for increasing capillary to venous rates such as using a protocol for follow-up on elevated capillary tests and provider education through public health detailing. There was time for grantees to share their successes and talk through solutions to barriers with each other.

There was continued success in the in-home nursing case management program at LHDs. In January 2017, the reimbursement to all LHDs for in-home nursing case management to Medicaid children with EBLLs increased from $75 per visit to $201.58 per visit. This allowed for greater capacity at the LHD level to provide home visits for Medicaid-enrolled children with EBLLs. CLPPP continues to support the LHDs through training and technical assistance. In FY 2019, 1,049 reimbursable home visits were conducted by the 43 participating LHDs for 831 children with EBLLs. A requirement for reimbursement is that the blood lead level must be confirmed with a venous blood lead test. If a child has an EBLL from a capillary test, a venous confirmatory test must be done before the in-home nursing case management can begin.

Although the nursing case management reimbursement is only for Medicaid-enrolled children because funding comes from Medicaid, many LHDs have committed to doing follow-up with non-Medicaid children with EBLLs, including pursuing venous confirmatory tests where indicated, regardless of no reimbursement. In FY 2019, 64 home visits were completed for a total of 42 non-Medicaid children with EBLLs. The Childhood Lead Poisoning Prevention grantees cover the communities with high-rates of EBLLs. They can use grant funds to offset the costs of providing nursing case management services to this population.

In Genesee County, nursing case management activities are conducted by the Greater Flint Health Coalition Child Health Access Program (CHAP). CLPPP staff support case management activities by maintaining a list of all children in Flint with EBLLs, including their testing history and status of their case management, investigations and remediation. Weekly data exchanges of blood lead data and case management activity updates have been shared with CHAP. This close partnership enables all parties to ensure that all children with EBLLs are contacted, enrolled in a medical home, and offered services (including a home environmental investigation, effective water filters, nutrition counseling, child developmental assessment, and other activities).

All efforts and interventions to lower an elevated blood lead level are documented by the nurse case managers and CLPPP in Michigan's Healthy Homes and Lead Poisoning Surveillance System (Mi-HHLPSS). Mi-HHLPSS is a surveillance system maintained by CLPPP. It is used as a tool to assess homes abated and to prevent future EBLs. CLPPP uses the system to assure children are provided nursing case management by nurses.

In FY 2019, CLPPP continued support of the Governor's Child Lead Exposure Elimination Commission (CLEEC), established to address the need for coordinated efforts to eliminate childhood lead poisoning. CLEEC's action plan prioritizes 51 specific action steps to create a state free of lead exposure to benefit the health of Michigan's children. The action steps were sorted into six key topic areas of enhanced testing, education, data, partnerships, funding, and regulations/law. In alignment with the education key top area, CLPPP developed the "Lead Free Michigan" toolkit as a go-to resource for nursing case managers, health educators, and other public health professionals as they work with and educate varying populations about lead poisoning prevention. Over 1,200 toolkits have been distributed statewide through local health departments and state lead poisoning prevention partners.

CLPPP's efforts are not possible without partnerships with other federal and state MCH programs. Michigan is one of nine state participants in the Maternal and Child Environmental Health Collaborative Improvement and Innovation Network (MCEH CoIIN), which started in July 2018. The aim of the MCEH CoIIN is to support and improve coordinated systems of care to address the needs of maternal, infant, and child populations that are at risk for or experience exposure to lead. CLPPP's specific focus within the MCEH CoIIN includes increasing capillary to venous testing rates and developing materials and recommendations for testing pregnant women.

As part of the MCEH CoIIN, Michigan engaged and built relationships with Michigan parents as family partners and experts. At a meeting in September 2019, the CLPPP public health consultant presented with two parents about the importance of family engagement in lead poisoning prevention work and planning. There are several parent groups that are working to prevent lead in their communities, including Parents for Healthy Homes in Grand Rapids, the Detroit Lead Advocacy Group, and several in Genesee County. CLPPP will continue to support the creation of family-led lead poisoning prevention groups throughout Michigan.

Additional programs and activities undertaken in FY 2019 to improve testing and confirmatory retesting in all children (Medicaid-enrolled and non-Medicaid) included:

- Monthly data summary reports of testing status of Medicaid-enrolled children that included data by Medicaid Health Plan are available. These reports are produced in an effort to bring all Medicaid Health Plans in line with the Medicaid goal of 100% of continuously-enrolled children tested by age three.
- Continuation of a quarterly Medicaid-CLPPP workgroup to ensure coordination between Medicaid programs and CLPPP.
- Facilitating requests for blood lead data and Medicaid data by researchers.
- Providing feedback as MDHHS developed their strategic plan for addressing lead hazards in Michigan. The plan includes a pillar on increasing testing of at-risk children.
- Regularly meet with MDHHS WIC leadership to align our programs, provide technical assistance, and troubleshooting problems that arise at local WIC offices around lead testing.
- Coordination with MDHHS drinking water unit and Michigan's Department of Environment, Great Lakes & Energy to respond to communities with water testing over 15 ppb. When this happens, CLPPP develops data reports, helps with filter distribution, and attends events to ensure accurate information is distributed to residents.
- Development of an online lead poisoning prevention training module for healthcare providers, in partnership with MPHI. This highlights testing recommendations. Continuing education credits are available for nurses, pediatricians, social workers, and physicians.
- Development of an online lead poisoning prevention training module for home visitors, in partnership with MPHI and MDHHS Child Welfare. This highlights lead hazards home visitors can look for and recommendations for referrals to address the lead hazards.
- Establishing a data referent group to get feedback and input on reports, processes, and procedures from frequent users of CLPPP data. One of the initial recommendations from this group is the development of quarterly reports for local health departments, which will include data on testing rates, capillary to venous rates, and blood lead results. LHDs will be able to use this data to target medical providers with low testing rates, target areas of high risk, and evaluate the effectiveness of their efforts.

In an effort to continuously improve CLPPP programs and activities, CLPPP contracts with the Michigan Public Health Institute (MPHI) to conduct an annual evaluation. The evaluation includes a satisfaction survey and key informant interviews with LHDs and lead poisoning prevention partners to collected data about communication, usefulness of resources, and response times/actions of CLPPP. Overall, results suggest satisfaction of participants with their interaction with CLPPP staff.

Critical to the success of CLPPP and LHDs in meeting the objectives of this project were numerous partnerships with community groups, advocacy organizations, families of lead-exposed children, health care provider groups, and local governmental agencies. Partners included the Michigan Environmental Council, Ecology Center, Healthy Homes Coalition of Western Michigan, WIC, Michigan State Housing Development Authority, Genesee County

Medical Society, Michigan Association of School Nurses, Michigan Chapter of American Academy of Pediatrics, Children's Hospital of Michigan, Michigan Public Health Institute, Greater Flint Health Coalition, MDHHS Medicaid, MDHHS Lead Safe Home Program, Early On Michigan, Michigan Head Start, other programs within MDHHS Division of Environmental Health, local county and regional task forces, and many more.

Immunizations – Children (FY 2019 Annual Report)

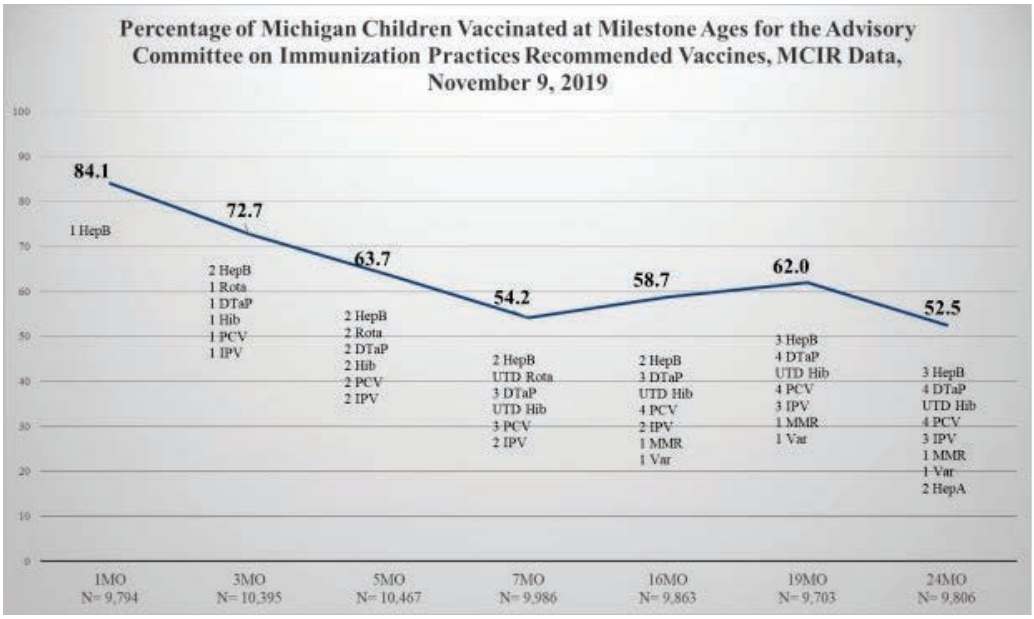
To address the 2015-2020 state priority need to "Invest in prevention and early intervention strategies," MDHHS originally developed a two-part SPM related to Immunizations. The SPM included two measures: A) Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4:3:1:3:3:1:4 series) and B) Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus (HPV) vaccine. Starting in 2018, these measures were split into two separate measures in two population domains (Child Health and Adolescent Health) to align with the revised HRSA population domains and for clarity of reporting.

The first measure, percent of children 19 to 36 months of age who have received a completed series of recommended vaccines, is discussed here. Many efforts were implemented by MDHHS in 2019 to assure children are vaccinated on schedule. On-schedule vaccinations have become increasingly difficult as parents have questions about vaccines and vaccine hesitancy appears to be increasing. A recent national study suggested that only 63% of parents are following the CDC recommended ACIP schedule. Unfortunately, Michigan immunization rates for this SPM (percent of children 19 to 36 months of age who have received a completed series of recommended vaccines) have dropped from 75% to 74% in the reporting year, based on data from the Michigan Care Improvement Registry (MCIR). However, Michigan continues to see lower immunization waiver rates in school children and preschool children due to the requirement that parents receive immunization education on the value of vaccination before receiving a non-medical waiver.

Objective A: Increase the percentage of children 19-36 months of age who receive recommended vaccines.

In FY 2019, Michigan continued to experience a significant problem keeping children on schedule. Only 54.2% of children who were seven months of age were on schedule with all recommended vaccines which is about 0.5% lower than measured at this time last year (see Figure 1). By the time children reach 24 months of age (when they should have completed all pediatric vaccines) MCIR data show that only 52.5% of children in Michigan are up to date with all vaccines. Children are therefore susceptible to diseases for a longer period of time when they are most vulnerable. Data also show that children who fall behind are less likely to complete the schedule.

Figure 1. Percentage of Children Vaccinated at Milestone Ages



To addresses these challenges, the Michigan Immunization program continues to support the statewide media campaign called I Vaccinate (which began in March of 2017). MDHHS also conducted focus groups with young mothers who were hesitant to vaccinate their children. The goal of the focus groups was to learn about mothers' concerns and what types of information and messaging would most impact their decision to vaccinate their children. These mothers were also asked how they receive information. This information was used to create the I Vaccinate Campaign. The I Vaccinate Campaign ran through 2019 to provide vaccine information to parents with questions about vaccines. The campaign promotes vaccination of children in Michigan using many media methods, including TV ads, radio ads, social media posts on several social media sites, immunization provider materials, and "Mommy Bloggers" promoting vaccines and vaccine safety. More information is available at the I Vaccinate website.

Objective B: Make quality improvement reports (AFIX reports) available to immunization providers using the MCIR.

The Division of Immunization, under the guidance of CDC, has restructured the quality improvement reports available to local health department staff and to immunization providers in an effort to encourage timely vaccination. Past AFIX reports have been replaced with Immunization Quality Improvement (QI) reports. AFIX reports were focused on immunization rates and efforts to be sure children were caught up with their immunizations. The QI reports put a focus on timely vaccinations and assuring that children are staying on schedule. These QI reports have now been programmed into the Michigan Care Improvement Registry (MCIR) and are available. Local health department staff visit immunization providers in their jurisdiction to educate them on their current vaccination rates to keep vaccinations timely and work with the practice on strategies to improve timely vaccination. In 2019, 829 QI visits were completed in provider offices to assist with increasing immunization rates.

Objective C: Enable local health departments to better track successes or shortfalls for their health jurisdiction.

In FY 2017, County Immunization Report Cards were first generated and posted on the MDHHS website on a quarterly basis. The report cards were generated to reflect the immunization rates of each county in Michigan and ranked them against other counties in the state. The report cards have been modified several times to better meet

the needs of local health departments. The goals of the report card data are to 1) provide each county with an understanding of vaccination rates in their respective communities and 2) identify areas for improvement. County report cards have been published every quarter and highlighted during several conferences. The state will continue to make that data available to the public to increase awareness of immunization rates in their area.

The Michigan Immunization Program also provides immunization drop-off data to local health departments on a quarterly basis. Data are obtained from the MCIR. These reports track vaccine completeness by the age at which vaccines should be obtained for children. Data show a dramatic drop off in vaccine completeness by seven months of age which reinforces the difficulty of keeping children on schedule for vaccines.

Oral Health – Children (FY 2021 Application)

National Performance Measure (NPM) 13.2 focuses on oral health in children and is linked to the state priority need to “Improve oral health awareness and create an oral health delivery system that provides access through multiple systems.” In the needs assessment, focus group participants reported several needs and challenges related to oral health. These included a need for more school-based oral health services; an overall shortage of dental providers that will accept Medicaid beneficiaries; and a lack of access to dental services in communities. The health status assessment also identified a disparity between oral health outcomes for Black children and non-Hispanic White children, as discussed in Objective B of this state action plan.

The MDHHS Oral Health Program (OHP) provides population-based oral health prevention efforts and effective utilization of the dental workforce in implementing and improving oral health access. With the increased awareness of the impact of oral health on overall health—which is illustrated by the fact that this NPM is linked to Title V National Outcome Measure 19, the percent of children in excellent or very good health—the OHP has increased its collaborations with community partners to improve oral health through prevention activities and direct access programs.

In Michigan, 58 of the state’s 83 counties have a full, partial or facility Health Provider Shortage Area (HPSA) designation, with 11 counties having less than five dentists. Only 38% of Medicaid-eligible children in Michigan receive dental services. Children under the age of five are the least likely to have visited a dentist. The Michigan Medicaid Program has been addressing access to oral health care by implementing the Healthy Kids Dental program throughout the state. The Healthy Kids Dental program began as a demonstration program through a contract with Delta Dental Plan of Michigan in 22 counties in May 2000. By October 2015, the program had expanded into all 83 counties. The Healthy Kids Dental Plan now utilizes Delta Dental, Blue Cross Blue Shield and DentaQuest network of dentists and provides a higher reimbursement rate to dentists, thereby allowing greater access to dental care for Medicaid-enrolled children. The utilization of dental care within this program has increased to over 50% of enrollees. This program assists children and adolescents, ages 0-21, to receive dental care.

The Healthy People 2020 goal is to have 28.1% of children ages 6-9 with one or more dental sealants in place. Between 2005 and 2016 there has been an increase in the percent of third grade students in Michigan with one dental sealant or more. In 2005, 23.3% of third grade students had one or more dental sealants; in 2010 it was 26.6%; and in 2016 it was 37.6%. This increase is attributed in part to the MDHHS SEAL! Michigan school-based dental sealant program which piloted in 2007 and has expanded within the state over the last several years. Until the fall of 2018, SEAL! Michigan was funded through Title V, CDC Cooperative Agreements, HRSA grants (as available), and annual gifts received from the Delta Dental Foundation of Michigan. Beginning in the fall of 2018, the SEAL! MI program experienced a loss of federal grants, and is now primarily funded through a Medicaid match, Title V, and annual gifts from the Delta Dental Foundation. This blended funding supports direct services delivered in schools across Michigan and a School Oral Health Consultant to manage SEAL! Michigan at the state level. Although less funding is currently available for sealant programs, the loss of federal grant funding did result in the state Medicaid program supporting the Oral Health Consultant position which adds significant sustainability to the program overall.

Objective A: Increase the number of students who have received a preventive dental screening within a school-based dental sealant program.

This objective aligns with the Oral Health NPM: Percent of children, ages 1-17, who had a preventive dental visit in the past year. Implementing a school-based dental sealant program will support progress toward an increased

number of children with a preventive dental visit. SEAL! Michigan is focused on providing preventive oral health care to students through assessment, education, dental sealants, and fluoride varnish application. To best align preventive efforts to highest areas of need, the SEAL! Michigan programs target schools that have 50% or more students enrolled in the Free and Reduced Lunch Program (FRLP).

Dental decay is the leading chronic childhood disease and nationally leads to more than 51 million missed school hours per year. Dental sealants are an evidence-based strategy to prevent dental decay. SEAL! Michigan is a school-based dental sealant program that provides dental screening and places dental sealants for students at no cost to families. In addition to dental sealants, students receive a dental screening, oral health education and (over 90% of the time) fluoride varnish. Although this strategy does not include comprehensive dental services, dental screenings are an effective point of entry to connect to a dental provider, which is increasingly more accessible with the expansion of Healthy Kids Dental.

SEAL! Michigan began in 2007 with a single pilot program serving a handful of schools. Through increased awareness and advocacy, the program has seen consistent growth by adding more programs and with each individual program expanding into more schools annually. Currently the program has eight grantees across the state, with two more programs planned to begin in the summer of 2020. Although the program provided service to 202 schools in FY 2019, most schools in Michigan do not offer a dental sealant program to students. Dental sealants ultimately decrease dental disease in youth as they are nearly 100% effective in preventing dental decay when they are retained on the tooth. Reaching children through school-based services is efficacious and is a recognized best practice approach by the CDC and the Association of State and Territorial Dental Directors.

Program management and growth significantly rely on data collection. SEAL! Michigan has made ongoing improvement modifications to its data collection efforts. Data is collected annually and efficiently entered through Teleform software where it is cleaned and analyzed by the oral health epidemiologist. Annual reports are written in a timely manner and released for each local program as well as aggregated into a statewide report. Data can illustrate program success through annual increases in number of schools and students served and through number of sealants placed. Ultimately, the data will be captured by the Michigan Basic Screening Survey of third grade students (completed every five years), Count Your Smiles Report, to demonstrate the rates of dental sealant placement and dental decay in children across the state. In FY 2020, the SEAL! Michigan team worked with an intern in the oral health unit to create a year-end infographic which will be posted on the MDHHS Oral Health webpage. The infographic shares data highlights of each individual program for the fiscal year and can be used by each program to share accomplishments to stakeholders, school administrators, and additional funders. The infographic was also created for the OHP to highlight the cumulative outcome of SEAL! Michigan. The infographic will be updated annually.

The SEAL! Michigan program attempts to reach the target population through family and consumer outreach and engagement. As stated previously, programs focus on schools with a high number of children enrolled in the FRLP. The program relies on parent and guardian awareness of the program; thus, parents' consent for their children to receive the preventive oral health services is a key component of the program. To reach families and consumers, staff from the funded programs attend back-to-school nights and Parent Teacher Organization (PTO) meetings. A satisfactory rate of parental consent is achieved among currently established SEAL! Michigan programs. New programs will assess parent engagement strategies, as discussed in Objective B. All student consent forms are delivered home with an informational brochure on the SEAL! Michigan program and the benefits of dental sealants. The brochure was developed by professional health literacy specialists and is written at a third-grade reading level to accommodate varying literacy levels. The brochure strives to deliver linguistically and age-appropriate health information.

The first strategy under this objective is to utilize the SEAL! Michigan database to track the number of students receiving an annual preventive dental screening. This strategy reflects the measure's ESM, which is the number of students who have received a preventive dental screening through the SEAL! Michigan program. Continual updating of the database allows for tracking the number of unique students who receive one or more dental sealants through the program.

The second strategy is to promote dental sealant programs through school health professionals. The growth of the program relies on continual expansion into new schools. The MDHHS School Oral Health Consultant will continue to a) promote dental sealant programs through school nurses and other school health professionals and b) encourage participation with SEAL! Michigan or other school-based dental sealant programs. This strategy will be accomplished through collaboration with internal MDHHS partners, as well as embracing external partnership opportunities via professional organizations, conferences and educational venues.

The third strategy is to monitor evaluations to determine best practices in school sealant programs in schools with high participation. Ongoing evaluation of sealant programs is imperative to overall growth. Learning from all partners involved (students and parents, school administrators, teachers, school nurses, health professionals, social workers etc.) through evaluation will assist in directing the SEAL! Michigan program towards continued success. In FY 2017, a full SEAL! Michigan program evaluation was conducted by the Michigan Public Health Institute, and the final evaluation provided program improvement strategies. Recommendations continue to be implemented by individual programs to the extent possible.

A fourth strategy is to examine ongoing health trends to identify geographic areas experiencing a high burden of disease, and then use the information to identify populations that will benefit from an increase in dental sealant placement in proportion to disease and population. This strategy will help assess whether oral health programs are funded in areas of high need and to maximize access and preventive potential to the populations with the highest need. This strategy will help build the OHP's capacity to achieve equitable health outcomes.

Objective B: Increase dental sealant placement on children enrolled in Detroit Public Schools (DPS).

Detroit Public Schools has incorporated BLUEPRINT 2020 into their system to help "rebuild Detroit Public Schools." Oral health is included in the plan and falls under the Whole Child Commitment, as students receiving dental care will have less toothaches and will be more likely to achieve their full potential. The Detroit Public School (DPS) system is the largest school district in the state and provides educational services to approximately 50,000 students. According to a report by the Michigan Department of Education, the majority of children (approximately 82%) attending DPS are African American.

Michigan's 2016 Count Your Smiles (CYS) report collected data from open mouth screenings of third grade children across Michigan. According to the report, the City of Detroit data indicated that approximately 82% of third grade children had active dental disease (18.3% had no obvious problems, 59.6% needed early dental care, and 22.1% needed immediate dental care). Additionally, only 28.3% of children had at least one dental sealant, which is the lowest region in Michigan. The City of Detroit also reported the highest percentage of children who had a toothache in the past six months. The National Survey of Children's Health (2016-2018) indicates that Black children ages 1-17 are between 10-22% less likely than non-Hispanic White children to have had a recent preventive dental visit. Black children are also likely to have dental caries than Non-Hispanic White children (NSCH, 2016-2018). Given these disparities in oral health outcomes and access to care, establishing stronger oral health programs and follow-up care coordination in DPS will help to improve the oral health of Michigan's children.

In the years prior to 2018, several SEAL! Michigan grantees provided services to numerous DPS school buildings. However, in October 2018, the school system halted all oral health work as a result of having too many different

providers of oral health services. Administrators took the opportunity to pause and create an oral health plan that provides more clarity on which providers are servicing the schools. The new process involves contracting with four different providers (two restorative and two preventive) and assignment of two to each school (one restorative and one preventive). This improvement enables DPS to have more control over which programs are coming in and out of each school building; however, DPS lacks a designated position to oversee all oral health activities and lacks the oversight to ensure that students are receiving preventive and restorative care as well as urgent follow up care. Thus, the OHP has worked extensively with DPS to create and fund a half-time Oral Health Coordinator (OHC) that will oversee work relating to oral health in all DPS buildings.

The first strategy to achieve this objective is to hire a qualified Oral Health Coordinator in FY 2021 to oversee oral health related work in DPS. This person will be the point of contact for all four assigned providers. The OHC will be onsite with the providers continuously throughout the school year and will work closely with the four designated providers to ensure safe and appropriate care is provided and that students with urgent needs are followed up with until their needs are met. Having a place-based OHC will help to ensure that the DPS oral health initiative is being responsive to individual school and community needs.

The second strategy is for the OHC to organize parent and student focus groups to assist with developing a more successful oral health program in DPS. The groups will support inclusion to ensure families and students have a voice in the program and that program development and evaluation is informed by these stakeholders. This strategy will also enable an increased ability to create culturally and linguistically appropriate health education materials. Involving parents and students will assist in gathering qualitative data and a better understanding of what parents and students need in their school-based oral health program—and conversely, what may not be working. This knowledge will likely lead to an increase in positive parental consent forms and result in a higher utilization of services. Findings will also be shared with SEAL! Michigan programs outside of DPS so all programs can benefit from the outcomes of the focus groups.

The third strategy is to increase reporting requirements for all DPS oral health providers. Currently, no data are collected from the four contracted programs, thus there is no understanding of what exactly is being provided to students participating in the school-based oral health programs. All contracted oral health programs in DPS will be required to complete data forms on each student served to aid in program evaluation and improvement. The data collected will provide a better understanding of delivery of care, patient services, patient outcomes, and follow up. Once these data are collected and examined it will provide guidance as to where program improvement should be implemented.

Lead Poisoning Prevention (FY 2021 Application)

A state performance measure (SPM) was established to address lead poisoning prevention and intervention as a result of the 2015 needs assessment. In the 2020 needs assessment, the SPM was determined to still be a critical need for Michigan. Michigan has made significant progress over time in reducing the percentage of children who have elevated blood lead levels, and Michigan's rate of children under the age of six with an elevated blood lead level is less than the US rate (3.6% in comparison to 4.0% in 2016). However, several of Michigan's cities (including Highland Park, Detroit, Hamtramck, Grand Rapids, and Muskegon) have significantly higher rates of elevated blood lead levels. Additionally, the Forces of Change Assessment found that environmental toxins (including lead) disproportionately affect vulnerable populations such as racial and ethnic minorities, those living in poverty, and children. The provider survey and focus groups also identified concerns related to environmental contaminants (especially lead and PFAS) and their impact on health equity. Therefore, prevention and intervention can help to achieve equitable health outcomes, especially among vulnerable populations.

The SPM measures the percent of children less than 72 months of age who receive a venous lead confirmation test within 30 days of an initial positive capillary test. The SPM is linked to the state priority need to expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems. Leadership for Michigan's lead prevention activities, as they relate to the MCH population, is housed within the Childhood Lead Poisoning Prevention Program (CLPPP). Title V funding currently supports the childhood lead programs administered by CLPPP. CLPPP staff work collaboratively with MCH staff and Medicaid, particularly on issues related to case management and blood lead testing.

Three main focus areas of CLPPP include data surveillance, nursing assistance, and community education and engagement. Title V funding directly supports nursing assistance and community education. Data surveillance allows for CLPPP to better target areas for needed nursing assistance and community education. CLPPP provides statewide community outreach to parents, health care providers, childcare providers, public schools, homeowners, and tenants on the prevention of lead exposure and the importance of blood lead testing. CLPPP also provides technical nursing assistance for local health departments (LHDs) and health care providers to support the management and coordination of services for children with elevated blood lead levels (EBLL). An EBLL is defined as a blood lead level (BLL) equal to or greater than 4.5 micrograms per deciliter of blood (µg/dL). Children with an EBLL should have interventions such as 1) in-home nursing case management and 2) environmental investigations to mitigate health effects of lead exposure and identify and remove sources of lead in their environments.

Objective A: By 2025, increase screening for lead exposure risk factors for children less than 72 months of age.

Blood lead testing of children at risk of exposure to lead in homes or from other sources is critical for targeting interventions to prevent adverse health effects of lead. All children covered by Medicaid are considered at high risk for blood lead poisoning. In Michigan, all Medicaid children are required to receive blood lead testing at 12 and 24 months of age, or between 36 and 72 months of age if not previously tested. MDHHS also recommends targeted testing for other children who are especially at risk of lead exposure. This risk is determined by screening the child using the Michigan blood lead risk assessment tool. Assessment questions include:

- Does the child live in or regularly visit a home built before 1978?
- Does the child live in or regularly visit a home that had a water test with high lead levels?
- Does the child have a brother, sister, or friend that has an elevated blood lead level?
- Does the child come in contact with an adult whose job or hobby involves exposure to lead?
- Does the child's caregiver use home remedies that may contain lead?
- Is the child in a special population group such as foreign adoptee, refugee, migrant, immigrant, or foster child?
- Does the child's caregiver have a reason to believe the child is at risk for lead exposure?

If the answer is "yes" or "don't know" to any of the above questions, then blood lead testing is recommended.

The blood lead risk assessment is a verbal questionnaire that is conducted with family members when they are in a health care provider's office. Currently, there is not a consistent way to document the completion of the risk assessment. That creates a barrier of not being able to accurately determine the number of providers who are conducting the risk assessment with their patients.

A strategy to increase blood lead screening is to work with the Michigan Care Improvement Registry (MCIR) team. MCIR is the state immunization registry, accessed by local health departments, health care providers, Medicaid

health plans, and schools throughout the state. In FY 2021, CLPPP will work with MCIR to determine the best way to add functionality in the registry to flag or alert a MCIR user that blood lead screening should be done by going through the blood lead risk assessment questions. Calling specific attention to any child who has not had a blood lead test will support health care providers, local health departments, schools, and Medicaid health plans to go through the risk assessment, determine if testing is needed, coordinate care, help arrange transportation as needed, and address any other barriers to blood lead testing.

Another strategy is education and outreach to health care providers throughout Michigan. Health care providers play a vital role increasing screening, testing, and confirmatory testing rates in Michigan. CLPPP will undertake several efforts to educate and connect with health care providers.

- Development of an online training module for health care providers, in partnership with the Michigan Public Health Institute. Continuing education credits are available for social workers, nurses, physicians, and pediatricians. The overall goal of the course is to increase knowledge, understanding, and behaviors to reduce the health impacts of lead exposure in children under the age of six. Content of the training focuses on understanding how children are exposed to lead, the health impacts of lead, blood lead testing requirements and the risk assessment questions, understanding the importance of working with local health departments and other resources.
- Grants to local health departments to connect with and build partnerships with local health care providers within their jurisdiction. The coordination of care between local health departments and health care providers is critical when a child has been identified as having an EBLL. It's important that these partnerships are developed ahead of time and both parties recognize the services and resources each other offer.
- Public Health Detailing done by an MDHHS nurse consultant. This will include the nurse consultant visiting health care provider offices across the state to provide education about blood lead testing recommendations, discuss testing options for offices (including point of care testing), and build partnerships.
- Material development and mailing to area health care providers, specific to health care providers that work with children under six years old, including pediatricians, family practitioners, and OBGYNs.
- Key informant interviews with health care providers to get input on resources, tools, ways CLPPP can assist in increasing blood lead screening and testing and identifying barriers that need to be addressed.

The third strategy is partnering with agencies to provide culturally appropriate lead education to at-risk populations.

- Eastern Michigan University Center for Health Disparities Innovations and Studies has a lead program that works with underserved Asian Americans. CLPPP will work with and support this program in developing culturally appropriate materials, outreach plans, and education/awareness strategies to decrease lead exposure for this population.
- CLPPP has partnered with a consultant in Southeast Michigan to provide trainings and equip staff with tools and materials to conduct environmental assessments, screenings, and education in Arabic for immigrant and refugee clients. This work will be based on the CDC's Lead Poisoning Prevention in Newly Arrived Refugee Children toolkit.
- CLPPP will work with the MDHHS Community and Faith Engagement Office to engage faith-based communities, specifically in areas of the state that are at highest risk for lead exposure. Engagement will include obtaining feedback from community members and faith-based leaders about the community's needs and what kind of messaging will be most effective in the community. The focus of this partnership will be to educate about lead poisoning and the various sources of lead exposure.
- CLPPP plans to continue to have lead poisoning prevention materials developed and translated into commonly used languages including Spanish, Arabic, and Bengali. CLPPP will work with a group in the

Division of Environmental Health (DEH) called Culturally Appropriate Services for All (CASA). CASA is a group of DEH employees who come from various cultural background and speak different languages. The group reviews materials to ensure that they are both linguistically and culturally appropriate. Also, specific to Bengali translations, in partnership with Eastern Michigan University Center for Health Disparities Innovations and Studies, CLPPP will work with representatives from the Bangladeshi community to review materials and get feedback.

Objective B: By 2025, increase by 10% the percent of Medicaid-enrolled children less than 72 months of age that receive blood lead testing.

As mentioned above, all Medicaid-enrolled children are considered to be at high risk for blood lead poisoning. Specifically focusing on Medicaid-enrolled children can help to increase equitable health outcomes across the population. Medicaid policy requires blood lead testing at 12 and 24 months of age, or between 36 and 72 months of age if not previously tested. This population is a priority target for CLPPP to increase testing rates overall. The baseline data for this objective is 27.1% in 2019.

The first strategy for this objective is to provide local health departments with a monthly report that includes all Medicaid-enrolled children within that local health department's jurisdiction. The report includes all children less than 72 months of age and their blood lead testing status. Local health departments can use this report as a tool to identify children who need follow up to encourage blood lead testing.

The second strategy to achieve Objective B will be health care provider education and outreach, as discussed under Objective A. The same activities and efforts will be used here, specific to encouraging blood lead testing to Medicaid-enrolled children.

Objective C: By 2025, increase by 10% the percent of all children less than 72 months of age with an elevated blood lead level (EBLL) from a capillary test who receive a venous lead confirmation test.

Two sample types are used in blood lead testing: a capillary draw and a venous draw. Any blood lead test that is done on a capillary drawn sample must be confirmed by a venous drawn sample. This is because oftentimes a capillary blood lead test can be falsely elevated, and a venous test is needed to confirm that the blood lead level is truly elevated. This objective will use MDHHS data warehouse data to track progress through 2025. The baseline data is 45.8% in 2019.

The first strategy for Objective C is to send local health departments quarterly spreadsheets for each county within their jurisdiction. The spreadsheet will include a venous follow-up testing status for all capillary EBLLs, deduplicated by month, as well as a line list of children with a capillary EBLL no venous follow-up. CLPPP is working with the University of Michigan to develop these quarterly reports in a format that is easy to use for local health departments. Local health departments will be able to use these quarterly reports to conduct phone calls, mailings, and home visits to encourage the venous confirmatory test.

The second strategy to achieve Objective C is health care provider education and outreach, as discussed under Objective A. The same activities and efforts will be used here, specific to encouraging that all elevated blood lead test results from a capillary test are followed up with a venous confirmation test.

Immunizations – Children (FY 2021 Application)

Based on the 2020 Title V needs assessment, the state performance measure (SPM) created in 2015 was retained, which is the "Percent of children 19 to 36 months of age who have received a completed series of recommended

vaccines (4:3:1:3:3:1:4 series)." In the 2020 needs assessment, when asked "Which of the following healthcare-related needs are most often unmet among the families you serve?" 37.8% of respondents across population domains identified immunizations as an unmet need. The need was identified as highest among respondents who serve CSHCN (46%) and children and adolescents (40.6%). The forces of change assessment identified an increasing focus on individual choice versus community benefits (including vaccine refusal) as a factor that impacts population health.

Additionally, while the needs assessment was completed before the COVID-19 pandemic, Michigan is currently experiencing significant impacts on immunization rates. In May 2020, the CDC published "Decline in Child Vaccination Coverage During the COVID-19 Pandemic —Michigan Care Improvement Registry, May 2016–May 2020" in its *Morbidity and Mortality Weekly Report*. Data from the Michigan Care Improvement Registry (MCIR) showed vaccine coverage declines among most children at milestone ages in May 2020 compared to previous May estimates. For example, from January through April 2020, the number of non-influenza vaccine doses given to children aged ≤18 years decreased 21.5% compared to the average for the same period in 2018 and 2019. Up-to-date vaccinations have also declined to <50% among most children ≤2 years. In addition to the vaccine coverage challenges typically experienced in Michigan, it is anticipated that recovering from the impact of COVID-19 will create new, unique challenges.

Additionally, within some populations, Michigan has experienced declining immunizations rates and has not met the Healthy People 2020 goal of 80% for child immunizations. For example, the percent of children ages 19-35 months who received a full schedule of age appropriate immunizations (Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza and Hepatitis B) is at 73.6% based on Michigan Care Improvement Registry (MCIR) data. The 2018 National Immunization Survey data shows Michigan at 76.0% for childhood vaccination coverage among children two years old for Michigan for birth years 2011 through 2016 for the same vaccine series. Furthermore, two dose hepatitis A vaccination rates for children are low in Michigan. The Advisory Committee on Immunization Practices (ACIP) routinely recommends two doses of hepatitis A, and Michigan has started tracking completion rates for children to measure progress. If two doses of Hepatitis A vaccine are added to the full series of vaccines for children ages 19-35 months the compliance rate drops to 58.2%.

Parent vaccine hesitancy has also greatly increased even though many published scientific articles show that vaccines are safe and effective. Michigan continues to have some of the highest vaccine exemption rates for kindergarten children compared to other states. Michigan has worked hard to educate providers on the importance of immunizations and the need to talk with parents about their concerns. Michigan has also partnered with a non-profit organization called the Franny Strong Foundation to provide information for parents through the I Vaccinate campaign to learn facts about immunizations and the benefits and risks of not vaccinating. MDHHS has also worked with the Franny Strong Foundation to provide educational messages to the public to promote timely vaccinations.

The mission of the MDHHS Division of Immunization is to minimize and prevent the occurrence of vaccine-preventable diseases in Michigan. The program seeks to fulfill its mission through coordinated program efforts designed to:

- Promote high immunization levels for children and adults
- Provide vaccines through a network of public and private health care providers
- Facilitate the development, use and maintenance of immunization information systems
- Support disease surveillance and outbreak control activities
- Provide educational services and technical consultation for public and private health care providers
- Promote the development of private and public partnerships to improve immunization levels across the state
- Promote provider and consumer awareness of immunization issues

The vision of the Division of Immunization is to implement effective strategies and to strengthen partnerships with our stakeholders to eliminate vaccine preventable diseases in Michigan.

The National Immunization Surveys (NIS) are a group of telephone surveys sponsored and conducted by the CDC National Center for Immunization and Respiratory Diseases (NCIRD). In 1994, the NIS began to monitor child immunization coverage in all 50 states and select local areas for sampling. The NIS is the only standardized sampling method that can show differences and disparities between states. The NIS uses random-digit-dialing to identify households with children ages 19 through 35 months. In 2018 the methodology was changed to reflect birth years (those children 2 years of age during 2018) as opposed to those who were 19-36 months of age at the time of the survey. This change enhances the power of the survey to provide a more accurate estimate of vaccine coverage. A parent or guardian is interviewed on child immunization status and vaccination providers are mailed a survey to verify immunizations. NIS currently measures: 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, 4 PCV (4313314). The most recent NIS data from 2018 shows that the point estimate for Michigan is 76.0%.

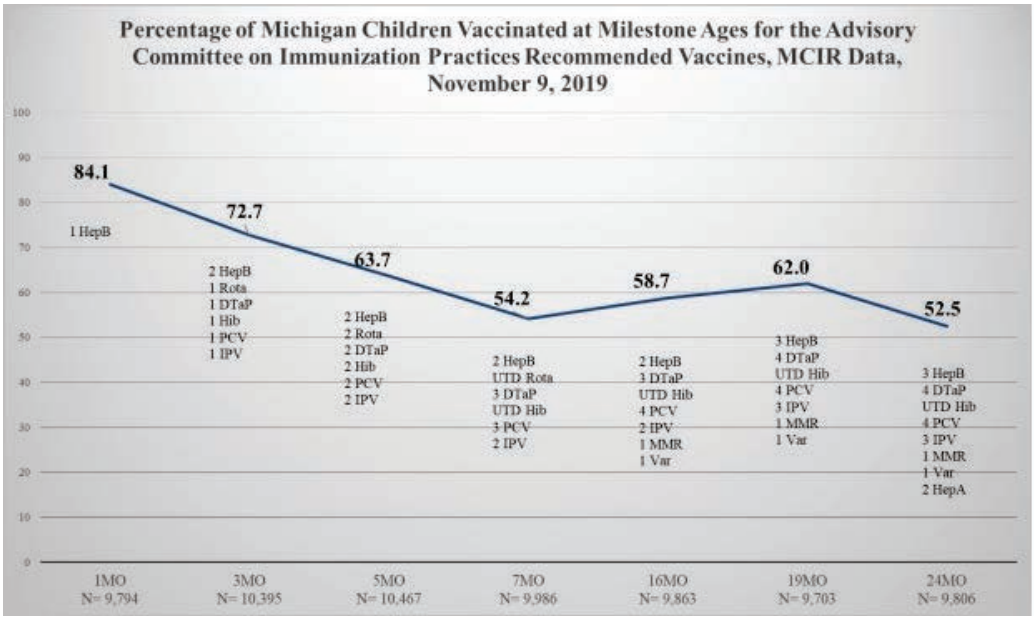
The Division of Immunization operates the Michigan Care Improvement Registry (MCIR). The MCIR is a regionally based, statewide immunization registry that contains over 149 million shot records administered to 10 million individuals residing in Michigan. MDHHS is currently working through subcontracts with six MCIR regions to enroll and support every immunization provider in the state. Current enrollments include: 6,535 health care providers and pharmacies; 4,142 schools; and 3,943 licensed childcare programs. MCIR is used routinely by nearly 33,000 users to access and determine the immunization records of children and adults. In 2019, MCIR generated over 203,187 recall letters notifying responsible parties whose children had missed shots and encouraged them to visit their immunization provider to receive needed vaccines. In addition, over 3 million reports were generated by users of the MCIR system in 2019.

MCIR can forecast needed doses of vaccine for all children who are contained in the system. All children should have completed the recommended pediatric vaccines by the time the child reaches 19 months of age. Data from MCIR show that 73.6% of children who reside in Michigan have received the routinely recommend 4313314 series by the time they reach 36 months of age. MCIR rates have experienced gradual decreases in compliance rates for children enrolled in Medicaid and WIC. The current vaccination rate for children enrolled in Medicaid is 71.5% and the vaccination rate for children enrolled in WIC is 76.9%. The overall statewide vaccination level of 73.6% is short of the Healthy People 2020 goal of 80%.

Objective A: By 2025, increase the percentage of children 19-36 months of age who receive recommended vaccines to 80%.

Data obtained from MCIR show that children are not receiving vaccines on schedule, and many of these children never catch up on all needed vaccines. By seven months of age, only 54.2% of children in MCIR are current with all recommended vaccines. This puts children at risk, with nearly half of children susceptible to these serious diseases. From birth to 2 years of age, children are recommended up to 25 vaccinations to prevent 14 infectious diseases. The vaccination schedule is designed to protect children when they are most vulnerable. Recommendations based on ages of vaccines are shown to be safe and effective. An assessment of NIS data shows that only 23% of children 24-35 months of age were vaccinated with the primary 4313314 series on time. A Michigan study of vaccine timeliness at age 24 months of children born from 2006 to 2010 shows that only 13.2% of children were vaccinated on time. There are no known benefits to delaying vaccinations. Image 1 illustrates immunization rates by age when vaccines should have been completed. There are small increases in most ages but rates still remain low.

Image 1. Percentage of Michigan Children Vaccinated at Milestone Ages



MCIR can also assess existing immunization data for children and forecast needed doses. This functionality greatly assists clinicians in determining any needed doses of vaccine during a clinical encounter. This same forecasting functionality can be used at a system level to determine any children who need vaccines. To increase vaccination rates, the Division of Immunization has initiated an effort to notify parents of all children 6 months through 24 months of age who are overdue for one or more vaccines. In the past, efforts have been targeted at children who are 2 to 3 years of age, but this effort will attempt to impact parents of children less than 2 years of age who are not staying on schedule. Data from MCIR show that children who stay on schedule are twice as likely to complete all needed vaccines as those who fall behind early. A central strategy to address this objective is to generate notices to parents of children who are overdue for vaccines. These notices are not intended to replace other efforts that may be underway in provider offices or local health departments but are meant to enhance existing efforts to remind parents of the importance of immunizations.

In Michigan, disparities exist in immunization rates based on race. The City of Detroit has among the lowest immunization rates in Michigan for the 4313314 series at 57.2%. Rates are even lower for people of color. In FY 2021, the Division of Immunization epidemiologist and nurse educators will conduct a root cause analysis for the City of Detroit to attempt to identify causes of these disparities. This root cause analysis will help to target future immunization efforts around strategies to reduce disparities.

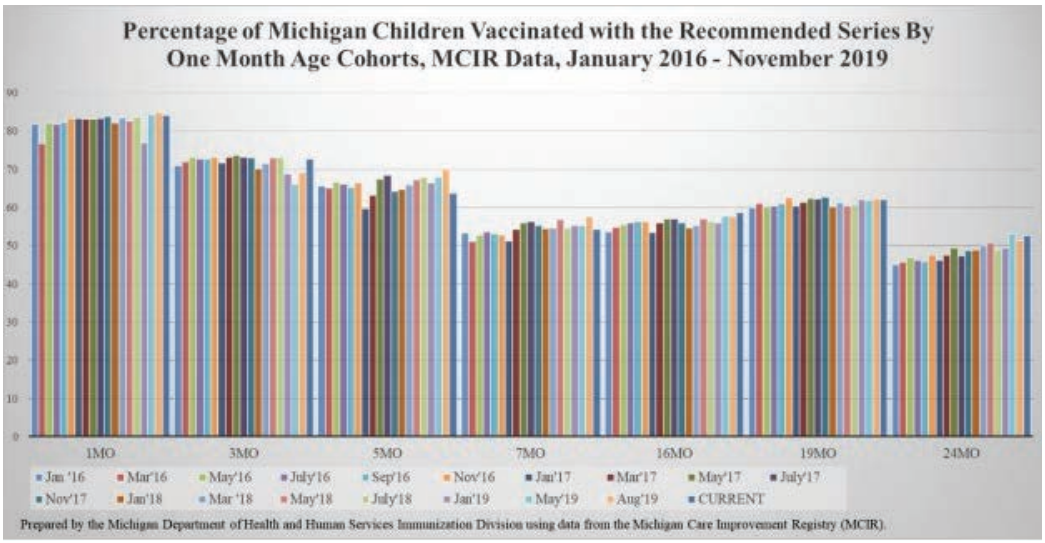
Objective B: Assist local health departments in targeting outreach to under-vaccinated populations in their jurisdiction.

The Immunization Program will continue to distribute population-based county "report cards" for local health departments to better understand immunization issues and areas for improvement in their communities. The MCIR epidemiologist will generate county report cards on a quarterly basis, which will be posted on the MDHHS website. The report card will contain coverage level information in several key areas including pediatric, adolescent and adult coverage levels. Report cards rank each county in the state, so a county can also compare its progress to other counties.

Another key report which will be made available to local health departments is the vaccine drop-off report. As discussed earlier, this report shows how well children are staying on schedule for all recommended vaccines. The Immunization Program will continue to make the data available to local health departments so they can be better

informed on areas for improvement as they work with immunization providers in their jurisdiction. Slight increases have been seen in the uptake of childhood vaccines, but the rates still show much work needs to be done to keep children on schedule. Image 2, below, shows immunization rates over time by age when vaccines should have been completed.

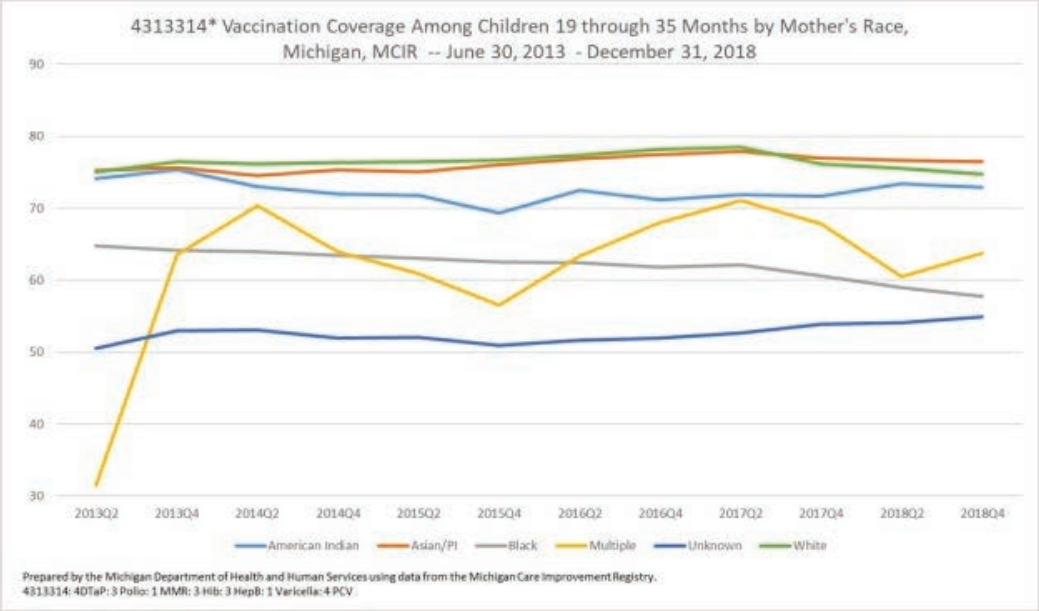
Image 2. Percentage of Michigan Children Vaccinated with the Recommended Series



These reports not only identify immunization rates by age but also show immunization rates by age broken down by vaccine types. Local health departments can identify immunization levels by vaccine type to determine areas where immunization providers may not be offering all recommended vaccines.

Michigan has large disparities in immunization coverage rates based on race. Using the same assessment logic being used by the CDC for the National Immunization Surveys, the statewide immunization rate is 70.89% for the 4313314 series. Image 3 illustrates vaccination coverage among children ages 19-35 months by mother's race. Black children record the lowest immunization rates (57.71%) as compared to the highest rates of Asian/Pacific Islanders (76.49%).

Image 3. Vaccination Coverage by Mother's Race



The Immunization Program will create reports on a semi-annual basis showing immunization rates by race for each local health jurisdiction. These data are being made available to local health departments to bring more focus to issues of health equity and health disparities as a key strategy to achieving equitable health outcomes related to vaccine coverage.

Objective C: Implement the I Vaccinate Campaign.

Parental vaccine hesitancy has been an increasing concern in Michigan. Vocal and organized groups have continued to push back on school vaccine requirements and vaccines in a broader sense. This trend is affecting not only the school reporting process but parents who may have questions about vaccines. Organized social media issues concerning vaccines circulate broadly throughout the state and the impact is that more parents are questioning the value and safety of vaccinating their children.

In an effort to make positive vaccine messages available to the public, MDHHS partnered with the Franny Strong Foundation in 2017 to launch the I Vaccinate Campaign. The campaign went live in March 2017 to provide information and tools based on research and medical science to help Michigan parents protect their children through vaccinations. MDHHS and the Franny Strong Foundation have partnered to provide financial and program support for the campaign. Approximately 17 other state and national groups are supportive of the campaign, including the Michigan Association of Health Plans, the Michigan Association of Local Public Health, the Michigan Chapter of the American Academy of Pediatrics, and the Michigan Health and Hospital Association.

The I Vaccinate Campaign uses several media platforms to reach target populations of women of childbearing years since they often have a primary role making decisions related to the health of their children. Television and radio ads are purchased during this campaign to promote vaccinations to protect all children. Social media messages are used throughout the state with real life stories of individuals affected by vaccine preventable diseases. A website assists parents in the decision-making process about vaccines for their children. The website is built on fact-based information presented in a user-friendly forum from a parent's viewpoint. In FY 2021, the Immunization Program will continue to assess the I Vaccinate campaign to identify ways to strengthen its message and broaden its reach. In particular, the Immunization Program will consider ways to obtain feedback and recommendations from parents and community members. Better understanding barriers to immunizations will enable the Immunization Program and its partners to craft messages that build trust and confidence in the effectiveness and safety of vaccines. Parent and

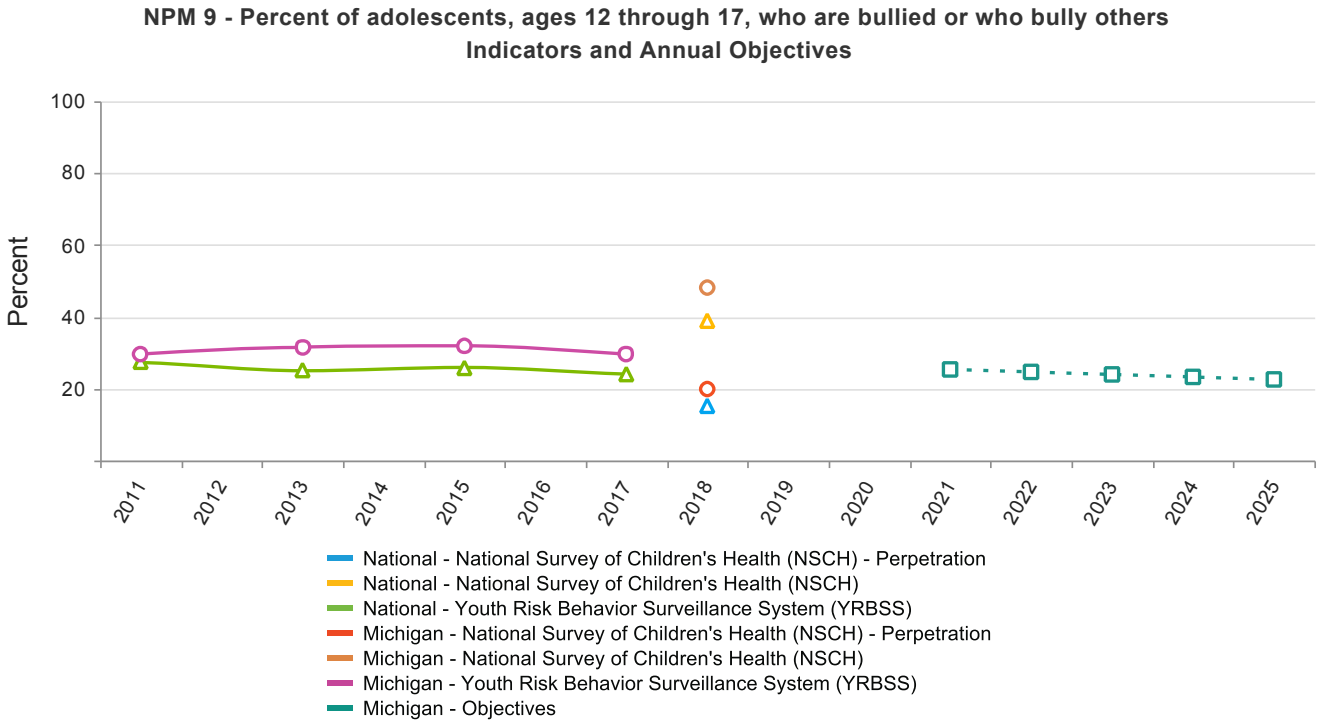
community input will also help to ensure that vaccine messages are culturally sensitive and linguistically appropriate, which may include different messages targeted to different population groups or geographical regions.

Adolescent Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000	NVSS-2018	32.8	NPM 9 NPM 10
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000	NVSS-2016_2018	9.3	NPM 10
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2016_2018	13.4	NPM 9 NPM 10
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2017_2018	57.8 %	NPM 10
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2017_2018	88.6 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	NSCH-2017_2018	18.9 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2016	13.3 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	YRBSS-2017	16.7 %	NPM 10
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2018_2019	56.7 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NIS-2018	72.5 %	NPM 10
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2018	93.8 %	NPM 10
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2018	95.9 %	NPM 10
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2018	15.8	NPM 10

National Performance Measures



Federally Available Data	
Data Source: Youth Risk Behavior Surveillance System (YRBSS)	
	2019
Annual Objective	
Annual Indicator	29.8
Numerator	127,314
Denominator	426,596
Data Source	YRBSS
Data Source Year	2017

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH) - Perpetration	
	2019
Annual Objective	
Annual Indicator	20.0
Numerator	145,381
Denominator	727,587
Data Source	NSCHP
Data Source Year	2018

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2019
Annual Objective	
Annual Indicator	48.0
Numerator	349,295
Denominator	727,587
Data Source	NSCHV
Data Source Year	2018

Annual Objectives					
	2021	**2022**	**2023**	**2024**	**2025**
Annual Objective	25.4	24.7	24.0	23.3	22.6

Evidence-Based or –Informed Strategy Measures

ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	6.0	12.0	18.0	24.0	30.0

State Performance Measures

SPM 3 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective			44
Annual Indicator	39.3	41.9	52.4
Numerator	295,138	313,144	334,188
Denominator	750,281	746,563	637,751
Data Source	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)
Data Source Year	2017	2018	2019
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	54.0	56.0	58.0	60.0	62.0	64.0

State Action Plan Table

State Action Plan Table (Michigan) - Adolescent Health - Entry 1

Priority Need

Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person

NPM

NPM 9 - Percent of adolescents, ages 12 through 17, who are bullied or who bully others

Objectives

A) By October 2025, 30 secondary schools will implement schoolwide bullying prevention initiatives emphasizing social emotional health (SEH) education and creating safe schools for LGBTQ students within a schoolwide SEL process

B) By October 2025, provide 1,050 schools with guidance on state laws and model policies on bullying prevention with protections for LGBTQ youth

C) Explore anti-bullying campaigns for CSHCS and determine goals for anti-bullying initiatives in Michigan

Strategies

A1) Six secondary schools per year will implement the Michigan Model for Health™ SEH module in all health education classrooms A2) Six secondary schools per year will utilize the Collaborative for Academic, Social and Emotional Learning (CASEL) Guide to Schoolwide Social and Emotional Learning to implement a school wide SEL process A3) Provide training and technical assistance to six secondary schools per year on creating safe schools for LGBTQ students

B1) Conduct training for regional school health coordinators on relevant guidance for schools on PA 241 and State Board of Ed Model Anti-Bullying policy B2) Provide TA follow up to school health coordinators working directly with schools B3) Facilitate learning session for educators during Child, Adolescent and School Health (CASH) conference B4) Collaborate with the Michigan Department of Education to disseminate guidance on Public Act 241 and the SBE Model Anti-Bullying Policy to schools and stakeholders

C1) Create a subcommittee consisting of CSHCS staff, Family Center Staff, other family representatives, and the Family Center Youth Consultant C2) Conduct a focus group with CYSHCN and their parents

ESMs	Status
ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity	Active

NOMs

NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000

NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000

State Action Plan Table (Michigan) - Adolescent Health - Entry 2

Priority Need

Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play

SPM

SPM 3 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Objectives

A) By 2025, increase the percentage of adolescents who have completed the HPV series to 64%

B) Increase outreach to adolescent immunization providers with low immunization rates

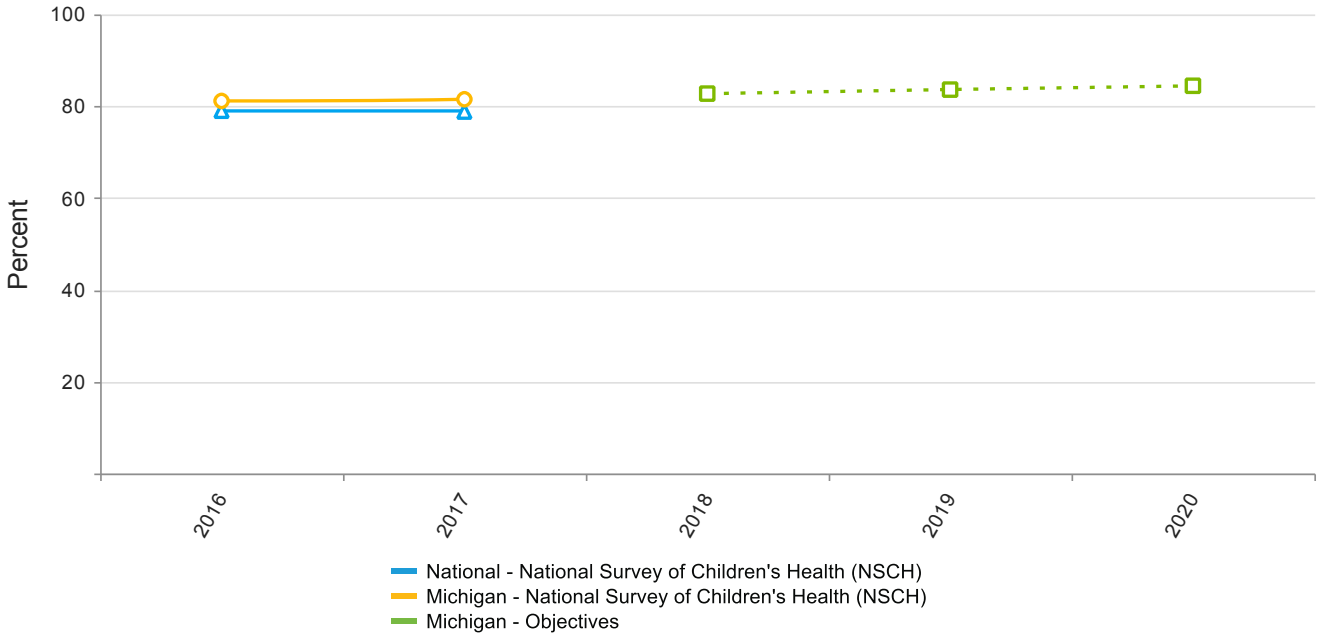
Strategies

A1) Generate a letter using MCIR data to parents of adolescents who have initiated but not completed the HPV series A2) Partner with the MDHSS Cancer Program and the American Cancer Society to build a stakeholder group to promote HPV vaccination as cancer prevention A3) Partner with health systems in Michigan to develop strategies to increase HPV immunization rates for their members

B1) Using MCIR data, generate a list of adolescent providers and their MCIR completion rates B2) Prioritize provider outreach to larger practices with the lowest immunization rates B3) Offer quality improvement visits to provide a comprehensive assessment of immunization rates and recommendations for practice improvements B4) Emphasize ‘on-time’ vaccination of adolescents during the 11-12 year only visits using Quality Improvement reports in the MCIR system

2016-2020: National Performance Measures

2016-2020: NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year. Indicators and Annual Objectives



Federally Available Data				
Data Source: National Survey of Children's Health (NSCH)				
	2016	**2017**	**2018**	**2019**
Annual Objective			82.6	83.5
Annual Indicator		81.0	81.3	81.3
Numerator		633,720	618,502	618,502
Denominator		782,076	760,429	760,429
Data Source		NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

2016-2020: Evidence-Based or –Informed Strategy Measures

2016-2020: ESM 10.1 - Of the health care providers who complete the Motivational Interviewing web course and the Motivational Interviewing professional development training, the percent who report skills in effectively counseling youth on changing risky behaviors

Measure Status:			**Active**	
State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective		93	95	95
Annual Indicator	87.5	93.3	96.4	93.8
Numerator	7	28	27	15
Denominator	8	30	28	16
Data Source	MDHHS Participant Assessment Tool	Evaluation tool / SurveyMonkey	Evaluation tool / SurveyMonkey	Evaluation tool / SurveyMonkey
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Adolescent Health Overview

The needs of adolescents are addressed at the state and local level in Michigan through a diffuse network of governmental and non-governmental organizations. Within MDHHS, the Division of Child and Adolescent Health (DCAH) plays a central role in meeting the health needs of Michigan's adolescents. DCAH includes programs designed to build healthy relationship skills among adolescents, prevent unintended pregnancy, and address bullying. It houses programs designed to meet adolescents' health needs in school settings thru Child and Adolescent Health Centers and school nursing. The Division of Immunization includes sections focused on adolescent outreach and education, as well as assessment and local support. The Children's Special Health Care Services (CSHCS) Division administers programs that impact adolescents and young adults with special health care needs, especially as they relate to transition. Title V funds support a variety of programs and services for adolescents through state and local organizations—including HPV immunization, pregnancy prevention and bullying—as well as services for adolescents who have special health care needs. Other federal MCH funds that impact adolescents, and with which Title V coordinates, include the State Abstinence Education Program (ACF funding), the State Personal Responsibility Education Program (ACF funding), the Pregnancy Assistance Fund to reduce unintended repeat teen pregnancy and an Epilepsy grant (HRSA funding). In addition, critical partnerships in the state that impact adolescent health include those with school based health centers, the Michigan Department of Education, the Youth Risk Behavior Survey and its state-based counterpoint (the Michigan Profile for Healthy Youth), the Michigan Organization on Adolescent Sexual Health, and the School-Community Health Alliance of Michigan.

At the local level, LHDs expended Title V funds in three performance measures in this domain. Five LHDs expended 2.5% of LMCH funds on NPM 10 (adolescent well-visit) with gap-filling activities such as well-visit physical exams, family planning services, HIV and STI counseling and testing, health education and links to community services. LHD activities related to the adolescent immunization measure (which is now a distinct measure but was originally a two-part measure linked with child immunizations) included media campaigns, initiatives to determine barriers to HPV vaccine, provision of gap-filling adolescent vaccinations, waiver education, recalls and reminders. Four LHDs selected former SPM 3 (Depression across the Life Course) and expended 1.8% LMCH funds. Activities included suicide prevention, gap-filling adolescent depression screening, and provision of mental health education to middle/high school youth.

Michigan's approach to adolescent health emphasizes reducing mortality, especially through suicide prevention, and protecting adolescents from adverse health outcomes due to a variety of factors, such as HPV or unplanned pregnancies. While the past decade has seen positive change in several dimensions of adolescent health, adolescents continue to face risks at the intersection of behavioral and physical health. The adolescent mortality rate of 32.8 per 100,000 has improved since 2009 but remains slightly above the national average (NVSS, 2018) and is highest among non-Hispanic Black adolescents (51.4 per 100,000, NVSS, 2016_2018). However, the motor vehicle mortality rate (11.66 per 100,000, NVSS, 2014_1016) among adolescents has dropped over the past six years to below the national average. Following alarming national trends, the suicide mortality rate (10.97 per 100,000, NVSS, 2014_2016) for adolescents has increased steadily over the past several years and currently exceeds the national average. The HPV vaccination rate has steadily increased, with the percent of female adolescents who have received at least one dose of the HPV vaccine increasing from 39.0% in 2009 to 72.5% in 2018 (NIS), and higher rates of vaccination among Hispanic (81.4%) and non-Hispanic Black (76.9%) adolescents as compared with non-Hispanic white (61.9%) adolescents. The teen birth rate has also steadily declined from 31.9 per 1,000 females in 2009 to 15.8 in 2018 (NVSS). However, the teen birth rate was 35.4 and 21.7 in 2018 among non-Hispanic Black adolescent females and Hispanic adolescent females, respectively. This disparity suggests a need to explore the appropriateness and responsiveness of teen pregnancy programs and services. In 2018, parents reported that 20.0% of Michigan adolescents bullied others (NSCH), compared with 15.3% nationally. In 2017, 29.8% Michigan

adolescents (12-17) reported being bullied, a number virtually unchanged since 2011 (29.7%, YRBS). Students who identify as lesbian, gay or bisexual were significantly more likely to report being bullied (44.3%) than those who identified as heterosexual (27.8%, YRBS). Similarly, female students (36.8%) and non-Hispanic White students (31.4%) all reported higher risk of being bullied than the state average. These data suggest a need to take gender and sexual orientation into account when addressing bullying in Michigan's schools.

Adolescent Well-Visit (FY 2019 Annual Report)

In FY 2019, activities focused on implementing a Motivational Interviewing (MI) web course and in-person training to public and private providers as well as piloting a behavioral health quality measure among state-funded school-based and school-linked health centers, known as Child and Adolescent Health Centers (CAHCs) in Michigan.

Attendance at the in-person Motivational Interviewing training decreased in FY 2019. The Evidence-based Strategy Measure (ESM) target for FY 2019 (95% of health care providers who completed the Motivational Interviewing web course and subsequently attended the Motivational Interviewing professional development in-person training reported improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies) fell just short of being reached.

Each state-funded CAHC is required to report on a standardized set of quality measures with an ultimate goal of improvement in care for CAHC clients. In FY 2019, a behavioral health quality measure was piloted which assessed appropriate follow-up care (treatment) for youth age 12 years and up who have a diagnosis of depression.

Meaningful family and consumer engagement of parents and youth is a longstanding priority of the CAHC Program and is accomplished through various strategies. Per boilerplate requirements, each CAHC must operate a community advisory committee that is comprised of at least one-third parents of school-aged children and youth. These advisory groups are tasked with giving input and approving core health center policies, including confidentiality, abuse and neglect and parental consent. Each group has a range of other responsibilities that are unique to each center. When funding for the CAHC program was eliminated in 2003, these advisory groups rallied other parents to provide a critical advocacy voice that was instrumental in reinstating the funding. Parents are a powerful ally in this work.

Youth input is also a longstanding requirement of the program and occurs through various strategies. Centers are required to have youth input through either their existing Community Advisory Council (CAC) or through a stand-alone youth advisory committee. As part of their work on these committees, youth routinely provide feedback on center services and programs, the center's environment, and reading material. Youth are strong advocates for CAHC utilization among their peers. Some CAHCs also conduct focus groups with youth to identify ways to increase health center utilization and improve services and outreach. As part of ongoing CQI activities, CAHCs must implement a client satisfaction survey at least annually. Results of these surveys are compiled, and centers must demonstrate how this critical feedback was used to improve services to clients.

Objective A: Increase the percent of adolescents, ages 12 through 17, enrolled in Medicaid, with a preventive medical visit in the past year.

This objective will be addressed as part of year five efforts in FY 2020.

Objective B: Of the health care providers who completed the Motivational Interviewing web course and the Motivational interviewing professional development training, 95% will report skills in effectively counseling youth on changing risky behaviors.

In 2014 and 2015, MDHHS Child, Adolescent and School Health (CASH) Section staff partnered with the Michigan Public Health Institute to design two web-based Adolescent Health Courses, grounded in research and best practice, to improve provider competencies in Motivational Interviewing (MI) and Positive Youth Development/Resiliency. Two additional courses were developed and released in 2017 including Adolescent Brain Development & Decision Making, and Encouraging Healthy Teen Relationships (interpersonal violence prevention). These courses have been promoted and offered at no charge to public and private providers throughout Michigan and the United States. The objective is to reach 250 providers over five years with these foundational adolescent health courses.

Since FY 2015, 2,230 health professionals (e.g., medical providers, mental health providers and health educators) have completed the MI web course. In FY 2019 alone, 469 professionals completed the motivational interviewing course. Of those that have completed the course since 2015, 1,402 individuals requested continuing education contact hours from their respective professions: nursing contact hours (27%); Michigan Social Work clock hours (15%); NASW Social Work contact hours (13%); continuing medical education (5%); and Certified Health Education Specialist (40%).

Health behaviors are increasingly recognized as multidimensional and embedded in healthy lifestyles. Social determinants of health (SDOH) are influenced by the interrelationship of social factors, health services, individual behavior, and biology. It is the interrelationships among these factors that determine individual and population health. Therefore, interventions that target multiple determinants of health are most likely to be effective. The motivational interviewing course focuses on identifying risk and preventing harmful effects on adolescent population health. Assessment of SDOH combined with evidence-based motivational interviewing counseling and referrals results in improved adolescent health and well-being.

As noted above, the ESM for this measure is the percent of health care providers who complete the MI web course and subsequently attend the MI professional development in-person training who report improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies. Through the Title V program in 2019, MDHHS offered two in-person MI trainings reaching 26 providers, for a total of 146 providers who have attended the in-person training over the past four years. Participants have included physicians, nurse practitioners, physician assistants, nurses, social workers and health educators. The trainings were promoted through provider organizations such as the Michigan Regional Chapter of the Society for Adolescent Health and Medicine, American Academy of Pediatrics, American Family Physicians, National Association of Pediatric Nurse Practitioners and the CAHC Medical Directors listserv. As a result of the MI training, 93.8% of evaluation respondents (n=16) reported improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies. Therefore, in 2019 Michigan fell just short of the ESM target (95%).

Objective C: Increase percentage of CAHC clients age 12+ with a positive depression screen who have documented follow-up.

As a first strategy to meet this objective, the CAHC program established a required behavioral health quality measure to assess appropriate follow-up care (treatment) among clients age 12 years and older who have a diagnosis of depression. This measure was piloted among all state-funded CAHCs in FY 2019. After review of baseline data, a tentative threshold of 90% has been established for this objective (e.g., 90% of clients age 12 years and older who have a diagnosis of depression will have documented, appropriate follow-up care).

Appropriate follow-up care has been defined as having ALL of the following elements of an appropriate follow-up plan**:** a) psycho-social assessment completed by third visit (includes suicide risk assessment/safety plan); AND b) treatment plan developed by third visit; AND for those on the caseload for at least 90 days, c) treatment plan

reviewed after 90 days; AND d) screener re-administered at appropriate interval to determine change in score. The goals of appropriate follow-up care are early intervention for behavioral health concerns, resolution of or a decrease in symptom severity, better overall mental health, reducing stigma surrounding mental health care, and lowered risk of negative outcomes associated with depression including, but not limited to, suicide ideation and/or attempt.

A full year of pilot data collection for this new behavioral health measure revealed questions and concerns from the field that have been, and continue to be, addressed by the state CAHC program staff. The two most frequent concerns were 1) assurance that CAHCs have a proper understanding of the measure and subsequently the data to be collected and reported and 2) provider fear and/or reluctance of diagnosing depression among youth. Both concerns have been the subject of numerous site-specific and program-wide technical assistance calls and correspondence and have been incorporated into webinars and in-person meetings and training. Two additional future strategies designed to address this objective (CQI initiatives and targeted training) will build upon the technical assistance that has already been provided as well as other identified needs that emerge from continued implementation of this measure.

Immunizations – Adolescents (FY 2019 Annual Report)

This section discusses the Immunization SPM focused on adolescent health: Percent of adolescents 13 to 18 years of age who have received a completed series of Human Papillomavirus (HPV) vaccine. Many successes were achieved in FY 2019. For example, several indicators used to measure immunization rates in Michigan moved in the right direction. Michigan has remained at 77% coverage rates for 1 dose of Tdap, 3 doses of polio, 2 doses of MMR, 3 doses of Hepatitis B, 2 doses of Varicella, and 1 dose of Meningococcal vaccines that did not include the HPV vaccine. Given the general pushback on vaccines in Michigan in recent years, maintaining vaccine levels at the same rate is encouraging. Some areas of the state are showing adolescent immunization rates, not including HPV vaccine, well above 80%. The adolescent immunization rates for HPV coverage increased. HPV series completion rates over the last year for 13 to 18-year-old adolescents increased by approximately 3.7% to reach 52.4%. A 3.7% increase is important, but Michigan still falls short of the HP 2020 goal of 80% coverage.

Objective A: Increase the percentage of adolescents who have completed the HPV series.

In the FY 2019 reporting year, 52.4% of adolescents 13 to 18 years of age completed the HPV series (MCIR) which represents a 3.7% increase from the previous year.

To achieve progress on this objective, the Immunization Program has partnered with the Cancer Program and Oral Health Unit in a variety of ways to improve HPV immunization uptake. The Immunization Program provided input on the development and evaluation of an oral cancer and HPV vaccine survey that was disseminated by Delta Dental to thousands of dental providers. In addition, the Immunization Program collaborated with these groups on several presentations to the dental community, including Dental Hygienist Association meetings, a rural health webinar and at the Michigan Primary Care Association Annual Meeting. These presentations focused on highlighting the importance of oral cancer screenings, the prevalence of oral cancers statewide and ways to recommend, promote and use the HPV vaccine to prevent these cancers. The Immunization Program also collaborates with the Cancer Program, Cancer Consortium, American Cancer Society and Michigan Medicine as part of the state HPV team focused on implementing strategies to improve HPV immunization rates.

Immunization Program staff have also taken the lead on a steering committee focused on re-developing the statewide HPV stakeholder group with the goal of bringing together private and public sector stakeholders to improve HPV vaccination uptake. This steering committee consists of members from MDHHS, Karmanos Cancer Institute, American Cancer Society, Henry Ford Health System, Michigan Pharmacists Association, Michigan Medicine, Spectrum Health System, Oakland County Local Public Health and Washtenaw County Local Public

Health. Finally, the Immunization Program has worked with CDC to improve partnerships with Michigan state societies, including the Michigan American Academy of Pediatrics, the Michigan Academy of Family Physicians and the Michigan Chapter of the National Association of Pediatric Nurse Practitioners to work collaboratively to improve HPV vaccine uptake statewide.

In FY 2019, the Michigan Immunization Program conducted one round of recall notices to adolescents who have not completed the HPV series. Notices were sent to over 53,000 adolescents 13-15 years of age.

Objective B: Increase outreach to adolescent immunization providers with low immunization rates.

In FY 2019, MDHHS analyzed adolescent immunization coverage levels from the MCIR to target outreach to large immunization providers with the lowest immunization rates. The focus of these coverage rates has been on HPV vaccination, but all adolescent vaccines are discussed. Staff conducted outreach to these providers to meet in person and offer quality improvement tools to assist the practice in increasing immunization rates. Immunization Quality Improvement reports from MCIR were provided and reviewed and areas of focus were identified. These reports were updated within the MCIR system in 2019 to assure providers were vaccinating in a timely manner thus assuring that more adolescents are vaccinated on schedule. The focus was to assure that all adolescents received the completed vaccine series by 13 years of age. Specific outreach to large provider practices with low HPV completion rates helped to educate providers on the importance of this vaccine. Practices were asked to develop quality improvement strategies and action steps to increase timely HPV vaccination of their patients.

In June 2019, Michigan successfully hosted the second Michigan HPV Cancer Summit in collaboration with the American Cancer Society. This event was attended by key decision makers, health system quality improvement leaders, physicians, top-level providers, American Cancer Society members and other MDHHS programs that came together with the common goal to decrease the prevalence of HPV-related cancers. In addition, Dr. Melinda Wharton from the CDC was invited to be the keynote speaker. There was also a focus on oral cancers attributed to HPV and how the dental community can assist with efforts to reduce those cancers. Speakers from the dental community and oncology surgeons presented on the effects of oral cancer to susceptible individuals. Attendees left the summit motivated to make a change in their practice, system and/or program to improve timely HPV vaccination rates and protect all Michigan adolescents from HPV-related cancers.

Adolescent Health - Application Year

Bullying (FY 2021 Application)

The percent of adolescents, ages 12-17, who are bullied or who bully others (NPM 9) was selected to address the priority need to "Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person." Michigan's needs assessment data points to multiple reasons why NPM 9 is a good fit for efforts over the next five-year cycle.

Needs assessment data for Michigan strongly support this selection. During adolescent focus groups and listening sessions, participants indicated that bullying is a recurring issue across Michigan. Students in Michigan schools experience bullying at an alarming rate. Michigan's 2017 YRBS data indicate that the rate of high school students who experienced bullying in the past 12 months remained steady at 29.6% but for some subsets this number has increased. And with 19.6% of high school students reporting being electronically bullied in the past 12 months, Michigan is above the national average of 14.9% for cyber-bullying.

Additionally, the mental health needs of adolescents are not being met. The 2017 YRBS results showed a 43% increase since 2011 in students reporting sad or hopeless feelings for two weeks or more. The link between bullying and suicide has also illuminated the need to recognize the damage that bullying inflicts. A marked increase was found in the percentage of Michigan high school students who report considering suicide (15.7% in 2011 to 21.3% in 2017). Further, the mortality rate per 100,000 young people ages 15-19 years has jumped an alarming 34% since 2013. Because bullying can lead to suicidal ideation, it is imperative that Michigan addresses this need through more robust bullying prevention strategies.

One subset of the adolescent population experiencing the harmful consequences of bullying is students who identify as LGBTQ. The percentage of high school students who identify as LGBTQ or have had same-sex sexual contact (2017 YRBS) has steadily increased from 13.6% in 2013, when this question was added to the survey, to 29.5% in 2017, an increase of 53%. The YRBS 2017 data further indicate that LGBTQ adolescents are more likely to report two or more ACEs, more likely to consider or attempt suicide, try illicit drugs and engage in high-risk sexual behavior. Focus groups and listening sessions in Michigan found that LGBTQ adolescents struggle with anxiety and depression that is tied to their experiences with peers, families and community members. This population of young people also reported not feeling respected by their teachers and the education system. A theme in these focus groups included the need for respect and inclusion within educational settings. LGBTQ youth and their allies are asking for more policies and education that specifically addresses safe schools for sexual minority youth because they do not feel supported at school.

Michigan's Forces of Change Assessment indicated that a lack of respect for and understanding of others increases stress, violence and trauma. Robust health education programs, in which social emotional learning (SEL) is at the forefront, enhance the skills needed to prevent bullying behavior. Adolescent focus group participants indicated that more progressive policies and innovative strategies for health education in schools are needed to teach children age-appropriate information on healthy habits and risks of dangerous health behaviors. The *Michigan Model for Health*™(MMH) is a K-12 comprehensive school health education curriculum that is evidence-informed and culturally, linguistically and age-appropriate. School officials throughout Michigan are recognizing the need for more robust education on SEL. The MMH can help meet this need as SEL is the foundation of the curriculum. Some Michigan state legislators recognize this need and are working to pass legislation requiring schools to implement the MMH as a key component of suicide prevention efforts.

These strategies align with a number of MDHHS and MDE priorities and initiatives related to creating safe and healthy school environments: a Whole School, Whole Community, Whole Child (WSCC) approach (addressing the

health needs of the whole child and every child); comprehensive school health education through the MMH; creating safe schools for LGBTQ youth; several SEL programs and initiatives; and a variety of assessment/survey tools available at no cost to Michigan schools, including the Bully-Free Schools survey.

Objective A: By October 2025, 30 secondary schools will implement schoolwide bullying prevention initiatives emphasizing social emotional health (SEH) education and creating safe schools for LGBTQ students within a schoolwide SEL process.

A comprehensive approach to bullying prevention combines three components that, when implemented together, prove to be more effective than one alone. This whole school, universal approach will include health education in the classroom, social and emotional learning initiatives throughout the entire school community and added supports for students who identify as LGBTQ. The whole school approach will help move the needle on all students feeling safe and supported at school. Title V funding will go directly to selected schools to fund these schoolwide efforts.

Michigan's regional school health coordinators are housed throughout Michigan in local school districts and Intermediate School Districts. They provide training and technical assistance for the MMH and a myriad of other school health initiatives. They are the local representatives for school health in Michigan. These school health coordinators report a need for a more comprehensive approach to bullying prevention through the implementation of social and emotional learning (SEL). They further indicated that the most pressing needs involve creating safe schools, addressing the needs of LGBTQ students, and addressing the role of adults in the SEL learning environment.

In FY 2021, Michigan will partner with regional school health coordinators to select six schools to implement a comprehensive approach to bullying prevention that involves SEL curriculum, schoolwide SEL initiatives, and training on creating safe schools for LGBTQ youth. Schools will implement the evidence-informed *Michigan Model for Health*™ social and emotional health skills module of the curriculum in all classrooms. The Collaborative for Academic, Social and Emotional Learning (CASEL) *Guide to Schoolwide Social and Emotional Learning* will be utilized to implement schoolwide initiatives in SEL. A school level team will also be trained on creating safe schools for LGBTQ students.

SEL has been shown to be an effective component in bullying prevention. Foundational to social and emotional learning is the teaching of social skill competencies, which include skills in the areas of self-awareness, self-management, social awareness, healthy relationships, and responsible decision-making. The ESM for this NPM will be all classrooms in six selected schools implementing the evidence-based *Michigan Model for Health*™ Social and Emotional Health unit/module with a minimum of 80% fidelity. Both the middle and high school modules focus on the development of social skills, including lessons that directly address bullying and cyber-bullying. Health teachers will complete fidelity lesson logs documenting the implementation of lessons. Teachers will also conduct pre- and post-tests to measure student improvements in knowledge, skills, and attitudes related to SEL and bullying.

The second strategy is for selected schools to implement a schoolwide SEL process based on the CASEL *Guide to Schoolwide Social and Emotional Learning*. Each school will fully engage in the process outlined in the guide. The process will include an assessment of the entire school environment so schools will be addressing the needs evident within their unique school setting. Student input is an integral component of this assessment process as youth voice and engagement is a key indicator of schoolwide SEL.

The third strategy involves each school training a team of staff members in creating safe schools for LGBTQ students and implementing schoolwide strategies to improve the school climate for this subset of students. The training workshop is designed to help educators understand, assess, and improve school climate and safety for all youth, especially those who identify as LGBTQ. The workshop includes youth panels and youth-driven content. Participating

schools commit to schoolwide approaches that include LGBTQ youth in planning, development and implementation. This strategy helps to target inequitable health outcomes among LGBTQ students related to bullying and depression. The training is facilitated by an expert in this area who also provides follow-up support to schools as they move forward in their efforts. Both the workshop and accompanying guidebook are entitled, *A Silent Crisis: Creating Safe Schools for Sexual Minority Youth.*

To strengthen protective factors against bullying and suicide, schools are working to improve their school climate, increase school connectedness and bolster efforts at addressing the needs of the whole child. School health professionals throughout Michigan are promoting use of the whole child approach through the Whole School, Whole Community, Whole Child (WSCC) framework. Through this lens, schools address the multi-faceted health needs of all students in order to become humane places for everyone, which leads to equitable outcomes. This approach acknowledges the effectiveness of a comprehensive approach in which multiple components work together to address bullying prevention on a more global, whole school level in order to create effective change throughout the entire school system.

Objective B: By October 2025, provide 1,050 schools with guidance on state laws and model policies on bullying prevention with protections for LGBTQ youth.

Michigan's Public Act 241 of 2011, or Matt's Safe School Law, mandates that schools develop a district policy and submit that policy to the Michigan Department of Education. The law includes multiple components, based on best practices, required to be included in the policy. However, many school districts do not have a full understanding of the law and, as a result, do not fully implement it or understand its importance. Regional school health coordinators work with every district in their region and are aware of districts that need further education and support on Michigan's laws and model anti-bullying policy. They report that many schools do not understand the state laws related to bullying in schools and that many are not aware of the importance of having and implementing a local, district level anti-bullying policy. Policies are often in place, as required by law, but not fully implemented. The school staff response to bullying and staff role modeling remains varied and too often unhelpful and even harmful. School staff understand that it is imperative to intervene when bullying occurs, but surveys show that many feel ill-equipped to do so.

For legislation to be effective as a means of decreasing student exposure to bullying and cyberbullying, it is necessary to ensure that the requirement for schools to adopt (and fully implement) policies at the local district level is being met. Regional school health coordinators will receive training to prepare them to work with their local schools to provide guidance on Michigan law and policy related to anti-bullying. Coordinators will be supported with follow-up technical assistance from both MDHHS and MDE staff.

Michigan's State Board of Education (SBE) has a model anti-bullying policy in place to help school districts meet the law, as well as add components to their policies to make them even more robust. While Michigan is a local control state—meaning the SBE Model Policy is a recommendation for schools rather than a requirement—the policy is in place to help school districts understand what should be included in a comprehensive bullying prevention policy.

To further create awareness and understanding in the education community and among stakeholders a session at the Child, Adolescent and School Health (CASH) conference will be provided on bullying prevention in Michigan. The session will focus on the laws in Michigan and why adopting, and fully implementing, the complete model anti-bullying policy is an essential component of anti-bullying efforts. Participants will be guided in the process of fully implementing each component of a model policy.

An additional strategy for promoting knowledge and understanding of PA 241 and the SBE Model Anti-Bullying Policy will involve collaboration with MDE on dissemination of guidance through existing work groups, committees,

coalitions and contacts with stakeholders.

Objective C: Explore anti-bullying campaigns for CSHCS and determine goals for anti-bullying initiatives in Michigan.

According to the 2018 National Survey of Children's Health, 66.9% of CSHCN with more complex health needs in Michigan reported being bullied compared to 43.2% of non-CSHCN youth. For these CYSHCN, bullying creates stress which can impact their physical and mental health. The first strategy for this objective will be for the CSHCS Division to create a subcommittee consisting of CSHCS staff, Family Center Staff, other family representatives, and the Family Center Youth Consultant. This committee will be responsible for identifying bullying issues specific to CYSHCN, prioritizing identified issues, and developing initiatives to address these issues. The CSHCS Advisory Committee (CAC) will provide oversight to the subcommittee. The second strategy for this objective will be to conduct a focus group with CYSHCN and their parents. Results from the focus group will help to identify issues and prioritize initiatives. The Family Leadership Network (FLN) will be a partner in this work. The FLN will provide input on documents and resources that are developed by the subcommittee. Once initiatives are finalized, FLN, CSHCS, CAC and the Family Center will help to share the resources across the state.

Immunizations – Adolescents (FY 2021 Application)

Based on the 2020 Title V needs assessment, the state performance measure (SPM) created in 2015 was retained, which is the "Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus (HPV) vaccine." In the 2020 needs assessment, when asked "Which of the following healthcare-related needs are most often unmet among the families you serve?" 37.8% of respondents across population domains identified immunizations as an unmet need. The need was identified as highest among respondents who serve CSHCN (46%) and children and adolescents (40.6%). The forces of change assessment identified an increasing focus on individual choice versus community benefits (including vaccine refusal) as a factor that impacts population health. However, the health status assessment identified positive progress: Michigan has improved the percentage of adolescents receiving at least one dose of the HPV vaccine almost every year since 2012 (NIS-teen, 2012-2017). Additionally, the gap in vaccination rates between male and female adolescents is shrinking as the HPV vaccination rate for both groups improves. The Title V Program therefore felt it was important to retain this SPM to continue building on the state's progress.

The HPV vaccine has the potential to save thousands of lives from HPV-related cancers. Yet parental vaccine hesitancy persists, as evidenced by the fact that Michigan continues to have some of the highest vaccine exemption rates for children in the country. Michigan has made progress increasing the uptake of HPV vaccination for adolescents, but more progress is needed. Since 2014, Michigan has increased the coverage rate 25%; however, only 52.4% of adolescents between the ages of 13 and 18 years of age currently have completed the HPV series. The Healthy People 2020 goal is at least an 80% HPV vaccine coverage rate for adolescents in this age range. Data from the Michigan Care Improvement Registry (MCIR) show that the completion rate of females in the same age group is 53.9% while the rate for males is 51.0%. One goal of the MDHHS Immunization Program is to encourage the HPV vaccination at 11-12 years of age when it is routinely recommended. Data from the MCIR show that only 39.7% of adolescents have received a completed HPV series by 13 years of age. This is far short of the desired immunization level since it is routinely recommended at this younger age.

As discussed in the Child Health section, the Division of Immunization operates the MCIR. MCIR can forecast needed doses of vaccine for all children in the system. Data from the MCIR show that 76.9% of adolescents 13-18 years of age who reside in Michigan have received the routinely recommend 132321 series. The 132321 series represents 1 dose of Tdap vaccine, 3 polio doses vaccine, 2 doses of MMR vaccine, 3 doses of hepatitis B vaccine,

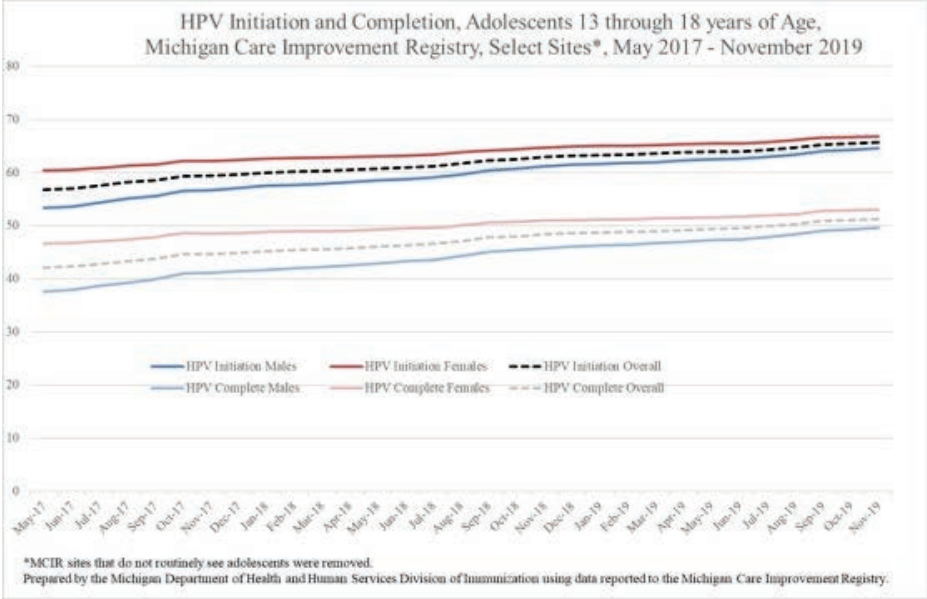
2 doses of varicella vaccine, and 1 dose of meningococcal vaccine. When a complete series of HPV vaccine is added to the same series, the rate drops to 43.1%.

Objective A: By 2025, increase the percentage of adolescents who have completed the HPV series to 64%.

In 2014, the Immunization Program received grant funding to increase HPV immunization rates for adolescents in Michigan. At the beginning of the grant period, the HPV coverage rate was 18% for all adolescents (male and female) 13 to 18 years of age. The Division of Immunization used most of the funding to distribute notifications to parents of adolescents 13 to 18 years of age who were overdue for one or more doses of HPV vaccine. Given the impact of this strategy, in FY 2021 the Immunization Program will continue to seek funding for and use this strategy to increase adolescent HPV immunization rates.

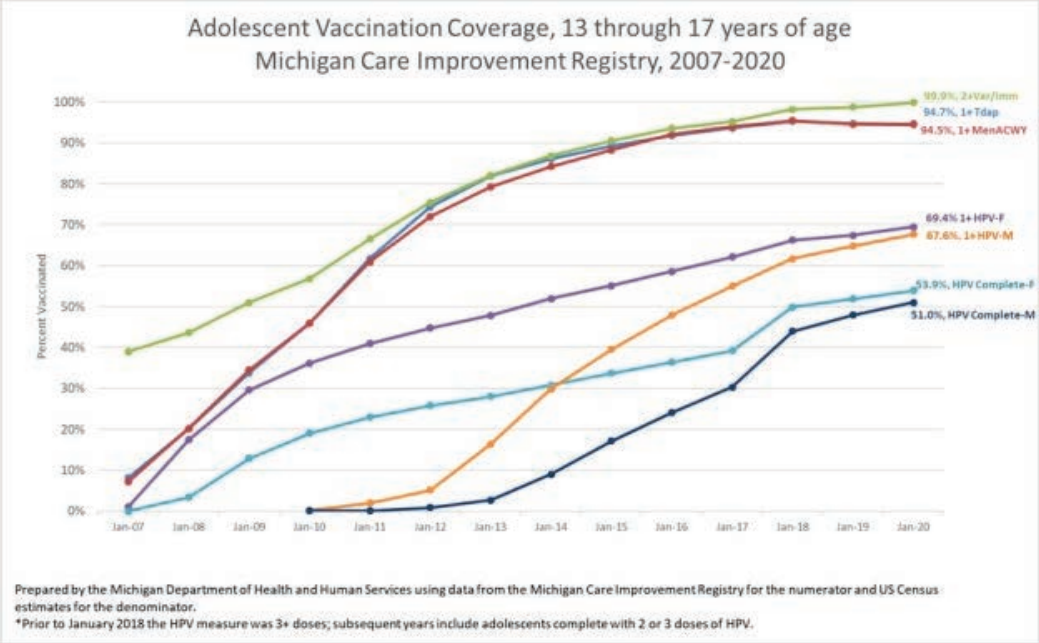
In Michigan, 68.5% of the adolescents 13-18 years of age have initiated the HPV series but only 52.4% have completed the series as illustrated in Figure 1. The Immunization Program plans to send out notices to each adolescent who has initiated the HPV series to encourage them to complete the vaccination series. It is anticipated that approximately 40,000 notices will be sent to the parents of these adolescents.

Figure 1. HPV Initiation and Completion Rates for Adolescents



Data from Figure 2 show that adolescents are seeking other routine immunizations as rates for Tdap and MenACWY are nearly 95% but one dose coverage for HPV vaccination is only 68.5% for males and females combined. This is nearly a 30% difference between vaccination rates which indicates a missed opportunity to vaccinate. Immunization providers see adolescents for vaccine visits and assure they are receiving other recommended vaccines and are therefore missing the opportunity to provide all needed vaccines, including HPV vaccine.

Figure 2. Adolescent Vaccination Coverage



The Immunization Program is also partnering with the American Cancer Society to form a stakeholder group. This stakeholder group is made up of representatives from several organizations including the Michigan Pharmacist Association, Karmanos Cancer Center, Michigan Cancer Consortium, and representatives from some health systems. The group is tasked with creating a plan to increase awareness about the importance of HPV vaccine in an effort to reduce cancers by increasing vaccination rates in Michigan. The group will meet on a quarterly basis with the intent to expand the group to include a broader set of partners. These larger groups will meet semi-annually.

MDHHS has partnered with several large health systems to increase awareness and vaccination levels for HPV vaccine. An HPV summit is planned in 2021 to bring together large immunization practices that have low immunization rates along with the partnering health systems. MDHHS plans to continue to work with the health systems throughout 2020-2021 to solidify plans that health systems can put in place to increase HPV rates.

An additional strategy for the Immunization Program is to continue partnering with the cancer programs working toward a common goal of increasing HPV coverage rates and decreasing the incidence of cancers caused by HPV. The Division of Immunization has partnered with these programs to promote the message about cancer prevention using social media and public advertising.

Objective B: Increase outreach to adolescent immunization providers with low immunization rates.

In FY 2021, the Division of Immunization epidemiologist will generate a monthly list of all immunization providers submitting data to MCIR that are vaccinating adolescents. The list will show how many adolescents are being seen by the practice and how many adolescents are receiving all needed vaccines. MDHHS staff will review this list and identify the largest providers with the lowest immunization rates and reach out to those providers. Follow-up will include providing comprehensive Quality Improvement reports and working with the practice to develop a plan to increase immunization rates. Through direct outreach to the provider, MDHHS will have the opportunity to customize a practical quality improvement plan to help improve immunization rates as well as the quality of care. The data will also be used to identify providers that are doing outstanding work on assuring all their adolescent patients are receiving the HPV vaccine. The Division of Immunization will recognize those practices achieving high immunization rates by providing Certificates of Excellence for their successful work. The Immunization Program will also educate providers on the importance of HPV vaccination and the HEDIS measures. These measures will assess a) the

number of adolescents who have completed the HPV series by 13 years of age and b) the number of adolescents who have completed the vaccine series according to the schedule which is to vaccinate at 11-12 years of age.

The Division of Immunization is changing the focus for how it evaluates completion of HPV vaccinations when educating provider offices. Rather than focusing on the completion rates for 13-18 years of age, more focus will be on adolescents who are complete at 13 years of age. This focus is to bring awareness in the provider office on timely vaccinations since all children should have completed the HPV vaccination series by 13 years of age.

Past experience indicates that clinic staff within provider practices tend to overestimate the immunization rates for the practice. Feedback to provider practices based on MCIR data to identify actual immunization rates is insightful and enables the practice to consider ways to improve how vaccines are promoted and administered. It may be as simple as making sure vaccines are assessed and offered at every encounter. The Immunization Program has made it routine to provide feedback to local health departments on their immunization levels using county report cards. Report cards are posted on the MDHHS website and provide immunization rates by county along with rankings. In the upcoming year, the Immunization Program will extend this concept to Vaccine for Children enrolled providers to create report cards for each of the larger practices in Michigan.

The Forces of Change assessment in the 2020 needs assessment revealed that for some racial and ethnic groups, cultural barriers (such as historical trauma, language or norms) may impact accessing mainstream health care. The System Capacity assessment also indicated that the MCH system has an opportunity for improvement in working with providers to establish trust with patients, especially minority families. To address these concerns related to health equity and access to care (including vaccinations), in FY 2021 the Division of Immunization will focus on working with providers in the Detroit area, where overall immunization rates lag state rates. The Division will assess possible strategies for engaging families and communities in the vaccine dialogue. As discussed in the child health domain, seeking expertise from families and consumers can help MCH systems and providers identify barriers to vaccine uptake and create vaccination messages that are culturally sensitive and linguistically appropriate, which may include different messages targeted to different population groups or geographical regions.

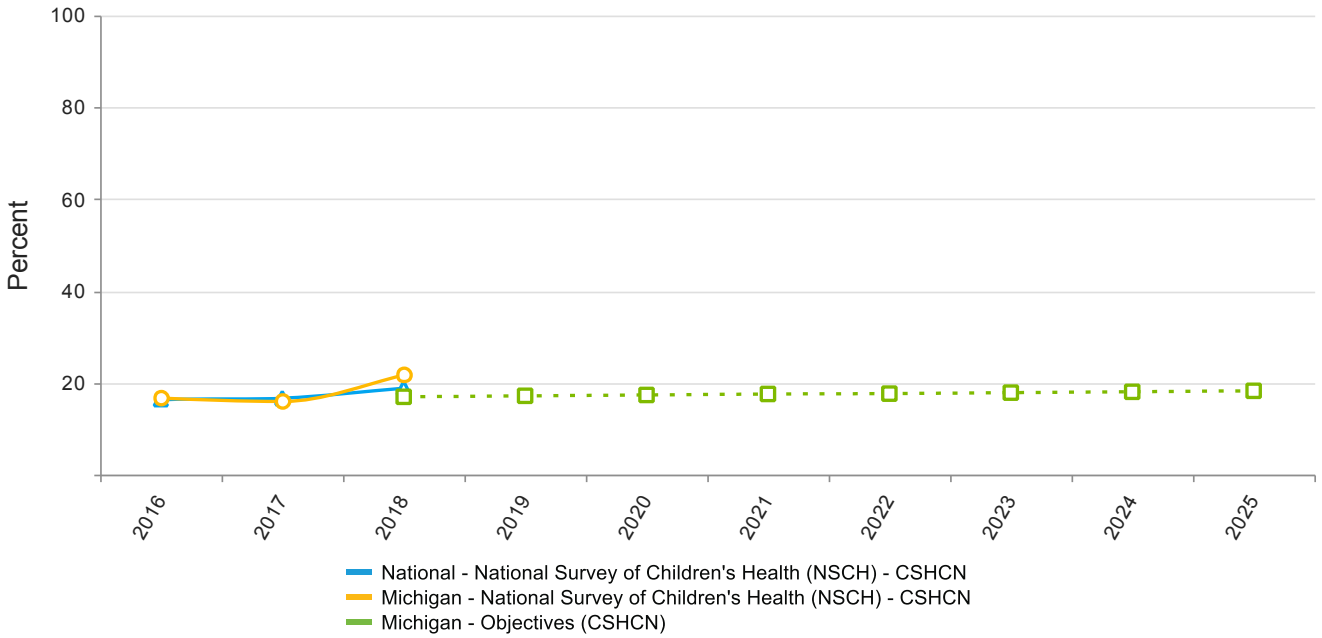
Children with Special Health Care Needs

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2017_2018	15.9 %	NPM 12

National Performance Measures

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care
Indicators and Annual Objectives



NPM 12 - Children with Special Health Care Needs

Federally Available Data				
Data Source: National Survey of Children's Health (NSCH) - CSHCN				
	2016	**2017**	**2018**	**2019**
Annual Objective			17	17.2
Annual Indicator		16.7	16.0	21.6
Numerator		32,776	34,325	48,634
Denominator		196,702	215,008	225,148
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	17.4	17.6	17.7	17.9	18.1	18.3

Evidence-Based or –Informed Strategy Measures

ESM 12.1 - Percent of CSHCS clients age 18 to 21 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective	40	43	46
Annual Indicator	52.5	49.9	46.7
Numerator	1,705	1,725	1,787
Denominator	3,246	3,459	3,828
Data Source	CSHCS database, Medicaid Claims, UM Provider Datab	CSHCS database, Medicaid Claims, UM Provider Datab	CSHCS database, Medicaid Claims, UM Provider Datab
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	49.0	52.0	55.0	58.0	61.0	64.0

State Performance Measures

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		89.9	90.9	91.9
Annual Indicator	88.1	89.1	88.9	88
Numerator	14,253,020	20,556,206	14,678,590	10,365,782
Denominator	16,176,800	23,074,740	16,507,392	11,783,520
Data Source	CAHPS	CAHPS	CAHPS	CAHPS
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	92.9	93.9	94.9	95.9	96.9	97.9

State Action Plan Table

State Action Plan Table (Michigan) - Children with Special Health Care Needs - Entry 1

Priority Need

Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they learn and live

NPM

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care

Objectives

A) By 2025, increase the percent of CYSHCN ages 12 and older receiving services necessary to transition from pediatric to adult health care from 21.6% to 25%

B) By 2025, increase by 10% the number of health care professionals who have received training on transition from pediatric to adult health care

C) By 2025, increase by 10% the number of partner organizations that reach the next level on the Got Transition “Current Assessment of Health Care Transition Activities”

Strategies

A1) Expand the school wellness center learning collaborative, a program designed to promote health care transition to students, grades 9-12, through school-based clinics A2) Increase the delivery of family-centered transition educational efforts by utilizing the Family Center and Family Center Youth Consultant to develop and distribute information, resources and trainings to families and family advocate organizations throughout the state A3) Work with family partners to create and implement a marketing plan to promote the Transition to Adulthood online module

B1) Design, implement and promote online transition courses and other resources to physicians, nurse practitioners, physician assistants, registered nurses, social workers and other health professionals B2) Continue to support the HRSA CYE grant partners to improve transition for children and youth with epilepsy in rural communities

C1) Adopt and implement the “Current Assessment of Health Care Transition Activities” with partners C2) Work with U of M CHEAR to identify a set of indicators to measure transition outcomes C3) Compile and publish scorecards to assist partner organizations

ESMs	Status
ESM 12.1 - Percent of CSHCS clients age 18 to 21 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider	Active

NOMs
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

State Action Plan Table (Michigan) - Children with Special Health Care Needs - Entry 2

Priority Need

Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they learn and live

SPM

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty

Objectives

A) By 2025, increase the percentage of CSHCS CAHPS' respondents who rate their health care with a top box score of 9 or 10 from 71.9% (2019) to 75%

B) By 2025, increase by 10% the number of meaningfully engaged community partners (families, youth, LHDs, CAC members, contractors, clinic sites, health care providers, other professionals, etc.) to improve knowledge of the CSHCS program

C) By 2025, improve the percentage of CSHCN who report receiving care in a well-functioning system from 17.8% to 20.3%

Strategies

A1) Continue enrolling children with special needs into the medical care and treatment benefit, which provides payment for medical care and treatment related to the child’s qualifying condition A2) Expand and/or enhance the capacity of specialty clinics to assure the delivery of patient-centered, family friendly care through CSHCS sponsored multi-disciplinary team clinics and Field Clinics A3) Expand and support the use of telemedicine to improve access to specialty care in rural and underserved areas A4) Improve the delivery of care services for Michigan’s most medically complex children

B1) Ensure all families have access CSHCS resources and that these resources are understandable and relatable B2) Continue to build a coordinated and systematic approach to family engagement, through the issuance of camp and conference scholarships; provision of resource and referral services; and utilization of the Youth Consultant to maximize outreach to adolescents B3) Develop and implement a comprehensive communication/outreach plan to improve awareness of CSHCS among providers, partners and families, to increase enrollment of eligible children with qualifying conditions B4) Maintain a competent workforce that is knowledgeable about the program and able to assist families in understanding their child’s condition and how to access the system of care in place

C1) Develop a comprehensive evaluation plan to measure CSHCS’s capacity and ability to provide effective, efficient and high-quality services to clients C2) Implement a provider survey to better understand provider expectations, experience, and underlying biases regarding systems of care for CYSHCN

CSHCN Overview

Children with special health care needs (CSHCN) include children with a wide variety of physical, emotional and behavioral conditions, some of which qualify to receive support through the Children's Special Health Care Services (CSHCS) program within MDHHS. CSHCS annual program enrollment has grown to approximately 50,000 beneficiaries.

The CSHCS Division is housed in the Bureau of Medicaid Care Management and Customer Service. The CSHCS Division includes the Family Center for Children and Youth with Special Health Care Needs (Family Center), which is parent-directed and designed to support and connect families with the care they need using a family-centered approach. CSHCS also includes sections focused on customer support, policy and program development, quality and program services, and the special needs fund. For the CSHCS population, Title V funds are primarily used to support medical care and treatment for CSHCN. Other federal funds that support CSHCS include a HRSA Epilepsy grant and Medicaid. Key partners include Medicaid, local health departments (LHDs), service providers, CSHCN and their families, the CSHCS Advisory Committee, the Family Leadership Network, Michigan Family to Family Health Information Center, and Michigan Family Voices.

At the local level, in addition to direct CSHCS funding, LHDs can elect to expend additional LMCH funds for CSHCN. In FY 2019, three LHDs selected NPM 12 (transition) expending 0.9% of LMCH funds to identify enrollees of transition age and provide education and plans of care for gap-filling transition services. Additionally, three LHDs expended 1.2% of LMCH funds to address SPM 4 (medical care and treatment for CSHCN) by providing gap-filling case management services, assistance with CSHCS enrollment, outreach and social media activities.

Michigan's approach to improving the health and well-being of CSHCN focuses on access to continuous health coverage and benefits. Services offered are patient-centered/family friendly, culturally appropriate and coordinated. These attributes are reflected in all CSHCS services, including those specific to health care transition. In the new five-year cycle, the CSHCS program will also start to work on bullying prevention for CSHCS. At the local level, in addition to direct funding from CSHCS, LHDs can elect to expend additional LMCH funds for CSHCN. Three LHDs selected NPM 12 (transition) expending 0.9% of LMCH funds to identify enrollees of transition age and provide education and plans of care for gap-filling transition services. Additionally, three LHDs expended 1.2% of LMCH funds to address SPM 4 (medical care and treatment for CSHCN) by providing gap-filling case management services, assistance with CSHCS enrollment, outreach and social media activities.

According to the 2017-2018 National Survey of Children's Health (NSCH), 19.8% of Michigan's children have special health care needs, as compared to the national average of 18.5%. However, more than a third of non-Hispanic Black children (34.5%) were identified with a special health care need. Additionally, only 15.9% of Michigan parents of children with special health care needs report that their children receive care in a well-functioning system.

Transition (FY 2019 Annual Report)

The 2010 needs assessment found that 41.2% of CSHCN received the services needed for transition to adult health care, which falls below the Healthy People 2020 target. In response, Michigan adopted "Percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care" (NPM 12) as a priority focus. Building on 2018, three objectives were identified to increase awareness of transition. The strategies associated with these objectives target local health departments (LHDs), medical providers, adolescents and families. In 2019 a strategic plan was created to improve transition services across the state. Provisions were incorporated into Medicaid Health Plan (MHP) contract language to better align with *Got*

Transition's Six Core Elements of Transition. An AMCHP replication project was completed that incorporated *Got Transition*'s Six Core Elements into a school-based health center resulting in a 36% improvement in the delivery of transition services. Finally, CSHCS received a $400,000 grant from HRSA to continue transition work with Children and Youth with Epilepsy (CYE).

Challenges, such as limited information technology resources, slowed implementation of some strategies. Successful implementation of other strategies was accomplished through collaboration with national and state MCH programs. CSHCS worked with MHPs, LHDs, the MDHHS Child and Adolescent Health (CAHC) section, HRSA-funded CYE grant participants, *Got Transition*, AMCHP's Replication Grant team, and other MCH-funded organizations such as Florida Health and Transition Services (HATS).

Objective A: By 2020, increase the number of youths who have a plan of care that includes transition planning, beginning at age 14, by 4.1%.

The first strategy is to achieve this objective is to provide transition technical assistance to LHDs. Technical assistance includes an orientation transition webinar for ongoing staff education; monitoring transition services provided through LHDs; and technical assistance workshops addressing transition and self-determination. CSHCS assists LHDs as they work with CYSHCN who receive private duty nursing and helps to facilitate the transition to a waiver program to ensure continued service availability for families. The CSHCS transition specialist serves on the Michigan Interagency Transition Taskforce to represent the CYSHCN population and distributes new information to LHDs to improve their knowledge and services.

The transition specialist also monitors transition services billed by LHDs through the CSHCS Healthcare Automated Support Services system. The number of unduplicated clients receiving care coordination/case management services increased from 10,669 in 2017 to 11,523 in 2019. Care coordination/case management services that included health care transition increased from 8% in 2017 to 12.8% 2019.

The second strategy was to create an infrastructure of automated monthly letters to CSHCS enrollees. Currently, clients/families receive automatically generated letters between the ages of 16 and 21. The letters highlight important topics and encourage clients/families to reach out to LHDs. To align with national recommendations, the transition specialist is working to start the automated letters at age 14. A committee was convened with LHD representatives, parents of youth with special health care needs, the Family Center Youth Consultant, and internal staff to establish a 14-year-old letter. Work continues to finalize and integrate the letter and establish a report to notify LHDs when their clients receive letters.

The third strategy for this objective was to utilize CC360 to improve use of shared care plans across partners such as LHDs, MHPs, Community Mental Health (CMH), the foster care system, and others. CC360 is an integrated care management system designed to improve the coordination of services delivered by multiple entities. A committee evaluated opportunities for LHDs to use CC360. The committee reviewed the data use agreement process, interviewed LHD health officers regarding their electronic medical record, and convened with other MDHHS leaders regarding their experience with CC360. This exploratory process has resulted in better-informed decision making. While CC360 offers potential to LHDs, in its current state it restricts access to dually enrolled Medicaid/CSHCS enrollees. As a result, CSHCS will continue to explore other systems, like those offered through the Health Information Networks which offer tools for referral sharing and shared plans of care.

For the final strategy, CSHCS continues to utilize the MDHHS Data Warehouse to track when CSHCS clients transfer care from a pediatric to an adult provider. Through a contract with the University of Michigan's Child Health Evaluation and Research (CHEAR) unit, CHEAR developed an Evidence-informed Strategy Measure (ESM) to provide ongoing analysis and support related to the CSHCS program. The measure is based upon selected groups

that include cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology. The measure combines data from three sources: 1) the CSHCS database; 2) the CHAMPS (Medicaid Claims) database; and 3) University of Michigan's provider database which includes providers statewide. Use of this measure assists the CSHCS program in knowing what percentage of clients completed their transfer of care by the age of 18. In 2019, University of Michigan CHEAR reported that 46.7% of targeted clients had transferred their care from a pediatric provider to an adult provider. This percentage fell slightly from 2017. The decrease can be explained, in part, by a change in age by which transition should be completed. In 2017, the University of Michigan health system was targeting 18 years for transition completion and in 2019, the targeted age was 21 years.

Objective B: By 2020, increase the number of youth and families by 50 that are aware of and understand the transition to adulthood process.

The first and second strategy of this objective were combined for more efficient implementation. In 2019, CSHCS established transition services within MDHHS school-based and school-linked health centers across the state. MDHHS has a network of more than 100 Child and Adolescent Health Centers (CAHCs) throughout Michigan. These centers provide services to both CSHCS and non-CSHCS students. Programs are staffed by mid-level practitioners, social workers and medical professionals and deliver services focusing on primary, preventive and early intervention health care. Clinic staff work collaboratively with students, parents, school personnel, LHDs, and the human service community to assure that students have what they need to be healthy.

Thanks to a Best Practices Technical Assistance Replication Project through the Association of Maternal and Child Health Programs (AMCHP), Michigan created a project to replicate components of the "Using the Six Core Elements of Health Care Transition in Medicaid Managed Care" project from *Got Transition* to advance transition work in the one of its school-based health centers.

The project began in October 2018 with a finalized work plan; an established implementation team; and an established administrative team with representation from *Got Transition*, Health Department of Northwest Michigan, and Blue Devil Wellness Center. Utilizing *Got Transition* experts, the "Current Assessment of Health Care Transition Activities" survey was completed. Identified areas of strength were spending time alone with students and providing students with information regarding adult doctors. Additionally, elements that could result in the most improvement in transition activities were identified. The transition policy, "Finding an Adult Doctor" flyer, medical care plan and summary, and the transition readiness assessment were customized and presented to the Youth Advisory Committee. *Got Transition* assisted with establishing procedures for implementing the customized documents.

Data collection began at the end of February 2019. Clinic staff worked with the health occupations instructor to secure a four-hour block of class time to provide education on transition, complete the Medical Care Plan and Summary, complete transition readiness assessments and review the Online Transition to Adulthood course. As a result, 48 students piloted the customized documents and provided feedback on the Online Transition to Adulthood module.

As part of the pilot, the online adolescent transition course was shared with participating students. The online adolescent transition course introduces youth to the importance of transitioning from pediatric to adult providers. The course was reviewed by the Family Center youth consultant and 48 junior and senior students from a school-based health center pilot. When surveyed, 80% of respondents indicated they learned something new from completing the online module. Students reported concerns about the overall length of the course and the length of section videos. Work will continue in 2020 with edits to the course, an official launch and implementation of a marketing plan.

Many lessons were learned throughout the pilot, including:

- Transition planning in schools needs to occur earlier in the school year to allow time for intervention.
- Whenever possible, clinic staff should seek relationships with teachers to coordinate education within the classroom.
- Clinics should utilize the validated transition readiness assessments provided by *Got Transition*.

In June 2019, *Got Transition* staff completed the final "Current Assessment of Health Care Transition Activities" survey again which demonstrated a 36% improvement in scores. The clinic demonstrated improvement in establishing a transition policy and engaging youth in the transition process.

The results of the pilot were shared with stakeholders including the MDHHS CSHCS division, the CSHCS Advisory Committee, the CAHC leadership team and the CAHC clinic coordinators. The transition specialist utilized the pilot experience to create a toolkit for implementing transition services in school-based health centers. The transition specialist and Family Center youth consultant presented at the CAHC Summer Conference highlighting the project, providing education to CAHC coordinators, and asking for volunteers for a future learning collaborative. In addition, the pilot was featured in a poster presentation at the 2019 AMCHP Conference. Work on this strategy will continue with the goal of replicating this project in diverse clinic types and geographic locations. Once implemented and evaluated, staff hopes to submit to AMCHP for consideration as a 'promising practice.'

In 2019, the transition specialist also collaborated with Michigan Family Voices to provide a presentation to 23 youth with special health care needs and their families.

Objective C: Increase provider awareness and understanding of the transition to adulthood process by 25% through the establishment and offering of a free online Medical Transition course.

The first strategy was to review University of Florida's "Health Care Transition Training for Health Care Professionals" (through Florida HATS) and establish a plan for replicating a similar model in Michigan. The University of Florida's training is based on evidence-based materials from *Got Transition* and includes coding and reimbursement information and condition-specific tools from the American College of Physicians. In 2019, the transition specialist established a relationship with the Michigan Chapter of the American Academy of Pediatrics to promote the course. The transition specialist reviewed each course and completed a review of other resources including programs from *Got Transition* and Vermont Family Network. A vendor was identified to host the courses and provide continuing education credits. Work will continue in FY2020.

The second strategy was accomplished through the HRSA CYE grant. The goal of Michigan's CYE project is to improve access to quality health care for CYE. Using a quality improvement learning collaborative framework, primary and specialty care project clinic sites incorporated best practice transition infrastructure. The project will provide training and education, community outreach and user-friendly technologies to help clinic sites develop initiatives that support self-management, care coordination, and transition of adolescents to adult providers. The cumulative effect of these initiatives impacts the system of care and results in transition services being provided in a standardized way. According to clinic site assessment using the *Got Transition* "Current Assessment of Health Care Transition Activities," 100% of participating project clinical sites have implemented at least one element of a transition infrastructure, which meets the goal for the project.

CYE grant partners reached out to the Michigan School Health Coordinators network to distribute *Got Transition* materials and messaging. The Family Center and Epilepsy Foundation of Michigan staff collaborated to conduct 39 community outreach events and trained 72 schools. Project training efforts reached 10,750 individuals including 347 local public health staff, 1,299 parents, 4,224 school staff, 1,735 health professionals, 3,022 general community

members, and 92 youth.

Throughout the learning collaborative, teams received health care transition training. The Project Evaluator developed a tool to guide teams through a process of implementation. The tool focused on health care transition policy, readiness assessment, and transfer of care. The project's health care transition AIM statement was, "By August 2019, 50% of the sites will reach a level 3 on at least 3 of the core elements". In November of 2018, the AIM statement was met with 71% of clinics achieving at least a score of 3 on at least 3 of the *Got Transition* Six Core Elements.

Other quality improvement activities for the CYE grant focused on consistently providing time alone between adolescent patients and providers. While this is common practice for primary care providers, specialists were not offering time alone. The youth consultant shared her own experience with not having time alone with her specialist. Hearing this perspective created a better understanding of the impact this has on successful health care transition. As a result, specialists are looking for opportunities to offer time alone with their adolescent patients. The project's success resulted in Michigan receiving a 4-year Transforming Health Care for Children and Youth with Epilepsy Grant in August of 2019.

Medical Care and Treatment (FY 2019 Annual Report)

Michigan's SPM for the CYSHCN population measures the percent of CYSHCN enrolled in Children's Special Health Care Services (CSHCS) that receive timely medical care and treatment without difficulty. This measure is aimed at addressing Michigan's 2015-2020 state priority need to reduce barriers, improve access, and increase the availability of health services for all populations. CSHCS was created to find, diagnose, and treat children who have chronic illnesses or disabling conditions. The mission of CSHCS is to enable children to have improved health outcomes and enhanced quality of life.

CSHCS accomplishes this goal by reducing barriers to medical care and treatment and minimizing financial burden for families. Approximately 36% of Michigan's Title V funding is used for medical care and treatment for CSHCN. CSHCS covers specialty care, pharmaceuticals, and treatment costs related to a client's qualifying condition. A review of responses to two survey questions used by the Consumer Assessment of Healthcare Providers and Systems (CAHPS) to measure the "percent of CYSHCN enrolled in CSHCS that receive timely medical care and treatment without difficulty" (SPM 4) showed improvement from 88.1% in 2016 to 88.9% in 2019. Respondents gave top box ratings of 'usually' or 'always' to questions related to getting care and treatment when needed.

Challenges for CSHCS include responding to rising pharmaceutical costs, a lack of information technology resources, and provider shortages. CSHCS's response to these challenges is to create cost containment strategies, explore telemedicine options, and develop an eligibility determination process for high-cost drugs.

Objective A: By 2020 reduce barriers to medical care and treatment by minimizing financial barriers from the increased medical services associated with the child's special need, as measured by a 5% increase in the Insurance Premium Benefit Assistance Program.

The first strategy is to provide payment assistance for specialty care and treatment related to a qualifying condition. CSHCS continues to enroll CYSHCN in the medical care and treatment benefit. CSHCS is the payer of last resort and requires that families follow their primary and secondary insurance rules. Families that may be eligible for Medicaid are required to enroll. Those who do qualify for Medicaid are moved into a Medicaid Health Plan (MHP) if deemed appropriate.

CSHCS medical care and treatment benefit covers more than 48,000 individuals annually with more than 2,700

qualifying diagnoses. Approximately 26% of enrollees have more than one severe, chronic health condition. Families receiving the CSHCS medical care and treatment benefit receive care coordination through LHDs, which provided more than 19,000 care coordination/case management services last year.

Transportation concerns increase stress levels for families of CYSHCN. The 2019 CAHPS composite scores regarding transportation indicated 11.3% of respondents requested transportation assistance from CSHCS. When asked to rate if the assistance met the needs of their family, 78.7% of respondents shared that the assistance "Usually" or "Always" met the needs. LHDs requested transportation assistance for more than 1,000 unduplicated clients in FY 2019. CSHCS provided $671,000 to vendors to provide transportation for CSHCS clients and $389,000 to families to support transportation for medical needs. These funds primarily impact Title V families, as Medicaid or MHP families receive the Medicaid transportation benefit.

The Family Center for Youth with Special Health Care Needs (Family Center) alleviates financial burden associated with ongoing education through two scholarships. The summer camp scholarship provides up to $250 for CYSHCN to attend a licensed Michigan summer camp. In 2019, 58 summer camp scholarships were distributed. The conference scholarship is available for parents and/or youth aged 14-26. Families can attend a conference to learn about medical advances and how to advocate for their child. Conferences provide the opportunity for parents and youth to connect with their peers, increasing the opportunity for social support. Scholarships are limited to one scholarship every two years per family. In 2019, 23 conference scholarships were distributed.

The second strategy relates to the Insurance Premium Payment Assistance Benefit (IPPAB). CSHCS offers IPPAB to eligible families who lack adequate financial resources to pay for the portion of their family's private or employer-based insurance premium specific to the eligible child. The IPPAB provides financial support to reactivate or maintain the family's private coverage. In 2019, the number of families qualified for the IPPAB increased to 152, surpassing the stated objective of a 5% increase. The strategy encompasses a study that was initiated in conjunction with the University of Michigan's Child Health Evaluation and Research Center (CHEAR) and the Commonwealth Fund. The study evaluates the numbers and characteristics of children receiving IPPAB, as well as its cost effectiveness. The project assesses predictors of program cost-effectiveness, identifies program benefits/disadvantages, and evaluates potential for expansion. The study is still in process.

The third strategy is for CSHCS to assess health disparities and inequalities for CYSHCN. In 2019, an initiative to compile data from multiple resources resulted in the creation of the "MI CSHCN Health Data Updates" report. The draft report includes programmatic, demographic, health status, socioeconomic, and health care delivery indicators. The report was utilized in the Title V five-year needs assessment and is being used to identify health disparities and inequalities for CYSHCN across the state. The report provides context and baseline information for ongoing work related to health equity and social determinants of health.

Objective B: By 2020, improve access to medical care and treatment by improving the systems of care for CSHCN clients, as measured by the CMDS patient satisfaction survey.

The first strategy is to improve the quality and effectiveness of CMDS clinics through the implementation of site reviews. CSHCS supports 27 CMDS clinics associated with seven different tertiary-care or university-based health systems. CMDS clinic types include: cleft lip/palate/facial, cystic fibrosis, diabetes/endocrinology, multiple handicap/disability (including myelodysplasia), pulmonary/severe asthma, myelodysplasia/spina bifida, hematology/oncology, centers for bleeding and clotting disorders (hemophilia), biochemical genetics, gastroenterology/nutritional deficiencies (CHIRP and liver clinics), systematic inflammation clinic, cardiology, and neurology. In 2018, CMDS clinics were reimbursed $475,398.17 related to 3,908 client encounters. In 2019, staff piloted a site review tool and completed site visits at three clinics. Site visits have been scheduled for all clinics

within a four-year cycle. The site visit team includes an Office of Medical Affairs (OMA) physician consultant, a Family Center representative, clinic development analyst, and LHD accreditation specialist. Clinic sites are evaluated on core staffing, shared comprehensive records, coordinated approach to meet multidisciplinary needs, referrals to other professionals, education for treatment/health promotion/disease prevention, family involvement, transition activities, plans of care, appropriate use of visit levels (initial comprehensive evaluation and basic/ongoing comprehensive evaluation), and appropriate billing. Additional focus is placed on health equity and transition services.

In 2019, working with the National Center for Care Coordination Technical Assistance, CSHCS laid groundwork for the adoption of the Pediatric Integrated Care Survey Tool. The survey, administered through Survey Monkey, is designed to be short and easy for clients to complete on their smart phones, at their convenience. The survey measures family experiences of care integration. In 2019, staff worked with the MDHHS compliance officer to determine the appropriate amount of demographic information to request which will enable stratification of data after collection. The survey will be implemented in 2020.

In 2019, CSHCS initiated a hospital focus group with Michigan's three large children's hospitals. The goal was to obtain feedback from the pediatric hospital systems on the CSHCS program and the systems of care for CYSHCN. The site visits provided CSHCS leadership an opportunity to educate hospital leaders on CMDS clinics and other CSHCS components and to garner feedback related to challenges hospitals face in addressing special health care needs of children. The site visits have led to improved relationships with key partners. This work continues into 2020.

In conjunction with the five-year needs assessment and the passing of the ACE for Kids act, CSHCS seeks to improve the systems of care for CYSHCN by evaluating the role palliative care plays in improving quality of life and containing costs. An internal committee is exploring options related to reimbursement and service delivery methods in order to assess the need and feasibility of offering a palliative care benefit through CSHCS. CSHCS is considering factors such as program components, staffing requirements, and reimbursement methodologies to determine what would result in cost savings and improved quality of life for clients/families. To assist in this process, CSHCS entered a partnership with University of Michigan's Partners for Children, a program that provides palliative care to chronically ill, severely limited children within a 100-mile radius of the University of Michigan. The goal of this partnership is to collect data to inform future payment and service models. This work will continue in 2020.

Lastly, CSHCS has adopted a quality improvement strategy which includes site visits to MHPs. As part of these visits, CSHCS staff will assess the quality of care offered to CSHCS enrollees through MHPs. In addition to CSHCS representatives, site visits are attended by Managed Care Plan division staff, Office of Medical Affairs (OMA) physician staff, and others depending on the focus for the year. In 2019, the team visited all 11 MHPS to discuss enrollment trends among each MHP's child and adolescent population (<21 years of age). Specific contract compliance activities related to durable medical equipment have been added to reviews. In the future, CSHCS will work with the Quality Improvement and Program Development Section within the Bureau of Medicaid Care Management and Customer Service to apply a health equity lens to CSHCS clients receiving services.

Objective C: By 2020, increase the availability of health services, particularly in underserved regions, through the utilization of telemedicine and community-based services.

The first strategy is to empower LHDs to assist their clients. This is accomplished through ongoing technical assistance and education. CSHCS provides significant support and training to LHDs. During the grant period, CSHCS provided 15 technical assistance sessions. In 2019, LHDs provided more than 19,000 direct care coordination and case management services to clients. Services covered advocacy, billing assistance, CSN Fund application assistance, community navigation, hospice, insurance premium payment benefit, outreach, plans of care,

private duty nursing, respite, service delivery, transition and transportation.

The second strategy is to form a community collaborative to foster coordination to understand the dual systems that are impacting CYSHCN. In 2019, CSHCS convened an interagency collaboration working to reduce barriers to supports and services experienced by children and families with complex medical and developmental/behavioral needs. Approximately 5,000 CSHCS-enrolled clients receive care from community mental health. Currently the collaboration is working to create documents that can be shared to increase awareness in both systems. Work will continue in 2020.

The third strategy is to explore ways to incorporate telemedicine into patient care. A committee was formed to inform a proposal that would allow for CYE to pilot home-based services. Working with its regional telehealth network, the committee reviewed standards and best practices of other states specific to platforms, privacy, security, redundancy and protocols. Implementation of the proposal is expected to occur in 2020, with the promulgation of new Medicaid policy and enactment of new Michigan legislation that allows delivery of telemedicine services within the home environment.

The fourth strategy is to enroll feeding clinic providers and assist them as they work to implement their programs per policy. In 2019, DeVos Children's Hospital and Michigan Medicine were enrolled as pediatric intensive feeding clinic programs. Clinics are being monitored to assure that they adhere to the bundled payment requirement. Work will continue in 2020.

Finally, in FY 2019 work continued on the implementation of the Family Leadership Network. Twenty parents were recruited (two from each prosperity region) and orientation sessions were held. The network provides guidance and feedback on programmatic issues, including planning and implementation of transition efforts, reviewing education materials, and helping design outreach strategies. This group ensures that CSHCS and Family Center work is patient-centered, culturally competent, educationally appropriate and inclusive.

Transition (FY 2021 Application)

Through the five-year needs assessment process, the state priority need to “Ensure CYSHCN have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they live and learn” was linked to NPM 12, the percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care.

Michigan data from the National Survey of Children’s Health (NSCH, 2016-17) supports this selection. In Michigan, 16.0% of CYSHCN reported they received services necessary to transition to adult health care. This is comparable to the 16.7% of CYSHCN nationwide who reported receiving these services. However, when CYSHCN with less complex health care needs are compared, Michigan data demonstrates an opportunity for improvement with 16.6% reporting positively compared with 20.3% reporting positively nationwide. Specific NSCH transition indicators reveal additional opportunities for improvement. For example, 17.9% of Michigan respondents reported they have an up-to-date written plan to meet health goals/needs and 20.8% discussed with their provider shifting to practices that treat adults. Several strengths were also found such as 74.7% of respondents reported their doctor worked with the adolescent to gain skills to better manage their condition and 57.4% of respondents reported their provider discussed their child’s health insurance coverage into adulthood.

Given these findings, three objectives were developed which focus on promoting awareness, developing skills and creating capacity for measuring improvement. Each objective targets areas of opportunity, while simultaneously addressing the state priority need. In addition, the objectives work in tandem to strengthen the Michigan Title V needs assessment pillars of improving capacity to achieve equitable health outcomes, engage families and communities and delivery culturally, linguistically and age-appropriate health education. Working in conjunction with a network of partners to address transition challenges for CYSHCN and their families, the strategies contained within the objectives reflect input from stakeholders at every level. CSHCS partnerships are varied and include local health departments, Medicaid Health Plans, school wellness centers, family advocacy organizations, and specialty providers. Title V funding is used to provide care coordination services through contracts with local health departments, which includes medical transition services. Transition is included as a Minimum Program Requirement during the LHD accreditation process. Transition objectives and strategies build on the local health department partnership, in conjunction with stakeholders, to improve awareness, provide training, and promote systematic change in the way transition progress is tracked and reported.

Objective A: By 2025, increase the percent of CYSHCN ages 12 and older receiving services necessary to transition from pediatric to adult health care from 21.6% to 25%.

Thanks to the support of a replication grant from the Association for Maternal and Child Health Programs (AMCHP), CSHCS completed a pilot program in 2019 to develop a process and toolkit for integrating transition programming into Child and Adolescent Health Centers (CAHC) school wellness centers. The first strategy for this objective is to expand the pilot to form a learning collaborative designed to promote health care transition in grades 9-12 through school clinics. Each year, CAHC-funded programs must implement a continuous quality improvement initiative that utilizes a Plan-Do-Study-Act (PDSA) cycle. The transition project meets these requirements. By expanding the pilot to additional schools, the goal is to formalize the toolkit and promote the process as an option to fulfill the Quality Improvement requirement.

For this strategy, the transition specialist will work with MDHHS CAHC state staff to replicate the pilot’s efforts in other school-based clinics, school-linked clinics and school wellness centers. Three to five additional clinics will be identified that represent diverse populations and have the capacity to implement the pilot. Each clinic will complete

Got Transition's "Current Assessment of Health Care Transition Activities" to identify their baseline. Teams will work together to customize documents for their clinics and will discuss how to effectively integrate transition programming into clinic workflow. The transition specialist will provide training specific to the concerns of participating clinics. Data collection will begin in the fall and will be collected monthly through the end of the school year. Along the way, clinic teams will participate in training webinars and conference calls to provide feedback on the process, ask for guidance and share ideas from other participating clinics, as well as successes. The transition specialist will document activities, collect data, and seek guidance from *Got Transition* as appropriate. Upon completion of the school year, clinics will once again complete a "Current Assessment of Health Care Transition Activities" as a post-test. Data compiled from these two data collection points will be compared and used to evaluate the project's success and identify future direction. Information from participating clinics and youth will also be collected to evaluate the project's effectiveness, and findings will be used to update the Transition Toolkit for School Wellness Clinics. Results will be shared with stakeholders including CSHCS and CAHC leadership and will be used to expand the project's reach.

The Family Center is an integral component of CSHCS in Michigan. The second strategy is to increase the delivery of family-centered transition educational efforts by utilizing the Family Center and Family Center Youth Consultant to develop and distribute information, resources and trainings to families and family advocate organizations throughout the state. This will include revising Family Center materials, including the Family Center's Family Guide, to reflect updated transition information.

The Family Center Youth Consultant provides a unique youth perspective on transition activities. The Youth Consultant will be involved with the school wellness center learning collaborative by providing insight on how to engage and expand the role of youth advisory committees in the project. The Youth Consultant will also review educational materials to ensure they are appealing, relevant and appropriate for their intended audience.

The transition specialist will work with the Family Center to provide training to parent mentors. Utilizing a train-the-trainer approach, parent mentors will receive training on topics such as guardianship, self-determination, self-advocacy, self-care and the importance of health maintenance. The transition specialist will work with the Family Center and Family Leadership Network to integrate transition training into annual meetings, as appropriate. On request, the Family Center provides trainings to local health departments and other family advocate organizations. By instilling knowledge and equipping others, Michigan is working to cast a broader net to reach as many families as possible with health care transition information, while still assuring consistent messaging and evidence-informed approaches are utilized.

The third strategy is to create and implement a marketing plan for the Transition to Adulthood online course. During FY 2019, CSHCS piloted the Adolescent Transition Online Course with 1) the Family Center youth consultant and 2) participants in an AMCHP transition replication pilot project within a school wellness clinic. Feedback received from student participants was incorporated into the online course.

With updates completed, the youth consultant, transition specialist and Family Center staff will develop a marketing plan for the Transition to Adulthood course. The purpose of the marketing plan is to make adolescents and their families aware of the course and the need for health care transition services. Benchmark data established at the end of 2018 will serve as a baseline for measuring the course's appeal and applicability. The course will be updated annually to ensure the information provided is age appropriate and linguistically appropriate, as well as culturally sensitive and relevant for youth.

Objective B: By 2025, increase by 10% the number of health care professionals who have received training on transition from pediatric to adult health care.

The first strategy for this objective is to design, implement and promote online transition courses and other resources to physicians, nurse practitioners, physician assistants, registered nurses, social workers and other health professionals. The training will be based on evidence-informed materials from *Got Transition*'s Six Core Elements. Through this training, participants will better understand how to:

- Establish a transition policy;
- Track and monitor transitioning youth and their activities;
- Assess transition readiness and orient adolescents to an adult practice;
- Develop a transition plan of care;
- Transfer care to an adult provider; and
- Assure the transfer is complete.

Course content will be determined by a group of internal stakeholders including a physician from the Office of Medical Affairs, an LHD nurse, and a social worker. The course will be piloted with the Office of Medical Affairs and an LHD. The transition specialist will then work with the communications team to develop a marketing plan to promote the online courses to physicians, nurse practitioners, physician assistants, registered nurses, social workers and other healthcare professionals. Evaluation data collected during the course will be used to monitor the course's effectiveness and participant satisfaction. The online courses will be reviewed annually and updated as needed.

The second strategy related to this objective will be to continue to support the HRSA CYE grant partners to improve transition for children and youth with epilepsy in rural communities. In the Title V needs assessment, stakeholders reported 1) a lack of access to specialty care providers in rural areas and 2) a lesser quality of care for those living in poorer, rural areas. Therefore, addressing health needs of CYSHCN in rural areas is one strategy to achieve equitable health outcomes across the population. By August 2023, the CYE project intends to increase by 75% the number of completed health care transition readiness assessments of youth (ages 14-22) with epilepsy within the participating clinics. To achieve this goal, the project will support implementation of transition readiness assessment tools and follow-up strategies among participating clinics. Each clinic team will identify the readiness assessment tool they would like to use and devise a process for implementing those assessments within the clinic flow. A QI project will be completed to determine how well their process works. The clinics will use a PDSA cycle with support from the Project Coordinator and the QI Leadership Team.

The project will support follow-up on transition topics through in-person and technology-enhanced options. Guided by the Family Center Youth Consultant, the Leadership Team will seek input from youth with epilepsy on technology-enhanced tools to support self-management. The Leadership Team, Youth Consultant, and Family Engagement Consultant will compile in-person training and online modules for transition topics and share with participating clinics. To support clinic sites, healthcare transition trainings will be offered to and conducted with community partners (schools, daycares, and health care professional groups) throughout the project. Specific trainings geared toward building self-care skills and independence among youth and families will be offered by the Epilepsy Foundation and Family Center throughout the project.

Objective C: By 2025, increase by 10% the number of partner organizations who reach the next level on the *Got Transition* "Current Assessment of Health Care Transition Activities."

A key component of Michigan's CSHCS transition plan is to build relationships with partner organizations and provide them with the resources they need to implement transition activities with the adolescents they serve. Work in prior years has established relationships with MHPs, LHDs, providers, school wellness centers, and families. For the first strategy of this objective, CSHCS will adopt *Got Transition*'s "Current Assessment of Health Care Transition

Activities" and implement the assessment with partners across the state. This strategy will improve the ability to measure improvements in transition related activities.

As a second strategy, CSHCS will continue to work with University of Michigan's Child Health Evaluation and Research (CHEAR) unit on the Evidence-informed Strategy Measure (ESM) for transition. The ESM provides data on the percent of CSHCS clients age 18 to 20 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider. CSHCS will continue to work with U of M CHEAR to monitor this ESM and to seek ways stratify the data by race, ethnicity and region. By stratifying the data, CSHCS hopes to identify health inequities in health care transition services, as well as better understand how to target educational efforts at a regional level to improve transition outcomes.

The third strategy for this objective is to compile and publish scorecards to assist partner organizations. To monitor transition activities across the state and to demonstrate progress to partners, the transition specialist will create a scorecard that combines partner progress; *Got Transition* recommendations; and regional, state and national results. These scorecards will establish benchmarks and build a foundation of measurement for ongoing monitoring and continuous quality improvement.

Medical Care and Treatment for CSHCN (FY 2021 Application)

Children's Special Health Care Services (CSHCS) was created to find, diagnose, and treat children who have chronic illnesses or disabling conditions. The mission of CSHCS, to improve health outcomes and enhance quality of life of children served, is accomplished by assisting children and their families in accessing the broadest range of appropriate medical care, health education, and support. It does this by removing barriers to care, including financial barriers, improving access to services and strengthening the existing systems of care.

During FY 2019, 50,211 individuals were enrolled in CSHCS and of these individuals, 37,354 were also eligible for Medicaid. Although there is an annual fee to enroll in CSHCS, this fee is waived if the client has Medicaid, MIChild, Healthy Michigan Plan, a court-appointed guardian, or lives in a foster home. The fee, which includes six possible payment levels paid through a payment agreement, is based on family income and family size. The lowest payment level is $120 for individuals below 200% of the Federal Poverty Level (FPL), and the highest level is $2,964 for those above 500% of FPL. These funds, along with Medicaid and state general funds, are combined with Michigan's Title V funding (over 30% of total funds) to support medical care and treatment of CSHCS recipients.

During focus groups conducted for the 2020 needs assessment, CSHCS stakeholders shared that service barriers impact children's availability to access timely health care services and therapies, such as the availability of specialty providers, insurance, language and culture. Similarly, the health status assessment revealed almost a third of CSHCN with complex health needs did not receive needed care coordination, and CSHCN are more than twice as likely as non-CSHCN to report that they did not receive care coordination (National Survey of Child's Health, 2016-2017). The encounter survey (a component of the community themes and strengths assessment) highlighted financial burdens created by a complex health care system. In response, the state performance measure—the percent of CSHCN enrolled in CSHCS that receive timely medical care and treatment without difficulty—was chosen to align with the state priority need identified through Michigan's 2020 needs assessment to ensure CSHCN have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they live and learn.

In addition to providing a substantial medical care benefit, the program empowers families to become engaged, self-determined, and informed caregivers who are strong advocates for their children. Much of this work is accomplished through the CSHCS Family Center for Children and Youth with Special Health Care Needs (Family Center) which provides ongoing support, education, and resources to families of CSHCN. In FY 2019, the Family Center responded to more than 11,000 phone calls through the family phone line and reported an additional 1,146 contacts

with families through health fairs, presentations, trainings, and other events. All families of CYSHCN can utilize Family Center services, regardless of CSHCS enrollment status.

Objective A: By 2025, increase the percentage of CSHCS CAHPS' respondents who rate their health care with a top box score of 9 or 10 from 71.9% (2019) to 75%.

The first strategy to meet this objective is for CSHCS to continue enrolling children with special needs into the program. The program benefit, while not intended to cover all the care a child needs, helps to reassure families that necessary specialty care for their child's qualifying diagnosis will not create undue financial burden. CSHCS is the payer of last resort and requires families to follow their primary and secondary insurance rules. If a family's income indicates that they may be eligible for Medicaid, they are required to apply for Medicaid.

Children with special needs who qualify for Medicaid and CSHCS continue to receive care through Medicaid Health Plans, barring a few exceptions. Children who are already receiving Medicaid, and who are determined to be medically eligible for CSHCS, are automatically enrolled. Automatic enrollment into CSHCS increases access to care coordination and case management services, which benefits families.

The second strategy of this objective is to enhance and/or expand the capacity of specialty clinics to assure the delivery of patient-centered, family friendly care. This two-prong strategy focuses on both Children's Multi-Disciplinary Specialty (CMDS) clinics and Field Clinics. CMDS clinics provide pediatric specialty care to children with complex medical needs and make up the largest segment of the program's specialty clinics. CSHCS supports CMDS clinics through an enhanced reimbursement mechanism for increased care coordination. The enhanced reimbursement provides additional resources for the development of an integrated care plan that involves the family as part of the care team. It also allows for additional management, follow-up and support services that facilitate on-going medical care, referrals and health education.

In 2019, CMDS clinic staff piloted a site review tool and completed site visits at three clinics. Site visits will continue in 2021, with the goal that all clinics are visited on a four-year cycle. Clinic sites are reviewed and offered recommendations based on core staffing, plans of care, care coordination capabilities, referral network, health education, family engagement, healthcare transition and billing appropriateness. In FY 2021, an additional focus will be placed on health equity and the social determinants of health during the clinic site reviews.

In 2020, working with the National Center for Care Coordination Technical Assistance, CSHCS adopted the Pediatric Integrated Care Survey Tool for its CMDS clinics. The survey, administered through Survey Monkey, is short and easy for clients to complete on their smart phones, at their convenience. The survey measures family experiences of care integration. In FY 2021, the survey will be piloted with one clinic, before rolling out to other clinics. CSHCS will provide participating clinics with a report that outlines client satisfaction and individual clinic findings. Through these shared results, CMDS clinics will be poised to conduct quality improvement activities that will increase their ability to meet the needs of clients and families. In addition, findings will be shared internally and used to augment CAHPS findings to better understand and communicate the benefits CSHCS provides to families.

Additionally, CSHCS will seek to expand its use of field clinics to include an Audiology Field Clinic. Field clinics are designed to improve access to specialty care within underserved areas in Michigan. Unlike CMDS clinics, field clinics do not reimburse providers for services rendered, but rather offer stipends and travel reimbursements to health professionals willing to travel to off-site locations to provide diagnostic and follow-up services. Beginning in FY 2021, CSHCS will work with Michigan Medicine to send a multi-disciplinary team consisting of an Otolaryngologist, Audiologist and Speech Pathologist to rural South-central Michigan to conduct diagnostic evaluations and follow-ups with Amish children. If deemed eligible, these children will be referred to CSHCS for enrollment. CSHCS will work in

conjunction with the local health department to identify culturally sensitive approaches for engaging the Amish community. Findings from this demonstration project will be assessed and used to determine the feasibility for future field clinic expansion.

The third strategy for this objective is to expand and support the use of telemedicine to improve access to specialty care in rural and underserved areas. CSHCS continues to work to increase access to health care services for CSHCN utilizing telemedicine. In FY 2021, the telemedicine workgroup convened in 2019 will review information associated with the rapid expansion of telemedicine that occurred during the COVID-19 pandemic and consider permanent policy changes to improve access to specialist care, while remaining compliant with federal and state rules, regulations and laws.

The fourth strategy seeks to improve the delivery of care for Michigan's most medically complex children. During FY 2021, CSHCS will work with pediatric palliative care and hospice providers to better understand the current approaches used to address needs of medically vulnerable children. This strategy will focus on understanding the scope of services currently provided, what services are best offered in a home setting versus a clinic setting, and identifying ancillary services that are needed, beginning with respite.

CSHCS will convene a group of family members of CSHCN, providers, and Medicaid representatives to assess the different palliative care models currently offered in Michigan. In addition, CSHCS will work to expand its CMDS clinic model to incorporate palliative care, pilot a pediatric palliative care CMDS clinic and evaluate. CSHCS will continue its work with Michigan Medicine's Partners for Children program for medically complex children to better understand how services can be delivered in the home and/or via telemedicine. Finally, CSHCS will assess the current utilization of respite services, the need for additional services and how best to meet that need.

Objective B: By 2025, increase by 10% the number of meaningfully engaged community partners (families, youth, LHDs, CAC members, contractors, clinic sites, health care providers, other professionals, etc.) to improve knowledge of the CSHCS program.

The first strategy is designed to ensure all families have access to CSHCS resources and that these resources are understandable and relevant to the population. CSHCS will review its brochures, online resources, webpages, and printed documents to ensure they are culturally sensitive, family-friendly and ADA compliant.

Working through the Family Center, the second strategy is to continue to build a coordinated and systematic approach to family engagement, through the issuance of camp and conference scholarships; provision of resource and referral services; and utilization of the Youth Consultant to maximize outreach to adolescents. In FY 2021, the Family Center will continue to grow the statewide Family Leadership Network which connects families with resources across the state. The network, which consists of up to 20 ambassadors that each reside within one of Michigan's 10 prosperity regions, will be utilized to do in-reach within their communities to promote CSHCS, as well as to instill self-advocacy skills within families and assist with resource review and deployment.

The third strategy for this objective is to develop and implement a comprehensive communication/outreach plan to improve awareness of CSHCS among providers, partners and families of eligible children with qualifying conditions. In 2019, CSHCS created a committee to review and update the Outreach and Training plan. In FY 2021, efforts will be made to reach diverse communities of color and ethnicity to assure potentially eligible diverse communities are aware of the program and its benefits.

The fourth strategy is to maintain a competent workforce that is knowledgeable about the program and able to assist families in understanding their child's condition and how to access the system of care in place. During FY 2021, CSHCS will continue to work with Michigan State University's Institute of Health Policy to design and offer trainings to

LHDs and MHPs. LHD training will focus on enhancing program staffs' skills and abilities to enroll and renew families and provide quality care coordination services. MHP staff will receive ongoing education to improve their awareness of the CSHCS program and increase their ability to provide quality care coordination services. In addition, MHP staff are invited to participate in LHD calls on a regular basis and to attend annual regional LHD meetings.

Objective C: By 2025, improve the percentage of CSHCN who report receiving care in a well-functioning system from 17.8% to 20.3%.

The first strategy for this objective is to develop a comprehensive evaluation plan to measure CSHCS's capacity and ability to provide effective, efficient and high-quality services to clients. Michigan is rich in data, having developed a data warehouse which allows access to a variety of claims, procedural and provider data sets. Data from the data warehouse is linked to other data sets such as vital records, registries and more. The CSHCS program has access to these data sets and adds data collected through the CSHCS client database and CAHPS survey. The large quantity of data allows CSHCS to make program adjustments and also presents an opportunity to combine data into a more comprehensive approach to evaluation that tracks patient outcomes, creates actionable improvement strategies, and effectively communicates program benefits in a systematic and meaningful way.

In 2019, CSHCS was accepted into the 2020 MCH Workforce Development Center's Learning Cohort to devise a comprehensive evaluation strategy. With guidance from the MCH Workforce Development Center, CSHCS will develop an evaluation plan that seeks to describe the program, select and focus an evaluation design, identify meaningful data, utilize data to make decisions, and communicate results to stakeholders and policy makers. Participation with the Learning Cohort provides CSHCS the opportunity to develop new leaders and maximize its use of MCH Workforce resources.

The second strategy for this objective is to implement a provider survey to better understand provider expectations, experience, and underlying biases regarding systems of care for CSHCN. In 2019/2020, CSHCS initiated a hospital focus group with Michigan's three large children's hospitals, with the goal of obtaining feedback on the CSHCS program and the systems of care for CSHCN. The site visits provided CSHCS leadership with an opportunity to educate hospital leaders and to garner feedback related to challenges they face in addressing special health care needs of children. The site visits have led to improved relationships with key partners. In FY 2021, CSHCS leadership will implement an electronic survey to reach specialists regarding their experience with the CSHCS program. Data will be compiled and utilized to inform program changes and findings will be integrated into the CSHCS evaluation framework.

Cross-Cutting/Systems Building

State Performance Measures

SPM 6 - Support access to developmental, behavioral, and mental health services through Title V activities and funding

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	Yes	Yes	Yes	Yes	Yes

State Action Plan Table

State Action Plan Table (Michigan) - Cross-Cutting/Systems Building - Entry 1

Priority Need

Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems

SPM

SPM 6 - Support access to developmental, behavioral, and mental health services through Title V activities and funding

Objectives

A) Support the work of local health departments in addressing developmental, behavioral, and mental health needs in their jurisdictions through 2025

B) Support the work of Regional Perinatal Quality Collaboratives in addressing behavioral and mental health in their respective Prosperity Region through 2025

C) Support increased collaboration and engagement between Title V and behavioral health partners

Strategies

A1) Provide Title V funding to local health departments to address developmental, behavioral, and mental health needs

B1) Provide resources to Regional Perinatal Quality Collaboratives to implement and expand use of universal perinatal screening at prenatal care clinics within their respective regions B2) Provide resources to Regional Perinatal Quality Collaboratives to implement and expand telehealth services inclusive of behavioral and mental health within their respective regions

C1) Engage behavioral health stakeholders to assure issues and concerns related to children with special health care needs are represented

Cross-Cutting/Systems Builiding - Annual Report

No content was entered for the Cross-Cutting/Systems Building - Annual Report in the State Action Plan Narrative by Domain section.

Cross-Cutting/Systems Building - Application Year

Cross-Cutting Overview

Public health can play a key role in mental health promotion and the prevention of mental illness, as well as providing linkages to systems of intervention and treatment. Recognizing that physical and mental health are closely related at the individual and population levels, Michigan is working toward better integration between these systems. Within the organizational structure of MDHHS, the Behavioral Health and Developmental Disabilities Administration (BHDDA) and the Public Health Administration (PHA) both fall under the leadership of the Senior Chief Deputy for Health. Additionally, there are close working relationships between BHDDA staff who work with children and families and PHA staff. For example, BHDDA's Division of Services to Children and Families leads the implementation of the Infant Mental Health program, a home visiting model that coordinates with public health home visiting programs. Additionally, BHDDA's Division of Recovery Oriented Systems of Care supports a network of substance use treatment programs designed specifically for pregnant women and women with young children. Similar partnerships exist between MDHHS and the Michigan Department of Education related to adolescent mental health. MDHHS is also working toward better integration of mental and physical health care through a behavioral health redesign effort that involves establishing specialty integrated Medicaid health plans for those with significant behavioral health needs.

Although efforts have occurred at the state and local level to coordinate and integrate promotion, prevention, intervention, and treatment strategies across physical and behavioral health, the Title V needs assessment found that gaps remain that threaten the mental health of all Title V populations. The system assessment found that programs and services are often siloed which creates gaps in assessment, surveillance, planning, coordination, and referral. The forces of change assessment found that sociocultural phenomena such as systemic racism, implicit bias, trauma, political polarization, and social media play a role in creating a climate that fosters anxiety and depression. It also highlighted the intergenerational impact of mental illness. The community themes and strengths assessment found that stigma continues to play a role in preventing people from seeking treatment and that the mental health system does not have the capacity to treat everyone who needs treatment. This was especially true for individuals seeking providers who accept Medicaid. The assessment also noted the linkages between maternal mental health and developmental outcomes for children, as well as the impact of chronic stress and trauma on mental health.

The health status assessment also identified behavioral and mental health concerns across multiple population domains. For women and maternal health, serious and increasing mental health needs were found in the preconception period and during and after pregnancy. For example, women ages 18-44 years showed an increase from 2013 (14.1%) to 2017 (19.2%, BRFS) in reporting two or more weeks of poor mental health over the previous month. From 2016 to 2018 the percentage of Michigan women who reported treatment for anxiety or depression in the year prior to their pregnancy rose from 35.8% to 38.4% (PRAMS). Similarly, major postpartum depression symptoms rose from 2014 (12.6%) to 2018 (16.3%, PRAMS). While there are fewer sources of data regarding mental health among children in Michigan, they are more likely than children nationwide to be diagnosed with an autism spectrum disorder (3.2%, NSCH 2017-2018) or attention deficit disorder (10.0%). Over a third of Michigan children ages 6-11 years who had a diagnosed mental or behavioral health condition did not receive treatment in the previous year (36.8%, NSCH 2017-2018). Adolescents in Michigan have experienced a higher suicide mortality rate than adolescents nationwide since at least 2012 despite increases in both rates. For adolescents ages 10-19 years, the suicide rate in Michigan was 7.4 per 100,000 and 6.1 per 100,000 for the US (WISQARS). 37.3% of Michigan high school students reported two or more weeks of sad or hopeless feelings over the previous month, a major increase from the 26.0% in 2011, and this metric was even higher among Hispanic students (45.4%, YRBS). Michigan adolescents have also increasingly reported considering suicide, from 15.7% in 2011 to 21.3% in 2017 (YRBS). Parents report that 59.3% of children with special health care needs experienced bullying, compared to 43.2% of non-CSHCN (NSCH 2018), which is linked to adverse mental health outcomes. These data indicate that

Michigan has unmet needs for mental and behavioral health services across Title V populations.

Behavioral/Mental Health (FY 2021 Application)

The findings from the Title V needs assessment led to a new state priority need to "Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems." While work on this priority is evident across many domains and state action plans, for the purpose of Title V the priority formally links to a continuing state performance measure (SPM) on childhood lead poisoning prevention and a new SPM to "Support access to developmental, behavioral, and mental health services through Title V activities and funding." Creation of this new SPM will enable Michigan's Title V program to better capture existing work related to behavioral and mental health and to identify opportunities for expanded work in the future. For the initial state action plan, the Title V program has chosen to focus on three areas: 1) the work of local health departments in addressing developmental, behavioral, and mental health needs through Title V funding; 2) the work of Regional Perinatal Quality Collaboratives in addressing behavioral and mental health; and 3) increased engagement between Title V and behavioral health partners. Many other MCH initiatives and partnerships are underway but are not discussed in this state action plan, as the intent of the plan is to more intentionally capture work related to Title V activities and/or funding.

Objective A: Support the work of local health departments in addressing developmental, behavioral, and mental health needs in their jurisdictions through 2025.

Title V funding is allocated to each of the 45 local health departments (LHDs) in Michigan through the Local Maternal Child Health (LMCH) program. Local MCH needs and priorities vary across the state. LHDs choose to address national and state performance measures as well as local MCH priority needs. LHDs are required to complete an annual LMCH plan, which includes the Title V pillar related to seeking knowledge and expertise of communities and families. Engaging families and consumers helps LHDs create and deliver services that are more responsive to issues of health equity and cultural competence. The LMCH plan describes the jurisdiction's priority MCH needs; health disparities; the extent to which families, consumers and other stakeholders are involved in ongoing needs assessment; and identifying strategies and activities that will be used to address the identified needs.

Michigan's LHDs participated in a Local Maternal Child Health (LMCH) needs assessment in 2017. Mental health was a strategic priority identified by approximately one-third (12) of LHDs. Assessments that identified mental health highlighted opportunities for improvement in mental health services such as access, utilization, and awareness. Rural communities, children, and adolescents were among the populations of focus related to access. Many of the strategic priorities emphasized using tools and resources to increase access, such as telehealth, and improving both the affordability of mental health services and expanding behavioral health services. Utilization of mental health services was also identified as a strategic issue, with an emphasis on eliminating barriers. Raising awareness of mental health services was also seen as an important area of focus, since awareness influences utilization.

The objective in this state action plan helps to illustrate how behavioral/mental health is being addressed at the local level with the support of Title V funding. Currently, eight LHDs are addressing some aspect of mental health as a performance measure in their annual plans. In the adolescent health domain, three LHDs work on depression screening and suicide prevention. One LHD focuses on Adverse Childhood Experiences (ACEs) awareness and prevention. Another LHD uses funds as a gap-filling measure in the child health domain for developmental screening. Three LHDs focus on mental health, depression screening, and providing support and treatment referrals in the women/maternal health domain. In total, approximately $250,000 in Title V funding was used to support the behavioral and mental health work of these eight LHDs in FY 2019.

Over the five-year period, the LMCH program will provide support, guidance and technical assistance to health departments related to effective evidence-based and evidence-informed strategies and activities for behavioral/mental health access, utilization and awareness. The LMCH program will also track Title V spending on behavioral and mental health activities. Data gathered from this performance measure will provide a local perspective, which will be important for strengthening future Title V behavioral/mental health strategies and activities.

Objective B: Support the work of Regional Perinatal Quality Collaboratives in addressing behavioral and mental health in their respective Prosperity Region through 2025.

Behavioral and mental health has a significant impact on maternal and infant morbidity and mortality. Michigan is plagued by poor behavioral and mental health outcomes, especially in pregnant women, as illustrated through several indicators. For example, in 2018, 14.3% of women in Michigan with a live birth indicated that they smoked while pregnant; in 2017, the Neonatal Abstinence Syndrome (NAS) rate for Michigan was 835.8 per 100,000 live births; and from 2012-2016, 47.4% of pregnancy associated injury deaths were attributed to accidental poisoning/drug overdose and 8.8% were attributed to suicide[1].

Michigan is working to address behavioral and mental health concerns through the work of the Regional Perinatal Quality Collaboratives (RPQCs). The aim of the RPQCs is to develop innovative strategies to regionally address the drivers of adverse birth outcomes. Several RPQCs have begun addressing behavioral and mental health, including perinatal substance use, through increased prenatal screening, increasing treatment capacity in their respective region and increased educational opportunities, including implicit bias and stigma reduction. Building on these efforts, the RPQCs will work to implement and expand telehealth services, focused on behavioral and mental health, in pregnant and postpartum women. Depending on the availability (or lack) of other funding sources, Title V funding is used as a gap-filling funding source for RPQCs. Title V MCH leadership is also closely involved in the work of RPQCs.

Strategies to achieve Objective B focus on providing resource supports to the RPQCs to implement and expand universal screening and telehealth services in their region. Previous surveys of prenatal care clinics illustrated a lack of consistent or universal screening of patients for perinatal substance use or mental health conditions, such as depression and anxiety. Universal screening of all pregnant women is the first step in addressing behavioral and mental health in this population. Subsequent linkage to behavioral and mental health professionals is the essential next step. Behavioral and mental health professionals are a limited resource in Michigan, especially in rural areas. Residents in rural Michigan often encounter barriers to care that include the physical distance to clinics and reliable and consistent transportation. Telehealth services are a logical option in overcoming these barriers.

Four RPQCs have implemented prenatal screening at clinics that serve residents of their respective regions. West Michigan is working with their region's major health system to implement the health system's preferred evidence-based screening tool. This screening tool is being built into the health system's electronic medical record and will be utilized for both inpatient and outpatient care. Northern Lower Michigan, the Upper Peninsula and the Thumb area are working with clinics to implement an electronic screening tool that is based on evidence-based Screening, Brief Intervention and Referral to Treatment (SBIRT). Initial results have shown success in both patients completing the screening tool (upwards of 80-95% of patients) and in identifying pregnant women with behavioral and/or mental health concerns that might not otherwise have been assessed or addressed. It is anticipated that these results will lead to expansion of universal screening within their regions, as well as to other regions.

Most clinics that have implemented universal prenatal screening have an embedded social worker or behavioral health professional in their clinic. This serves as a great resource for initial contact with patients, but in terms of ongoing support, it may only benefit those patients who live near the clinic and have adequate transportation. West

Michigan, Northern Lower Michigan, the Thumb area and the Upper Peninsula are comprised of largely rural areas. Patients in these areas often must travel long distances for prenatal care appointments; some struggle with reliable transportation or having money for gas; and some are unable to take the time from work for additional appointments. It is these situations and barriers which necessitate tele-behavioral/mental health services. Clinics in the Thumb region and the Upper Peninsula have begun piloting tele-behavioral/mental health services for prenatal patients. Successful results of the pilot are anticipated and will be used to expand tele-behavioral/mental health services both within and outside the two regions. Utilizing telehealth services for behavioral and mental health care will greatly increase the capacity of care, especially in rural areas of Michigan.

Objective C: Support increased collaboration and engagement between Title V and behavioral health partners.

The initial strategy for this objective is to engage behavioral health stakeholders to assure that the unique circumstances and challenges of children and youth with special health care needs are reflected in the discussions on enhancements to behavioral and developmental health services in Michigan. This strategy will be accomplished through several activities. First, the CSHCS Division Director will be serving by gubernatorial appointment to the Michigan Developmental Disabilities Council to represent Title V. In addition, CSHCS is working with behavioral health stakeholders at both the state and community level in a collaborative committee. During its first year, the collaborative committee assessed the knowledge level of Community Mental Health (CMH) and CSHCS staff regarding each other's systems of care. Building on this previous work, in FY 2021, the collaborative committee will develop tools for families and providers to inform them of available services and eligibility requirements. The collaborative committee will continue to offer trainings and resources which families and local staff can use as they work together to maximize client access to available and needed services. Finally, CSHCS will actively engage with other stakeholders in efforts to design behavioral health system reforms which will integrate behavioral and physical health services into a single managed care plan for Medicaid beneficiaries. Michigan anticipates expanded work around this objective over the course of the 2021-2025 cycle.

[1] Source: Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services

III.F. Public Input

A draft of the Title V FY 2021 application/FY 2019 annual report will be posted on the Michigan Department of Health and Human Services (MDHHS) website for public review and comment. Public input will also be invited through notification to approximately 60 advisory groups, community-based partners, nonprofit partners, advocacy groups and other state programs. Additionally, notice will be sent to all 45 local health departments. Individuals who participated in the 2020 Needs Assessment Stakeholder Group and Population Domain Workgroups will also receive notification of the posting. Public input will be presented to the Title V steering committee for review and consideration prior to submission of the grant application. The number and nature of public comments will be included in the final grant application submission.

After the application has been submitted, MDHHS will continue to work with entities representing advocates, advisory bodies, providers and consumers to receive input on the programs, policies, reports and plans included in the Title V application. For example, the Children's Special Health Care Services (CSHCS) Division routinely works with parent consultants through the Family Center for Children and Youth with Special Needs (Family Center) and the CSHCS Advisory Committee (CAC). The Family Center provides information and support to families and input on CSHCS program operations. The CAC is comprised of professionals and family members who are involved in the care for children with special needs. The CAC makes recommendations to the CSHCS Division on policy and promotes awareness to assure that services reflect the voices of individuals with special health care needs and their families.

As another example, families and consumers are represented in strategic planning initiatives aimed at improving maternal and infant health outcomes and Fetal Alcohol Spectrum Disorder (FASD). They also serve on advisory committees for home visiting, oral health, Family Planning, Child and Adolescent Health Centers, infant safe sleep, teen pregnancy prevention local coalitions, Parent Leadership in State Government, and maternal and child home visiting programs. Additionally, to implement the state’s new Mother Infant Health and Equity Improvement Plan, MDHHS works with the Mother Infant Health and Equity Collaborative which consists of representatives from hospitals and local health departments, parents and community members, and partners from research institutions, professional associations, community organizations, state programs and nonprofit organizations.

In addition to the annual public posting process, in 2019-2020 MDHHS completed a statewide five-year needs assessment (as required by Title V) to drive creation of the FY 2021-2025 state priority needs and performance measures. When determining the process to be used, the Needs Assessment Planning Committee prioritized the need to engage a diverse group of stakeholders to assess both needs and system strengths and capacity. In total, the needs assessment engaged approximately 1,000 community members, providers, clients, and stakeholders to obtain their thoughts, opinions and perspectives on the health and wellbeing of women, mothers, infants, children, adolescents, and children with special health care needs. The System Capacity Assessment and the Forces of Change Assessment captured input and perspectives from the Stakeholder Group. Additionally, the three methods in the Community Themes and Strengths Assessment—a provider survey, an encounter survey, and focus groups/listening sessions—offered a variety of opportunities to capture rich qualitative information.

Twenty-two focus group/listening sessions were completed with community members and stakeholders across the five Title V population domains. A provider survey distributed to MCH providers received 526 responses, and an encounter survey distributed through MIHPs and local health departments received 307 responses. The population domain workgroups (which reflected the population health domains) included state and local MCH staff, state and local MCH system partners, parents, parent consultants, consumers, and partners with expertise in health equity. Their input and experience shaped the issues and priority needs considered and included in Michigan’s five-year application.

III.G. Technical Assistance

As the Michigan Title V program implements its FY 2021-2025 state action plan over the next five years, it will identify any areas of needed technical assistance. Based on Michigan's current priorities, these areas may include:

- Ongoing learning opportunities and technical assistance related to identification, refinement, and assessment of evidence-based or -informed strategy measures (ESMs);
- Integration and implementation of health equity strategies in MCH work;
- Support of local public health partners in implementing new requirements and priorities as they relate to Title V; and
- Sharing of best practices and other peer learning opportunities (e.g., between states or within regions).

Some training needs are met by professional development opportunities provided by HRSA and AMCHP throughout the year, including the AMCHP Conference and HRSA learning labs. Michigan has also begun to review and utilize the "MCH Evidence" resource, which has expanded information and access related to ESMs and best practices for national performance measures (NPMs). Additionally, training or technical assistance provided by HRSA or AMCHP —especially in relation to ESMs, NPMs, the Title V Information System (TVIS), and other Title V priorities or requirements—is shared with relevant MCH programs and staff.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - MichiganStatePlan - Excerpt for Title V.pdf

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - Title V NPM-SPM Chart FY2021-2025.pdf

Supporting Document #02 - Needs Assessment Stakeholder List.pdf

Supporting Document #03 - New National Performance Measure Annual Objectives - FY 2021-2025 FINAL.pdf

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - CSHCS and MIH Org Chart 5-4-20.pdf

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Michigan

	FY 21 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 19,415,900	
A. Preventive and Primary Care for Children	$ 6,536,500	(33.6%)
B. Children with Special Health Care Needs	$ 6,994,200	(36%)
C. Title V Administrative Costs	$ 602,800	(3.2%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 14,133,500	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 42,008,500	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 790,000	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 7,868,700	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 50,667,200	
A. Your State's FY 1989 Maintenance of Effort Amount $ 13,507,900		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 70,083,100	
9. OTHER FEDERAL FUNDS Please refer to the next page to view the list of Other Federal Programs provided by the State on Form 2.		
10. OTHER FEDERAL FUNDS(Subtotal of all funds under item 9)	$ 315,888,100	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 385,971,200	

OTHER FEDERAL FUNDS	FY 21 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 1,914,500
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 1,582,600
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 150,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 187,500
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventive Health and Health Services Block Grant	$ 200,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State and Local Healthy Homes and Childhood Lead Poisoning Prevention Programs (CLPPPs)	$ 396,600
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	$ 9,330,700
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 137,172,200
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy	$ 439,600
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 235,000
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	$ 970,000
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 7,600,000
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 147,601,900
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 8,007,500

	FY 19 Annual Report Budgeted		FY 19 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 19,193,200		$ 19,238,763	
A. Preventive and Primary Care for Children	$ 6,880,900	(35.9%)	$ 6,013,182	(31.2%)
B. Children with Special Health Care Needs	$ 6,994,200	(36.4%)	$ 6,994,200	(36.3%)
C. Title V Administrative Costs	$ 741,200	(3.9%)	$ 563,095	(3%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 14,616,300		$ 13,570,477	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 46,999,800		$ 41,868,576	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0		$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 500,000		$ 763,473	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 68,309,200		$ 58,013,859	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 115,809,000		$ 100,645,908	
A. Your State's FY 1989 Maintenance of Effort Amount $ 13,507,900				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 135,002,200		$ 119,884,671	
9. OTHER FEDERAL FUNDS Please refer to the next page to view the list of Other Federal Programs provided by the State on Form 2.				
10. OTHER FEDERAL FUNDS (Subtotal of all funds under item 9)	$ 381,595,500		$ 312,150,786	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 516,597,700		$ 432,035,457	

OTHER FEDERAL FUNDS	FY 19 Annual Report Budgeted	FY 19 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 2,609,300	$ 1,904,124
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 1,493,200	$ 1,461,225
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 150,000	$ 181,405
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 187,500	$ 177,691
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventive Health and Health Services Block Grant	$ 200,000	$ 200,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State and Local Healthy Homes and Childhood Lead Poisoning Prevention Programs (CLPPPs)	$ 327,400	$ 387,752
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State Oral Disease Prevention Program	$ 310,600	$ 0
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	$ 10,715,500	$ 9,890,749
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 123,516,700	$ 127,607,022
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy	$ 483,500	$ 374,204
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 7,907,300	$ 7,865,594
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Oral Health	$ 470,800	$ 0

OTHER FEDERAL FUNDS	FY 19 Annual Report Budgeted	FY 19 Annual Report Expended
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 250,000	$ 255,300
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	$ 1,360,900	$ 967,761
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 7,485,000	$ 8,450,635
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 224,030,800	$ 152,330,213
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 97,000	$ 97,111

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**Federal Allocation, A. Preventive and Primary Care for Children:**
	Fiscal Year:	**2019**
	Column Name:	**Annual Report Expended**
	Field Note: Line 1A, Preventive and Primary Care Service for Children, FY 2019 Annual Report Expended was lower than budgeted due to decreased Title V expenditures related to Children in the Local MCH appropriation.	
2.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2019**
	Column Name:	**Annual Report Expended**
	Field Note: Line 1C, Title V Administrative Costs, FY 2019 Annual Report Expended was less than anticipated due to a decrease in personnel and administrative costs.	
3.	**Field Name:**	**3. STATE MCH FUNDS**
	Fiscal Year:	**2019**
	Column Name:	**Annual Report Expended**
	Field Note: Line 3, State MCH Funds, FY 2019 Annual Report Expended, was lower than expected due to realized medical care and treatment expenses being lower than anticipated.	
4.	**Field Name:**	**5. OTHER FUNDS**
	Fiscal Year:	**2019**
	Column Name:	**Annual Report Expended**
	Field Note: Line 5, Other Funds, FY 2019 Annual Report Expended, was higher than budgeted due to Children with Special Needs Fund earnings above the authorization amount included in the budget.	
5.	**Field Name:**	**6. PROGRAM INCOME**
	Fiscal Year:	**2019**
	Column Name:	**Annual Report Expended**
	Field Note: Line 6, Program Income, FY 2019 Annual Amount Expended, was lower than budgeted due to WIC Rebate earnings less than the appropriation amount.	

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served

State: Michigan

I. TYPES OF INDIVIDUALS SERVED

IA. Federal MCH Block Grant	FY 21 Application Budgeted	FY 19 Annual Report Expended
1. Pregnant Women	$ 594,200	$ 702,695
2. Infants < 1 year	$ 1,924,100	$ 1,870,500
3. Children 1 through 21 Years	$ 6,536,500	$ 6,013,182
4. CSHCN	$ 6,994,200	$ 6,994,200
5. All Others	$ 2,764,100	$ 3,095,091
Federal Total of Individuals Served	$ 18,813,100	$ 18,675,668

IB. Non-Federal MCH Block Grant	FY 21 Application Budgeted	FY 19 Annual Report Expended
1. Pregnant Women	$ 1,994,100	$ 483,337
2. Infants < 1 year	$ 10,059,900	$ 61,148,517
3. Children 1 through 21 Years	$ 2,009,000	$ 2,122,801
4. CSHCN	$ 34,285,000	$ 34,934,121
5. All Others	$ 2,319,200	$ 1,957,132
Non-Federal Total of Individuals Served	$ 50,667,200	$ 100,645,908
Federal State MCH Block Grant Partnership Total	$ 69,480,300	$ 119,321,576

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

None

Data Alerts: None

Form 3b
Budget and Expenditure Details by Types of Services

State: Michigan

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY 21 Application Budgeted	FY 19 Annual Report Expended
1. Direct Services	$ 9,294,400	$ 9,182,388
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 278,000	$ 281,601
B. Preventive and Primary Care Services for Children	$ 4,067,800	$ 3,952,153
C. Services for CSHCN	$ 4,948,600	$ 4,948,634
2. Enabling Services	$ 6,463,500	$ 6,307,489
3. Public Health Services and Systems	$ 3,658,000	$ 3,748,886
4. Select the types of Federally-supported "Direct Services", as reported in II.A.1. Provide the total amount of Federal MCH Block Grant funds expended for each type of reported service		
Pharmacy		$ 4,341,583
Physician/Office Services		$ 1,785,414
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 712,605
Dental Care (Does Not Include Orthodontic Services)		$ 301,604
Durable Medical Equipment and Supplies		$ 313,472
Laboratory Services		$ 0
Other		
Special Project, Local MCH and CSHCS Medical Care		$ 1,727,710
Direct Services Line 4 Expended Total		$ 9,182,388
Federal Total	$ 19,415,900	$ 19,238,763

IIB. Non-Federal MCH Block Grant	FY 21 Application Budgeted	FY 19 Annual Report Expended
1. Direct Services	$ 32,252,500	$ 33,394,321
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 0	$ 0
B. Preventive and Primary Care Services for Children	$ 279,800	$ 249,365
C. Services for CSHCN	$ 31,972,700	$ 33,144,956
2. Enabling Services	$ 5,192,800	$ 5,858,111
3. Public Health Services and Systems	$ 13,221,900	$ 61,393,477
4. Select the types of Non-Federally-supported "Direct Services", as reported in II.B.1. Provide the total amount of Non-Federal MCH Block Grant funds expended for each type of reported service		
Pharmacy		$ 22,513,119
Physician/Office Services		$ 2,146,466
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 5,853,239
Dental Care (Does Not Include Orthodontic Services)		$ 108,892
Durable Medical Equipment and Supplies		$ 2,522,589
Laboratory Services		$ 0
Other		
Medical Care and Treatment		$ 250,016
Direct Services Line 4 Expended Total		$ 33,394,321
Non-Federal Total	$ 50,667,200	$ 100,645,909

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

1.	**Field Name:**	**IIA. - Other - Special Project, Local MCH and CSHCS Medical Care**
	Fiscal Year:	**2021**
	Column Name:	**Annual Report Expended**

Field Note:
The “Other” direct services category includes local MCH gap-filling services (e.g., family planning, immunization, STD clinic services); special projects (e.g., Fetal Alcohol Spectrum Disorder services); and CSHCS medical care and treatment.

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated

State: Michigan

Total Births by Occurrence: 106,095 **Data Source Year: 2019**

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Screen	(B) Aggregate Total Number Presumptive Positive Screens	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	106,095 (100.0%)	2,732	223	221 (99.1%)

Program Name(s)				
3-Hydroxy-3-Methyglutaric Aciduria	3-Methylcrotonyl-Coa Carboxylase Deficiency	Argininosuccinic Aciduria	Biotinidase Deficiency	Carnitine Uptake Defect/Carnitine Transport Defect
Citrullinemia, Type I	Classic Galactosemia	Classic Phenylketonuria	Congenital Adrenal Hyperplasia	Critical Congenital Heart Disease
Cystic Fibrosis	Glutaric Acidemia Type I	Glycogen Storage Disease Type II (Pompe)	Hearing Loss	Homocystinuria
Isovaleric Acidemia	Long-Chain L-3 Hydroxyacyl-Coa Dehydrogenase Deficiency	Maple Syrup Urine Disease	Medium-Chain Acyl-Coa Dehydrogenase Deficiency	Methylmalonic Acidemia (Cobalamin Disorders)
Methylmalonic Acidemia (Methylmalonyl-Coa Mutase)	Mucopolysaccharidosis Type 1	Primary Congenital Hypothyroidism	Propionic Acidemia	S, ßeta-Thalassemia
S,C Disease	S,S Disease (Sickle Cell Anemia)	Severe Combined Immunodeficiences	ß-Ketothiolase Deficiency	Trifunctional Protein Deficiency
Tyrosinemia, Type I	Very Long-Chain Acyl-Coa Dehydrogenase Deficiency	X-Linked Adrenoleukodystrophy		

2. Other Newborn Screening Tests

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
Early Hearing Detection & Intervention (EHDI) Program	103,072 (97.2%)	5,005	166	166 (100.0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

Michigan has a robust system for follow-up beyond referral of an infant with a positive newborn screening (NBS) result. The state maintains several coordinating centers, focused on different groups of NBS disorders. Each center is designated by MDHHS and works with the family, the newborn's primary care provider, and specialists to triage infants with positive screens and facilitate prompt diagnostic testing, evaluation, and initiation of medical monitoring and/or treatment. Each center reports the number of infants seen, diagnostic work-ups provided, and results of assessments to MDHHS. Information is crucial for measuring and monitoring detection rates, positive predictive values, and other screening performance metrics including time from birth to treatment initiation. Aggregate results are included in the NBS Annual Report online. The length of follow-up monitoring varies by disorder, with the longest follow-up occurring for those will metabolic disorders and sickle cell disease.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	**Field Name:**	**Core RUSP Conditions - Referred For Treatment**
	Fiscal Year:	**2019**
	Column Name:	**Core RUSP Conditions**
	Field Note: Out of the 223 total confirmed cases, one infant expired before treatment began and one was diagnosed with a non-classical form of a disorder, so treatment was not initiated. Therefore, 221 cases were referred for treatment.	
2.	**Field Name:**	**Early Hearing Detection & Intervention (EHDI) Program - Receiving At Least One Screen**
	Fiscal Year:	**2019**
	Column Name:	**Other Newborn**
	Field Note: Preliminary EHDI information based on 2019 provisional data of hospital and midwife births reported as of April 2020.	

Data Alerts: None

Form 5
Count of Individuals Served by Title V & Total Percentage of Populations Served by Title V

State: Michigan

Annual Report Year 2019

Form 5a – Count of Individuals Served by Title V
(Direct & Enabling Services Only)

		Primary Source of Coverage				
Types Of Individuals Served	(A) Title V Total Served	(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	9,816	41.5	0.0	56.7	1.5	0.3
2. Infants < 1 Year of Age	26,910	41.1	0.0	57.1	1.5	0.3
3. Children 1 through 21 Years of Age	277,231	35.0	0.0	61.0	4.0	0.0
3a. Children with Special Health Care Needs	50,211	74.4	4.1	18.1	3.4	0.0
4. Others	67,832	18.0	0.0	76.0	6.0	0.0
Total	381,789					

Form 5b – Total Percentage of Populations Served by Title V
(Direct, Enabling, and Public Health Services and Systems)

Populations Served by Title V	Reference Data	Used Reference Data?	Denominator	Total % Served	Form 5b Count (Calculated)	Form 5a Count
1. Pregnant Women	110,032	No	107,745	84	90,506	9,816
2. Infants < 1 Year of Age	109,091	No	106,787	99	105,719	26,910
3. Children 1 through 21 Years of Age	2,594,958	Yes	2,594,958	46	1,193,681	277,231
3a. Children with Special Health Care Needs	533,523	Yes	533,523	46	245,421	50,211
4. Others	7,290,656	Yes	7,290,656	4	291,626	67,832

Form Notes for Form 5:

Form 5a includes the number of individuals who received a direct or enabling service funded by both Federal and Non-federal Title V program dollars as reported on Form 2, Line 8. Duplication in counts is possible because some individuals may have received more than one service. Per the Title V guidance, WIC could be included "if Title V funds or staff time are used to promote or enhance services." Since Title V funds are not directly used, WIC participants were not included, even though WIC rebates are a component of program income on Form 2, Line 6. MHVI counts are from the state match from general funds, not MIECHV federal funds.

Form 5b is the total percentage of the population that received Federal and Non-federal Title V supported programs, as reported on Form 2, Line 8. It includes all levels of the MCH pyramid. To calculate Form 5b, direct and enabling service numbers from Form 5a were added to public health services and systems.

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2019**
	Field Note: Individuals in the pregnancy category include Local Maternal Child Health Program breastfeeding (as proxy for pregnancy), Family Planning (proxy is pregnant/seeking pregnancy, FPAR, preliminary 2019), MICCA postpartum LARCs project, Nurse Family Partnership, Rural MHVI HFA, MI-APPPT and MI APP, FASD. Note that MHVI counts are from the state match from general funds, not MIECHV federal funds. Population estimates were used for Primary Sources of Insurance Coverage from Birth Certificate Resident births, preliminary, 2019, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services. Pregnant women may also receive non-pregnancy related services and be counted in other participant categories.	
2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2019**
	Field Note: Individuals in the infant category include Local Maternal Child Health Program Safe Sleep (as proxy for infancy), Infant safe sleep training, Nurse Family Partnership, Rural MHVI HFA, and immunizations. Population estimates were used for Primary Sources of Insurance Coverage from Birth Certificate Occurrent births, preliminary, 2019, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.	
3.	**Field Name:**	**Children 1 through 21 Years of Age**
	Fiscal Year:	**2019**
	Field Note: Individuals in the children 1-21 years category include Local Maternal Child Health Program direct and enabling services (developmental screening, adolescent well visit, oral health, lead prevention, depression, immunizations and local needs), Family Planning (unduplicated count of girls and boys ≤15-19, FPAR, preliminary 2019), Nurse Family Partnership, Rural MHVI HFA, MI-APPPT and MI APP, FASD, Taking Pride in Prevention, lead education, dental sealants, immunizations. The number recorded here is the number of children 1-21 plus the number of CSHCN (line 3a). Population estimates were used for Primary Sources of Insurance coverage from American Community Survey - Children 1-21, 2018.	
4.	**Field Name:**	**Children with Special Health Care Needs**
	Fiscal Year:	**2019**

	Field Note: Includes CSHCN for medical care and treatment. Medical insurance coverage is reported by the CSHCS program (MDHHS, Data Warehouse). Michigan serves a much larger CSHCS Medicaid population (74.4%) than the National Survey of Children's Health - CSHCN, 2017 (50%).	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2019**
	Field Note: Individuals served in the other category include women who are not pregnant or within a 60-day postpartum window, but are in the childbearing age bracket. Examples of direct and enabling services reported include: Nurse Family Partnership, rural MHVI HFA, MI-APPT and MI APPP, Family Planning (FPAR, 2019, preliminary), Local Maternal Child Health (NPM/SPM: Well Woman, Oral Health, Lead Prevention, Depression, Immunizations). Other individuals such as grandparents, fathers, and teachers are also included in this count. Population estimates were used for Primary Sources of Insurance Coverage from American Community Survey - Adults 22+, 2018.	

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women**
	Fiscal Year:	**2019**
	Field Note: In addition to Pregnant Women Form 5a counts, numerators were used for the programs and services with the largest reach for a given population. For pregnant women, all 10 regions of the state have Perinatal Care Quality Improvement (PCQI) projects, with Title V support in Region 1, 2, 3, 4, 8 and 10. A population estimate of births in each Title V supported region was used. Denominator from Birth Certificate Resident births, preliminary, 2019, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.	
2.	**Field Name:**	**InfantsLess Than One Year**
	Fiscal Year:	**2019**
	Field Note: In addition to Infants from Form 5a counts, numerators were used for the programs and services with the largest reach for a given population. For infants less than one year of age, universal newborn screening (provisional) was used, which correlates to live occurrences births. Reference data for denominator is 2019 provisional live birth file, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.	
3.	**Field Name:**	**Children 1 Through 21 Years of Age**
	Fiscal Year:	**2019**
	Field Note: In addition to Children 1-21 and CSHCN Form 5a counts, numerators were used for the programs and services with the largest reach for a given population. For Children 1-21, the Michigan Model for School Health curriculum was used because staff time for Title V state match supported the program.The curriculum is widely used across Michigan. Due to age range overlap, some duplication in numbers is possible. Additionally, the number of children less than 6 screened for lead was used because staff time with Title V funds supports lead prevention in the state. [Denominator provided by HRSA]	

4.	**Field Name:**	**Children With Special Health Care Needs**
	Fiscal Year:	**2019**
	Field Note: CSHCS is a subset of Children 1-21. Form 5a CSHCS counts were used for the service with the largest reach for a given population. Family phone line calls are included in population served. As per the Title V Guidance, CSHCN are not excluded from population-based services for all children and therefore the percent reported is the same as Children 1-21 years. [Denominator provided by HRSA]	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2019**
	Field Note: In addition to Others from Form 5a counts, numerators were used for the programs and services with the largest reach for a given population. For Others, counts include the Local Maternal Child Health Public Health Infrastructure and Support (includes counts on population such as media campaign analytics; distribution of materials at health fair/outreach events), professional participants in the Great Lakes Breastfeeding Series, cases reviewed in the FIMR process, professional training/staff development, distribution of the lead-free toolkit to providers across the state, and other media campaigns. [Denominator from HRSA]	

Data Alerts: None

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: Michigan

Annual Report Year 2019

I. Unduplicated Count by Race/Ethnicity

	(A) Total	(B) Non-Hispanic White	(C) Non-Hispanic Black or African American	(D) Hispanic	(E) Non-Hispanic American Indian or Native Alaskan	(F) Non-Hispanic Asian	(G) Non-Hispanic Native Hawaiian or Other Pacific Islander	(H) Non-Hispanic Multiple Race	(I) Other & Unknown
1. Total Deliveries in State	106,787	71,377	20,191	7,552	375	4,242	33	2,348	669
Title V Served	106,787	71,377	20,191	7,552	375	4,242	33	2,348	669
Eligible for Title XIX	43,909	23,111	13,413	4,552	228	1,007	16	1,324	258
2. Total Infants in State	107,745	72,301	20,194	7,576	379	4,244	33	2,336	682
Title V Served	107,745	72,301	20,194	7,576	379	4,244	33	2,336	682
Eligible for Title XIX	44,747	23,933	13,402	4,564	227	1,022	16	1,318	265

Form Notes for Form 6:

Data Source: 2019 preliminary Live Birth File, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services

Field Level Notes for Form 6:

None

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: Michigan

A. State MCH Toll-Free Telephone Lines	2021 Application Year	2019 Annual Report Year
1. State MCH Toll-Free "Hotline" Telephone Number	(844) 875-9211	(844) 875-9211
2. State MCH Toll-Free "Hotline" Name	2-1-1	2-1-1
3. Name of Contact Person for State MCH "Hotline"	Hassan Hammoud	Hassan Hammoud
4. Contact Person's Telephone Number	(517) 664-9811	(517) 664-9811
5. Number of Calls Received on the State MCH "Hotline"		6,158

B. Other Appropriate Methods	2021 Application Year	2019 Annual Report Year
1. Other Toll-Free "Hotline" Names	Family Phone Line	Family Phone Line
2. Number of Calls on Other Toll-Free "Hotlines"		11,878
3. State Title V Program Website Address		
4. Number of Hits to the State Title V Program Website		
5. State Title V Social Media Websites		
6. Number of Hits to the State Title V Program Social Media Websites		

Form Notes for Form 7:

The "Number of Calls Received on the State MCH Hotline" represents the total number of unique MCH contacts by telephone call, text or email. Most contacts were via telephone.

Form 8
State MCH and CSHCN Directors Contact Information

State: Michigan

1. Title V Maternal and Child Health (MCH) Director	
Name	Dawn Shanafelt
Title	Director, Division of Maternal and Infant Health
Address 1	109 West Michigan Avenue
Address 2	
City/State/Zip	Lansing / MI / 48933
Telephone	(517) 335-4945
Extension	
Email	ShanafeltD@michigan.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Lonnie Barnett
Title	Director, Children's Special Health Care Services Division
Address 1	400 South Pine Street
Address 2	
City/State/Zip	Lansing / MI / 48913
Telephone	(517) 241-7186
Extension	
Email	BarnettL@michigan.gov

3. State Family or Youth Leader (Optional)	
Name	Candida Bush
Title	Director, Family Center for CYSHCN
Address 1	400 South Pine Street
Address 2	
City/State/Zip	Lansing / MI / 48913
Telephone	(517) 241-7197
Extension	
Email	BushC9@michigan.gov

Form Notes for Form 8:

None

Form 9
State Priorities – Needs Assessment Year

State: Michigan

Application Year 2021

No.	Priority Need	Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period)
1.	Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity	New
2.	Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play	New
3.	Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they learn and live	New
4.	Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems	New
5.	Improve oral health awareness and create an oral health delivery system that provides access through multiple systems	New
6.	Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities	New
7.	Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person	New

Form Notes for Form 9:

Michigan developed the 2020 priority needs through an extensive stakeholder and group process. MCH partners reviewed needs assessment findings and developed priority need statements independent of priorities from the 2015 needs assessment. Given this process, all state priority needs in Form 9 are indicated as new. However, there are commonalities and differences in the statements that emerged from the 2015 and 2020 needs assessment cycles.

Field Level Notes for Form 9:

None

Form 10
National Outcome Measures (NOMs)

State: Michigan

Form Notes for Form 10 NPMs, NOMs, SPMs, SOMs, and ESMs.

None

NOM 1 - Percent of pregnant women who receive prenatal care beginning in the first trimester

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	79.8 %	0.1 %	85,510	107,175
2017	80.4 %	0.1 %	86,882	108,031
2016	79.8 %	0.1 %	87,826	110,125
2015	79.3 %	0.1 %	87,582	110,483
2014	79.0 %	0.1 %	88,386	111,951
2013	76.4 %	0.1 %	84,520	110,574
2012	77.6 %	0.1 %	85,436	110,069
2011	77.9 %	0.1 %	86,398	110,846
2010	77.9 %	0.1 %	86,568	111,150
2009	77.6 %	0.1 %	87,799	113,120

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 1 - Notes:

None

Data Alerts: None

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	69.2	2.5	751	108,492
2016	73.6	2.6	811	110,188
2015	69.5	2.9	579	83,253
2014	72.6	2.6	807	111,154
2013	73.4	2.6	810	110,389
2012	78.7	2.7	867	110,115
2011	65.3	2.4	726	111,183
2010	73.6	2.6	821	111,606
2009	63.3	2.4	724	114,454
2008	61.7	2.3	728	117,905

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 2 - Notes:

None

Data Alerts: None

NOM 3 - Maternal mortality rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2014_2018	16.2	1.7	91	562,460

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 3 - Notes:

None

Data Alerts: None

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	8.5 %	0.1 %	9,302	109,955
2017	8.8 %	0.1 %	9,793	111,353
2016	8.5 %	0.1 %	9,654	113,232
2015	8.5 %	0.1 %	9,612	113,229
2014	8.4 %	0.1 %	9,545	114,290
2013	8.2 %	0.1 %	9,331	113,396
2012	8.4 %	0.1 %	9,548	112,995
2011	8.3 %	0.1 %	9,508	113,925
2010	8.4 %	0.1 %	9,610	114,413
2009	8.4 %	0.1 %	9,799	117,190

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 4 - Notes:

None

Data Alerts: None

NOM 5 - Percent of preterm births (<37 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	10.0 %	0.1 %	11,039	109,983
2017	10.2 %	0.1 %	11,406	111,386
2016	10.1 %	0.1 %	11,490	113,276
2015	9.9 %	0.1 %	11,200	113,267
2014	9.8 %	0.1 %	11,154	114,335
2013	9.7 %	0.1 %	11,050	113,390
2012	10.1 %	0.1 %	11,409	112,976
2011	10.0 %	0.1 %	11,365	113,901
2010	10.2 %	0.1 %	11,710	114,434
2009	10.1 %	0.1 %	11,856	117,185

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 5 - Notes:

None

Data Alerts: None

NOM 6 - Percent of early term births (37, 38 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	25.2 %	0.1 %	27,675	109,983
2017	24.8 %	0.1 %	27,648	111,386
2016	24.3 %	0.1 %	27,478	113,276
2015	23.7 %	0.1 %	26,818	113,267
2014	22.8 %	0.1 %	26,120	114,335
2013	22.9 %	0.1 %	26,006	113,390
2012	23.4 %	0.1 %	26,382	112,976
2011	23.4 %	0.1 %	26,618	113,901
2010	24.0 %	0.1 %	27,507	114,434
2009	24.6 %	0.1 %	28,843	117,185

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 6 - Notes:

None

Data Alerts: None

NOM 7 - Percent of non-medically indicated early elective deliveries

Data Source: CMS Hospital Compare

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018/Q2-2019/Q1	1.0 %			
2018/Q1-2018/Q4	1.0 %			
2017/Q4-2018/Q3	1.0 %			
2017/Q3-2018/Q2	1.0 %			
2017/Q2-2018/Q1	1.0 %			
2017/Q1-2017/Q4	1.0 %			
2016/Q4-2017/Q3	1.0 %			
2016/Q3-2017/Q2	1.0 %			
2016/Q2-2017/Q1	1.0 %			
2016/Q1-2016/Q4	1.0 %			
2015/Q4-2016/Q3	1.0 %			
2015/Q3-2016/Q2	1.0 %			
2015/Q2-2016/Q1	1.0 %			
2015/Q1-2015/Q4	1.0 %			
2014/Q4-2015/Q3	2.0 %			
2014/Q3-2015/Q2	2.0 %			
2014/Q2-2015/Q1	2.0 %			
2014/Q1-2014/Q4	3.0 %			
2013/Q4-2014/Q3	3.0 %			
2013/Q3-2014/Q2	3.0 %			
2013/Q2-2014/Q1	3.0 %			

Legends:

NOM 7 - Notes:

None

Data Alerts: None

NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	6.6	0.2	738	111,726
2016	6.1	0.2	689	113,623
2015	5.8	0.2	654	113,592
2014	5.9	0.2	676	114,656
2013	6.4	0.2	723	113,779
2012	6.4	0.2	727	113,359
2011	6.4	0.2	734	114,331
2010	6.8	0.2	785	114,838
2009	7.1	0.3	832	117,642

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 8 - Notes:

None

Data Alerts: None

NOM 9.1 - Infant mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	6.8	0.3	755	111,426
2016	6.4	0.2	727	113,315
2015	6.5	0.2	739	113,312
2014	6.5	0.2	739	114,375
2013	7.0	0.3	800	113,489
2012	6.9	0.3	784	113,091
2011	6.5	0.2	746	114,008
2010	7.1	0.3	816	114,531
2009	7.6	0.3	892	117,294

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.1 - Notes:

None

Data Alerts: None

NOM 9.2 - Neonatal mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	4.5	0.2	502	111,426
2016	4.2	0.2	479	113,315
2015	4.2	0.2	476	113,312
2014	4.3	0.2	488	114,375
2013	4.8	0.2	543	113,489
2012	4.8	0.2	540	113,091
2011	4.4	0.2	496	114,008
2010	4.8	0.2	551	114,531
2009	5.2	0.2	606	117,294

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.2 - Notes:

None

Data Alerts: None

NOM 9.3 - Post neonatal mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	2.3	0.1	253	111,426
2016	2.2	0.1	248	113,315
2015	2.3	0.1	263	113,312
2014	2.2	0.1	251	114,375
2013	2.3	0.1	257	113,489
2012	2.2	0.1	244	113,091
2011	2.2	0.1	250	114,008
2010	2.3	0.1	265	114,531
2009	2.4	0.1	286	117,294

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.3 - Notes:

None

Data Alerts: None

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	280.9	15.9	313	111,426
2016	233.9	14.4	265	113,315
2015	236.5	14.5	268	113,312
2014	248.3	14.8	284	114,375
2013	267.9	15.4	304	113,489
2012	299.8	16.3	339	113,091
2011	264.0	15.2	301	114,008
2010	295.1	16.1	338	114,531
2009	308.6	16.3	362	117,294

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.4 - Notes:

None

Data Alerts: None

NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	80.8	8.5	90	111,426
2016	94.4	9.1	107	113,315
2015	100.6	9.4	114	113,312
2014	104.0	9.5	119	114,375
2013	107.5	9.7	122	113,489
2012	78.7	8.4	89	113,091
2011	83.3	8.6	95	114,008
2010	89.1	8.8	102	114,531
2009	102.3	9.3	120	117,294

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.5 - Notes:

None

Data Alerts: None

NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	6.2 %	0.8 %	6,729	107,826
2013	7.1 %	0.8 %	7,783	109,332
2012	6.1 %	0.7 %	6,640	108,444
2011	6.2 %	0.7 %	6,761	109,422
2010	6.8 %	0.8 %	7,511	110,204
2009	7.2 %	0.7 %	8,062	112,665
2008	7.8 %	0.8 %	9,118	116,419
2007	6.8 %	0.7 %	8,160	119,804

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has an unweighted denominator between 30 and 59 or confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 10 - Notes:

None

Data Alerts: None

NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	8.0	0.3	873	109,707
2016	7.7	0.3	863	111,474
2015	8.3	0.3	696	84,277
2014	7.4	0.3	828	112,305
2013	6.8	0.3	759	111,274
2012	5.5	0.2	609	110,704
2011	5.0	0.2	557	111,639
2010	3.6	0.2	403	112,371
2009	2.9	0.2	334	115,268
2008	2.0	0.1	241	118,761

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 11 - Notes:

None

Data Alerts: None

NOM 12 - Percent of eligible newborns screened for heritable disorders with on time physician notification for out of range screens who are followed up in a timely manner. (DEVELOPMENTAL)

Federally available Data (FAD) for this measure is not available/reportable.

NOM 12 - Notes:

None

Data Alerts: None

NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)

Federally available Data (FAD) for this measure is not available/reportable.

NOM 13 - Notes:

None

Data Alerts: None

NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	8.9 %	1.2 %	184,690	2,081,114
2016_2017	8.1 %	0.9 %	170,205	2,108,084
2016	10.4 %	1.3 %	218,950	2,112,940

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 14 - Notes:

None

Data Alerts: None

NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	21.3	1.4	223	1,048,510
2017	17.9	1.3	188	1,049,560
2016	20.1	1.4	212	1,052,423
2015	18.0	1.3	190	1,055,961
2014	15.6	1.2	166	1,063,261
2013	15.7	1.2	169	1,074,265
2012	18.6	1.3	202	1,084,513
2011	16.5	1.2	181	1,094,617
2010	16.7	1.2	187	1,119,319
2009	19.1	1.3	216	1,130,341

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 15 - Notes:

None

Data Alerts: None

NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	32.8	1.6	417	1,273,169
2017	33.5	1.6	430	1,283,533
2016	35.6	1.7	461	1,293,264
2015	34.6	1.6	451	1,305,161
2014	31.1	1.5	411	1,320,994
2013	31.6	1.5	423	1,337,140
2012	35.8	1.6	486	1,356,278
2011	35.3	1.6	488	1,382,472
2010	35.3	1.6	500	1,414,815
2009	35.6	1.6	512	1,436,495

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.1 - Notes:

None

Data Alerts: None

NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016_2018	9.3	0.7	184	1,983,162
2015_2017	10.5	0.7	209	1,999,968
2014_2016	11.7	0.8	235	2,015,261
2013_2015	10.6	0.7	216	2,032,680
2012_2014	10.6	0.7	218	2,059,137
2011_2013	11.7	0.8	245	2,097,639
2010_2012	13.2	0.8	283	2,151,744
2009_2011	13.9	0.8	306	2,207,213
2008_2010	12.9	0.8	291	2,253,754
2007_2009	14.6	0.8	333	2,280,096

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.2 - Notes:

None

Data Alerts: None

NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016_2018	13.4	0.8	266	1,983,162
2015_2017	12.4	0.8	248	1,999,968
2014_2016	11.0	0.7	221	2,015,261
2013_2015	10.5	0.7	213	2,032,680
2012_2014	10.3	0.7	213	2,059,137
2011_2013	9.9	0.7	207	2,097,639
2010_2012	9.7	0.7	208	2,151,744
2009_2011	8.8	0.6	195	2,207,213
2008_2010	8.3	0.6	188	2,253,754
2007_2009	7.3	0.6	167	2,280,096

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.3 - Notes:

None

Data Alerts: None

NOM 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	19.8 %	1.7 %	431,476	2,177,152
2016_2017	20.5 %	1.6 %	448,832	2,192,727
2016	20.2 %	1.6 %	444,614	2,199,932

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.1 - Notes:

None

Data Alerts: None

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	15.9 %	2.9 %	68,445	431,476
2016_2017	17.2 %	3.0 %	77,383	448,832
2016	17.8 %	3.7 %	79,079	444,614

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.2 - Notes:

None

Data Alerts: None

NOM 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	3.2 %	1.0 %	58,419	1,845,774
2016_2017	2.8 %	0.8 %	52,901	1,858,721
2016	2.4 %	0.5 %	43,444	1,841,205

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.3 - Notes:

None

Data Alerts: None

NOM 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	10.0 %	1.6 %	182,715	1,821,576
2016_2017	10.2 %	1.4 %	188,503	1,845,607
2016	9.9 %	1.2 %	180,655	1,832,465

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.4 - Notes:

None

Data Alerts: None

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	57.8 %	6.2 %	143,894	248,906
2016_2017	55.4 %	5.9 %	134,110	242,058
2016	65.3 %	5.7 %	143,720	220,148

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 18 - Notes:

None

Data Alerts: None

NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	88.6 %	1.5 %	1,921,968	2,169,294
2016_2017	91.4 %	1.2 %	1,994,495	2,182,883
2016	93.2 %	1.0 %	2,044,871	2,193,776

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 19 - Notes:

None

Data Alerts: None

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Data Source: WIC

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	13.3 %	0.1 %	11,211	84,387
2014	13.4 %	0.1 %	11,553	86,139
2012	13.9 %	0.1 %	12,787	91,932
2010	14.4 %	0.1 %	12,273	85,293
2008	14.3 %	0.1 %	12,268	85,493

Legends:

Indicator has a denominator <50 and is not reportable

Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	16.7 %	2.0 %	68,699	410,229
2015	14.2 %	0.9 %	59,233	416,489
2013	13.2 %	0.9 %	57,012	431,311
2011	12.0 %	0.8 %	59,082	491,966
2009	12.0 %	0.7 %	56,629	472,367
2007	12.3 %	1.0 %	60,114	487,053
2005	12.0 %	1.1 %	59,303	492,176

Legends:

Indicator has an unweighted denominator <100 and is not reportable

Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	18.9 %	2.7 %	173,600	919,783
2016_2017	17.3 %	2.4 %	156,793	904,564
2016	13.9 %	2.2 %	123,218	887,288

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 20 - Notes:

None

Data Alerts: None

NOM 21 - Percent of children, ages 0 through 17, without health insurance

Data Source: American Community Survey (ACS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	2.9 %	0.2 %	61,744	2,161,263
2017	2.8 %	0.2 %	61,529	2,171,692
2016	2.9 %	0.2 %	63,999	2,185,729
2015	3.3 %	0.2 %	71,886	2,205,601
2014	3.7 %	0.2 %	81,249	2,218,195
2013	4.2 %	0.3 %	94,466	2,241,806
2012	4.3 %	0.2 %	96,150	2,264,117
2011	3.9 %	0.3 %	88,603	2,287,224
2010	4.2 %	0.3 %	98,185	2,333,517
2009	4.4 %	0.2 %	101,999	2,347,431

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 21 - Notes:

None

Data Alerts: None

NOM 22.1 - Percent of children, ages 19 through 35 months, who completed the combined 7-vaccine series (4:3:1:3*:3:1:4)

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	70.5 %	3.5 %	115,183	163,286
2017	69.9 %	3.8 %	113,675	162,701
2016	70.2 %	3.9 %	114,209	162,645
2015	67.6 %	3.7 %	109,543	162,007
2014	65.0 %	4.4 %	105,178	161,836
2013	70.0 %	3.8 %	114,033	162,940
2012	70.5 %	3.7 %	114,503	162,484
2011	66.2 %	3.9 %	110,115	166,313
2010	65.2 %	3.5 %	111,999	171,698
2009	52.1 %	3.8 %	97,818	187,622

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

Estimates with 95% confidence interval widths >20 or that are inestimable might not be reliable

NOM 22.1 - Notes:

None

Data Alerts: None

NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

Data Source: National Immunization Survey (NIS) - Flu

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	56.7 %	1.9 %	1,160,321	2,045,700
2017_2018	54.0 %	1.8 %	1,106,263	2,049,234
2016_2017	55.7 %	2.7 %	1,160,747	2,083,553
2015_2016	55.5 %	2.2 %	1,175,624	2,118,242
2014_2015	52.6 %	2.0 %	1,128,562	2,144,332
2013_2014	54.5 %	2.1 %	1,173,013	2,151,267
2012_2013	50.5 %	2.1 %	1,104,144	2,185,520
2011_2012	45.5 %	2.1 %	1,012,029	2,222,082
2010_2011	45.9 %	2.2 %	1,021,330	2,225,120
2009_2010	37.1 %	2.3 %	888,940	2,396,064

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or because the relative standard error is >0.3.

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.2 - Notes:

None

Data Alerts: None

NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	72.5 %	3.1 %	461,285	636,563
2017	67.3 %	3.1 %	434,131	644,686
2016	61.3 %	3.5 %	400,347	653,090
2015	59.8 %	3.1 %	395,586	661,834

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.3 - Notes:

None

Data Alerts: None

NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	93.8 %	1.6 %	597,278	636,563
2017	93.4 %	1.7 %	602,005	644,686
2016	93.6 %	1.7 %	611,119	653,090
2015	74.0 %	2.8 %	489,955	661,834
2014	79.3 %	2.8 %	530,881	669,523
2013	81.0 %	2.7 %	545,205	672,858
2012	84.2 %	2.4 %	572,289	679,895
2011	71.0 %	3.3 %	489,318	689,393
2010	66.2 %	3.2 %	462,403	698,032
2009	46.2 %	2.8 %	333,108	720,421

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.4 - Notes:

None

Data Alerts: None

NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	95.9 %	1.3 %	610,491	636,563
2017	93.5 %	1.7 %	602,651	644,686
2016	95.0 %	1.3 %	620,674	653,090
2015	95.0 %	1.3 %	629,015	661,834
2014	90.7 %	2.0 %	607,555	669,523
2013	90.7 %	2.0 %	610,110	672,858
2012	87.5 %	2.1 %	594,639	679,895
2011	77.9 %	3.0 %	537,339	689,393
2010	70.9 %	3.1 %	494,777	698,032
2009	52.6 %	2.8 %	378,858	720,421

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.5 - Notes:

None

Data Alerts: None

NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	15.8	0.2	5,042	320,027
2017	16.4	0.2	5,307	323,738
2016	17.7	0.2	5,792	326,851
2015	19.4	0.2	6,356	328,084
2014	21.1	0.3	6,967	330,522
2013	23.5	0.3	7,872	334,483
2012	26.2	0.3	8,913	340,348
2011	27.8	0.3	9,658	347,543
2010	30.3	0.3	10,835	357,400
2009	31.9	0.3	11,709	366,494

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 23 - Notes:

None

Data Alerts: None

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	16.4 %	1.1 %	16,965	103,497
2017	12.9 %	1.0 %	13,526	104,743
2016	14.3 %	1.0 %	15,290	106,820
2015	14.1 %	1.1 %	14,980	106,503
2013	13.3 %	1.1 %	14,486	108,565
2012	13.8 %	1.1 %	14,895	108,047

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has an unweighted denominator between 30 and 59 or a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 24 - Notes:

None

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year

Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2018	2.2 %	0.5 %	46,684	2,168,786
2016_2017	1.9 %	0.4 %	42,521	2,185,942
2016	2.4 %	0.6 %	52,234	2,197,678

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 25 - Notes:

None

Data Alerts: None

Form 10
National Performance Measures (NPMs)

State: Michigan

NPM 2 - Percent of cesarean deliveries among low-risk first births

Federally Available Data	
Data Source: National Vital Statistics System (NVSS)	
	2019
Annual Objective	
Annual Indicator	27.3
Numerator	9,510
Denominator	34,845
Data Source	NVSS
Data Source Year	2018

Annual Objectives					
	2021	**2022**	**2023**	**2024**	**2025**
Annual Objective	25.9	25.7	25.5	25.4	25.2

Field Level Notes for Form 10 NPMs:

None

NPM 4A - Percent of infants who are ever breastfed

Federally Available Data				
Data Source: National Immunization Survey (NIS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	79.1	79.7	80.5	81.2
Annual Indicator	80.8	75.9	77.7	83.0
Numerator	82,892	86,976	88,168	86,380
Denominator	102,591	114,556	113,401	104,098
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	82.7	83.3	84.1	84.8	85.5	86.2

Field Level Notes for Form 10 NPMs:

None

NPM 4B - Percent of infants breastfed exclusively through 6 months

Federally Available Data				
Data Source: National Immunization Survey (NIS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	20.6	21.5	31.1	32.9
Annual Indicator	26.6	22.6	23.9	28.4
Numerator	25,900	25,415	25,921	28,764
Denominator	97,537	112,351	108,464	101,206
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	34.4	36.2	38.0	39.8	41.6	43.4

Field Level Notes for Form 10 NPMs:

None

NPM 5A - Percent of infants placed to sleep on their backs

Federally Available Data			
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)			
	2017	**2018**	**2019**
Annual Objective			87.6
Annual Indicator	81.4	83.3	82.5
Numerator	86,585	87,247	85,511
Denominator	106,318	104,718	103,596
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2017	2018

State Provided Data			
	2017	**2018**	**2019**
Annual Objective			87.6
Annual Indicator	81.9	83.5	82.5
Numerator	87,760	87,247	85,511
Denominator	107,091	104,517	103,596
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2016	2017	2018
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	86.8	87.9	89.1	90.3	91.5	92.6

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: Reporting PRAMS 2016 data year values instead of 2015	

NPM 5B - Percent of infants placed to sleep on a separate approved sleep surface

Federally Available Data		
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)		
	2018	**2019**
Annual Objective		35.7
Annual Indicator	39.2	38.9
Numerator	39,142	38,781
Denominator	99,861	99,669
Data Source	PRAMS	PRAMS
Data Source Year	2017	2018

State Provided Data			
	2017	**2018**	**2019**
Annual Objective			35.7
Annual Indicator	74.7	34	39.2
Numerator	77,520	34,751	39,142
Denominator	103,790	102,182	99,861
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2016	2017
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	45.0	47.6	50.2	52.9	55.5	58.1

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.

All PRAMS states began asking different safe sleep questions in 2016. In prior years this measure was based on only two sleep risk factors - does the infant sleep in his or her own crib, and does the infant sleep with other people. Starting in 2016 this measure is now based on a combination of 5 different sleep risk factors (always or often sleeps alone in own bed; in a crib, bassinet or pack and play; does not sleep on a twin or larger mattress; does not sleep on couches, sofas, armchairs; does not sleep in a car set or swing). Asking about whether infants sleep in a car seat or swing - a new question - has had an especially large impact on this measure. The proportion of Michigan mothers meeting this goal is lower than in prior years, but the measurement now provides a more comprehensive picture of infant safe sleep.

2.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.

In birth year 2016, MI was ranked 17th out of 29 total PRAMS states for this measure. In the 2017 birth year, MI was ranked 2nd out of 26 total PRAMS states for this measure.

NPM 5C - Percent of infants placed to sleep without soft objects or loose bedding

Federally Available Data		
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)		
	2018	**2019**
Annual Objective		54.4
Annual Indicator	58.3	59.8
Numerator	58,277	59,314
Denominator	99,994	99,167
Data Source	PRAMS	PRAMS
Data Source Year	2017	2018

State Provided Data			
	2017	**2018**	**2019**
Annual Objective			54.4
Annual Indicator	74.6	51.8	58.3
Numerator	78,063	52,803	58,277
Denominator	104,629	101,994	99,994
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2016	2017
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	68.2	71.6	74.8	77.8	80.5	83.0

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
HRSA is using variables from the 2016 PRAMS survey which differ from the infant sleep environment variables on previous versions of the questionnaire. Michigan does not yet have 2016 data, so the closest approximation to the 2016 variables was used.

2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.
All PRAMS states began asking different safe sleep questions in 2016. In prior years this measure was based on whether or not the infant often slept with any of four different sleep space objects (soft or plush blankets, pillows, stuffed toys, bumper pads). Starting in 2016 this measure is now based on a combination of 3 different sleep space items (blankets, toys or pillows, bumper pads). Due to changes in the wording of the blanket question [any blanket vs only plush or thick blankets], many more mothers now report that their infants have at least one soft item in the sleep space. Although the number here differs from the number reported in the past, in 2016 Michigan had the highest proportion of mothers reporting that their infants do not sleep with soft objects (compared to 28 other PRAMS states reporting this data).

3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.
All PRAMS states began asking different safe sleep questions in 2016. In prior years this measure was based on whether or not the infant often slept with any of four different sleep space objects (soft or plush blankets, pillows, stuffed toys, bumper pads). Starting in 2016 this measure is now based on a combination of 3 different sleep space items (blankets, toys or pillows, bumper pads). Due to changes in the wording of the blanket question [any blanket vs only plush or thick blankets], many more mothers now report that their infants have at least one soft item in the sleep space. Although the number here differs from the number reported in the past, in 2016 Michigan had the highest proportion of mothers reporting that their infants do not sleep with soft objects (compared to 28 other PRAMS states reporting this data).

NPM 9 - Percent of adolescents, ages 12 through 17, who are bullied or who bully others

Federally Available Data	
Data Source: Youth Risk Behavior Surveillance System (YRBSS)	
	2019
Annual Objective	
Annual Indicator	29.8
Numerator	127,314
Denominator	426,596
Data Source	YRBSS
Data Source Year	2017

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH) - Perpetration	
	2019
Annual Objective	
Annual Indicator	20.0
Numerator	145,381
Denominator	727,587
Data Source	NSCHP
Data Source Year	2018

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2019
Annual Objective	
Annual Indicator	48.0
Numerator	349,295
Denominator	727,587
Data Source	NSCHV
Data Source Year	2018

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	25.4	24.7	24.0	23.3	22.6

Field Level Notes for Form 10 NPMs:

None

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care - Children with Special Health Care Needs

Federally Available Data				
Data Source: National Survey of Children's Health (NSCH) - CSHCN				
	2016	**2017**	**2018**	**2019**
Annual Objective			17	17.2
Annual Indicator		16.7	16.0	21.6
Numerator		32,776	34,325	48,634
Denominator		196,702	215,008	225,148
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	17.4	17.6	17.7	17.9	18.1	18.3

Field Level Notes for Form 10 NPMs:

None

NPM 13.1 - Percent of women who had a preventive dental visit during pregnancy

Federally Available Data				
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	55.1	56.2	56.4	57.4
Annual Indicator	50.3	53.6	49.8	49.2
Numerator	54,731	57,883	53,356	51,874
Denominator	108,763	108,083	107,079	105,470
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2013	2015	2017	2018

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	58.5	59.6	60.6	61.7	62.7	63.8

Field Level Notes for Form 10 NPMs:

None

NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year - Child Health

Federally Available Data				
Data Source: National Survey of Children's Health (NSCH)				
	2016	**2017**	**2018**	**2019**
Annual Objective			77.6	78.4
Annual Indicator		76.1	77.9	77.7
Numerator		1,584,320	1,629,730	1,618,664
Denominator		2,082,991	2,092,116	2,083,849
Data Source		NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	88.2	90.2	91.9	93.4	94.6	95.6

Field Level Notes for Form 10 NPMs:

None

Form 10
National Performance Measures (NPMs) (2016-2020 Needs Assessment Cycle)

State: Michigan

2016-2020: NPM 1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Federally Available Data				
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)				
	2016	**2017**	**2018**	**2019**
Annual Objective	74.6	77.2	72.7	74
Annual Indicator	69.0	68.2	69.1	77.2
Numerator	1,141,612	1,123,599	1,142,535	1,288,214
Denominator	1,654,185	1,648,059	1,652,472	1,668,506
Data Source	BRFSS	BRFSS	BRFSS	BRFSS
Data Source Year	2015	2016	2017	2018

Field Level Notes for Form 10 NPMs:

None

2016-2020: NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Federally available Data (FAD) for this measure is not available/reportable.

State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective	89.4	90.1	91.6	91.5
Annual Indicator	89.2	88.9	86.7	89.5
Numerator	1,547	1,511	1,462	1,315
Denominator	1,735	1,699	1,687	1,470
Data Source	2015 Michigan Resident Live Birth File	2016 Michigan Resident Live Birth File	2017 Michigan Resident Live Birth File	2018 Michigan Resident Live Birth File
Data Source Year	2015	2016	2017	2018
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Home births are not included in data reporting.

2016-2020: NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Federally Available Data				
Data Source: National Survey of Children's Health (NSCH)				
	2016	**2017**	**2018**	**2019**
Annual Objective			82.6	83.5
Annual Indicator		81.0	81.3	81.3
Numerator		633,720	618,502	618,502
Denominator		782,076	760,429	760,429
Data Source		NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017

Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

Field Level Notes for Form 10 NPMs:

None

Form 10
State Performance Measures (SPMs)

State: Michigan

SPM 1 - Percent of children less than 72 months of age who receive a venous lead confirmation testing within 30 days of an initial elevated capillary test

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		22.1	24.6	27.1
Annual Indicator	23.6	25	43.4	45.8
Numerator	1,208	1,048	1,308	1,671
Denominator	5,116	4,190	3,017	3,646
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	29.6	32.1	34.6	37.1	50.0	55.0

Field Level Notes for Form 10 SPMs:

1. **Field Name:** **2016**

   Column Name: **State Provided Data**

   Field Note:
   DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for the last quarter of 2016 (October – December 2016) and 2017 are incomplete, and subject to change. Blood lead test results from 1/1/2014 to 2/13/2017 were downloaded from the DW on 2/22/17, and data for CY 2016 plus 30 days (1/1/2016-1/31/2017) were extracted for this report. The numerator was calculated as the number of Child_IDs with at least one capillary or unknown type test >= 5 ug/dL from 1/1/2016-12/31/2016 followed by a venous blood test within 30 days from 1/1/2016 to 1/31/2017. The denominator was all Child_IDs with a capillary or unknown type test > 5 ug/dL from 1/1/2016 to 12/31/2016.

2. **Field Name:** **2017**

	Column Name:	**State Provided Data**

Field Note:
Results reported are for initial elevated capillary blood tests conducted in CY 2017 (Jan. 1 2017 – Dec. 31 2017) with confirmatory testing completed before Feb 2, 2018. DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for FY2017 are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 2/2/2018. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test ≥ 5 µg/dL from 1/1/2017 to 12/31/2017 followed by a venous blood test within 30 days. The denominator was all children under 72 months with a capillary or unknown type test ≥ 5 µg/dL from 1/1/2017 to 12/31/2017.

3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Results reported are for initial elevated capillary blood tests conducted in CY 2018 (January 1, 2018 - December 31, 2018) with confirmatory testing completed before February 2, 2019.

DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for the last quarter of 2018 (October – December 2018) are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 2/08/2019. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test ≥ 5 µg/dL (> 4.5 µg/dL – Michigan began storing test results as unrounded numbers in 2017: this number was chosen maintain consistency in identifying elevated levels with past years when blood lead test results were rounded to the nearest whole number) from 01/1/2018 to 12/31/2018 followed by a venous blood test within 30 days. The denominator was all children under 72 months with a capillary or unknown type test ≥ 4.5 from 01/01/2018 to 12/31/2018.

NOTE: There have been significant improvements in the algorithm used by the MDHHS Data Warehouse to assign unique identifiers to individual children, which has corrected instances wh

4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Results reported are for initial elevated capillary blood tests conducted in CY 2019 (Jan. 1 2019 – Dec. 31 2019) with confirmatory testing completed before Feb 2, 2020

DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for the last quarter of 2019 (October – December 2019) are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 1/13/2020. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test ≥ 5 µg/dL (> 4.5 µg/dL – Michigan began storing test results as unrounded numbers in 2017: this number was chosen maintain consistency in identifying elevated levels with past years when blood lead test results were rounded to the nearest whole number) from 01/1/2018 to 12/31/2018 followed by a venous blood test within 30 days. The denominator was all children under 72 months with a capillary or unknown type test ≥ 4.5 from 01/01/2018 to 12/31/2018.
NOTE: Ther

SPM 2 - Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4313314 series)

Measure Status:				Active
State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective		76	77	75
Annual Indicator	74.7	75	74.1	74.1
Numerator	125,343	125,853	123,596	121,707
Denominator	167,778	167,842	166,746	164,167
Data Source	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Annual Objective	76.0	77.0	78.0	79.0	80.0	80.0

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: Completion rate will be measured at the end of the year.	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: The Immunization rates have remained static for children 19-35 months of age in the last fiscal year.	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: The immunization rates are dropping for children 19-36 months over the past year.	

SPM 3 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective			44
Annual Indicator	39.3	41.9	52.4
Numerator	295,138	313,144	334,188
Denominator	750,281	746,563	637,751
Data Source	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)
Data Source Year	2017	2018	2019
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	54.0	56.0	58.0	60.0	62.0	64.0

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: We have increased the number of adolescents who have completed the HPV vaccination series. Part of the reason for the significant increase was due to the change in the recommended schedule to receive the HPV series. Adolescents less than 15 years of age can complete the HPV series with only two doses of vaccine if they are separated by at least 5 months. The change in the recommended schedule resulted in a 7% increase in our vaccination rates for adolescents of this age.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: We continue to see adolescent rates increase. HPV completion rate had a slow but steady increase, as we continue to encourage parents and providers to vaccinate at the early recommended ages as to complete with just 2 doses.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: HPV completion rate continues to increase. Posting male and female combined rates for state and counties on website on immunization report card.	

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		89.9	90.9	91.9
Annual Indicator	88.1	89.1	88.9	88
Numerator	14,253,020	20,556,206	14,678,590	10,365,782
Denominator	16,176,800	23,074,740	16,507,392	11,783,520
Data Source	CAHPS	CAHPS	CAHPS	CAHPS
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	92.9	93.9	94.9	95.9	96.9	97.9

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
The CSHCS Program intended for this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where:

“In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?”
A: Number who reported “usually” or “always”
B: Number of respondents who answered this question

“In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?”
C: Number who reported “usually” or “always”
D: Number of respondents who answered this question

2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

	Field Note: Question 2 reads: “In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?” The CSHCS Program intended this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where: “In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?” A: Number who reported “usually” or “always” (2768) B: Number of respondents who answered this question (3287) “In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?” C: Number who reported “usually” or “always” (1649) D: Number of respondents who answered this question (1755).	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: Question 2 reads: “In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?” The CSHCS Program intended for this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where: “In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?” A: Number who reported “usually” or “always” (2,471) B: Number of respondents who answered this question (2,931) “In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?” C: Number who reported “usually” or “always” (1,317) D: Number of respondents who answered this question (1,408)	
4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: Question 2 reads: “In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?” The CSHCS Program intended for this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where: “In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?” A: Number who reported “usually” or “always” (2,099) B: Number of respondents who answered this question (2,520) “In the last 6 months, when your child needed care right away, how often did your child get the care as soon as he or she needed?” C: Number who reported “usually” or “always” (1,083) D: Number of respondents who answered this question (1,169)	

SPM 5 - Percent of women who had a live birth and reported that their pregnancy was intended

Measure Status:	Active

State Provided Data	
	2019
Annual Objective	
Annual Indicator	57.2
Numerator	59,915
Denominator	104,673
Data Source	PRAMS
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	59.8	60.9	61.9	63.0	64.0

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent general population

SPM 6 - Support access to developmental, behavioral, and mental health services through Title V activities and funding

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	Yes	Yes	Yes	Yes	Yes

Field Level Notes for Form 10 SPMs:

None

Form 10
Evidence-Based or –Informed Strategy Measure (ESM)

State: Michigan

ESM 2.1 - Number of birthing hospitals participating in Michigan AIM

Measure Status:	Active
State Provided Data	
	2019
Annual Objective	
Annual Indicator	68
Numerator	
Denominator	
Data Source	Michigan AIM
Data Source Year	2019
Provisional or Final ?	Final

Annual Objectives					
	2021	**2022**	**2023**	**2024**	**2025**
Annual Objective	72.0	74.0	76.0	78.0	80.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: Reporting year is 2019	

ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		17	20	23
Annual Indicator	14.3	14.5	19.5	18.8
Numerator	12	12	16	15
Denominator	84	83	82	80
Data Source	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	26.0	29.0	31.0	33.0	35.0	35.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: FY2016 Annual Indicator was used as a baseline measure to create Annual Objectives, including FY2016.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: One birthing hospital closed which decreased # of hospitals from 83 to 82. Sparrow (Carson City) closed in 2018.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: The number of Michigan birthing hospitals decreased from 82 (in FY 2018) to 80 (in FY 2019)	

ESM 5.1 - Increase the number of Maternal Infant Health Program agencies that have staff trained to use the concepts of motivational interviewing with safe sleep

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective			85
Annual Indicator			83
Numerator			
Denominator			
Data Source			Maternal Infant Health Program (MIHP) staff
Data Source Year			2019
Provisional or Final ?			Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	84.0	84.0	84.0	84.0	84.0	84.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: There were 85 MIHP agencies in FY 2019.	
2.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: In FY 2020, there are currently 84 MIHP agencies. Annual objectives for 2021-2025 are based on this current number of MIHP agencies, which can fluctuate if the number of agencies increase or decrease over time.	

ESM 5.2 - Increase the number of agencies that have implemented or revised/updated a safe sleep policy/protocol

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	10.0	20.0	30.0	40.0	50.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**

Field Note:
Annual objectives based on Infant Safe Sleep staff obtaining/reviewing policy/protocols for 10 agencies per year. Annual objectives reflect a cumulative count.

ESM 5.3 - Increase the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	2.0	4.0	6.0	8.0	10.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**

Field Note:
Annual objectives reflect a cumulative count based on Infant Safe Sleep staff obtaining and reviewing policy/protocols for two birthing hospitals per year.

ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	6.0	12.0	18.0	24.0	30.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**

Field Note:
Annual objectives for 2021-2025 reflect a cumulative count over time.

ESM 12.1 - Percent of CSHCS clients age 18 to 21 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective	40	43	46
Annual Indicator	52.5	49.9	46.7
Numerator	1,705	1,725	1,787
Denominator	3,246	3,459	3,828
Data Source	CSHCS database, Medicaid Claims, UM Provider Datab	CSHCS database, Medicaid Claims, UM Provider Datab	CSHCS database, Medicaid Claims, UM Provider Datab
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	49.0	52.0	55.0	58.0	61.0	64.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
The ESM combines three separate data sources: 1) the CSHCS database; 2) the CHAMPS (Medicaid Claims) database; and 3) University of Michigan provider database. These three databases provide information on CSHCS clients, and the providers they see.

Percent of children enrolled in CSHCS within a selected diagnosis groups who had an outpatient visit with adult specialists only, based on administrative claims. The selected diagnosis groups included: cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology.

2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
The ESM combines three separate data sources: 1) CSHCS database, 2) CHAMP (Medicaid claims) database; and 3) University of Michigan provider database. These three databases provide information on CSHCS clients and the providers they see.

In FY 2017, 49.9% of CSHCS clients ages 18-20 in selected diagnosis groups had outpatient visits only with adult specialists, based on administrative claims. The selected diagnosis groups were cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology.

3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
ESM includes clients ages 18, 19 and 20. Clients age out on their 21st birthday. In FY 2018, 46.7% of CSHCS clients ages 18 to 21 in selected diagnosis groups had outpatient visits only with adult specialists, based on administrative claims. The selected diagnosis groups were cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology.

ESM 13.1.1 - Number of medical and dental professionals who receive perinatal oral health education through MDHHS

Measure Status:	Active

State Provided Data			
	2017	2018	2019
Annual Objective			390
Annual Indicator	636	648	401
Numerator			
Denominator			
Data Source	FY2017 MDHHS Tracking Database	FY2018 MDHHS Tracking Database	FY2019 MDHHS Tracking Database
Data Source Year	FY2017	FY2018	FY2019
Provisional or Final ?	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	410.0	430.0	450.0	470.0	490.0	510.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: This ESM was newly established in 2018 to align with NPM 13.1. Therefore, there is no column for reporting 2018 data. In FY2018, 648 medical and dental professionals received perinatal oral health education through MDHHS. FY2018 exceeded expectations regarding provider education. This was due to the continued addition of different education activities across the state.	
2.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: FY 2019 exceeded the annual target for provider education due to the addition of educational activities across the state. Note: the perinatal oral health consultant was on maternity leave for several months of the reporting period, resulting in a decrease in the number of professionals trained in comparison to previous years.	

ESM 13.1.2 - Percent of pregnant women who receive at least one oral health service through Medicaid during the perinatal period

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives					
	2021	2022	2023	2024	2025
Annual Objective	40.0	41.0	42.0	43.0	44.0

Field Level Notes for Form 10 ESMs:

None

ESM 13.2.1 - Number of students who have received a preventive dental screening through the SEAL! Michigan program

Measure Status:	Active

State Provided Data				
	2016	2017	2018	2019
Annual Objective		5,927	6,127	6,327
Annual Indicator	8,039	6,677	6,964	6,897
Numerator				
Denominator				
Data Source	SEAL Michigan Annual All Grantee Report	SEAL MI 2017 All Grantees Data Report	SEAL MI 2018 All Grantees Data Report	SEAL MI 2019 All Grantees Data
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Provisional	Final	Final	Final

Annual Objectives						
	2020	2021	2022	2023	2024	2025
Annual Objective	6,527.0	6,727.0	6,927.0	6,927.0	7,127.0	7,327.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: Number was higher due to additional funding allocated to program, which created new programs. Funding may or may not continue in future years.	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: Goal was achieved, this is likely due to the additional funding under Title V.	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: Goal was exceeded, likely due to funding opportunities that supported program expansion.	
4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: In 2019 there was a loss of dental programs due to a loss of federal funding. However, the programs cut served the lowest number of students--and existing programs grew internally in each school and also added new schools to serve students. Thus, annual objectives were still achieved.	

Form 10
Evidence-Based or -Informed Strategy Measures (ESMs) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 1.1 - Percent of women aged 18-44 who have ever discussed reproductive life planning during a visit with a doctor, nurse, or other health professional

Measure Status:			**Active**	
State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective		61.3	62.3	63.3
Annual Indicator	60.3	64.3	66.2	58.4
Numerator	846,111	914,885	936,099	830,851
Denominator	1,404,213	1,423,068	1,413,029	1,422,036
Data Source	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste
Data Source Year	2015	2016	2017	2018
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: The reproductive life planning variable that will be used to quantify the identified strategy measure was a state-added question to the Michigan BRFS starting in 2015	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: The reproductive life planning variable that will be used to quantify the identified strategy measure was and continues to be a state-added question to the Michigan BRFS starting in 2015.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: The reproductive life planning variable that will be used to quantify the identified strategy measure was and continues to be a state-added question to the Michigan BRFS starting in 2015.	

2016-2020: ESM 3.1 - Number of CenteringPregnancy sites in Michigan

Measure Status:			Active	
State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective		12	12	12
Annual Indicator	14	12	14	15
Numerator				
Denominator				
Data Source	Centering Health Institute	Centering Health Institute	Centering Healthcare Institute	Centering Healthcare Institute
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: *CHI=Centering Health Institute; Of the 14 CenteringPregnancy sites in Michigan, 5 are CHI approved sites.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: *CHI = Centering Healthcare Institute; Of the 14 CenteringPregnancy sites in Michigan, 7 are CHI accredited sites.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: *CHI = Centering Healthcare Institute; Of the 15 CenteringPregnancy sites in Michigan, 7 are CHI accredited sites. There are also 3 CenteringParenting sites in Michigan	

2016-2020: ESM 5.1 - Number of birthing hospitals trained on infant safe sleep

Measure Status:			**Active**
State Provided Data			
	2017	**2018**	**2019**
Annual Objective			8
Annual Indicator			19
Numerator			
Denominator			
Data Source			Infant Safe Sleep Program Staff
Data Source Year			FY2019
Provisional or Final ?			Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Annual objectives are based on Infant Safe Sleep staff providing training to eight birthing hospitals per year. Annual objectives reflect the cumulative number of birthing hospitals trained.

2016-2020: ESM 10.1 - Of the health care providers who complete the Motivational Interviewing web course and the Motivational Interviewing professional development training, the percent who report skills in effectively counseling youth on changing risky behaviors

Measure Status:			**Active**	
State Provided Data				
	2016	**2017**	**2018**	**2019**
Annual Objective		93	95	95
Annual Indicator	87.5	93.3	96.4	93.8
Numerator	7	28	27	15
Denominator	8	30	28	16
Data Source	MDHHS Participant Assessment Tool	Evaluation tool / SurveyMonkey	Evaluation tool / SurveyMonkey	Evaluation tool / SurveyMonkey
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: In 2016, there were technical issues with the data collection process related to this ESM. Only eight of the 35 Motivational Interviewing Training participants completed an assessment. Efforts are now in place to improve data collection.	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: MDHHS offered two in-person MI trainings, reaching 43 providers (30 completed evaluation).	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: MDHHS offered two in-person MI trainings, reaching 42 providers (28 completed evaluation).	
4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: MDHHS offered two in-person MI trainings, reaching 26 providers (16 completed evaluation).	

Form 10
State Performance Measure (SPM) Detail Sheets

State: Michigan

SPM 1 - Percent of children less than 72 months of age who receive a venous lead confirmation testing within 30 days of an initial elevated capillary test
Population Domain(s) – Child Health

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To reduce the number of young children in Michigan with an unconfirmed elevated blood lead level</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Numerator:</td><td>Number of children 0-71 months of age who received a venous blood lead test within 30 days of an initial capillary or unknown test result of greater than or equal to 5 µg/dL</td></tr>
<tr><td>Denominator:</td><td>Number of children 0-71 months of age with an initial capillary or unknown test result of greater than or equal to 5 µg/dL</td></tr>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
</table>
</td></tr>
<tr><td>Healthy People 2020 Objective:</td><td>EH-8: Reduce blood levels in children</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>These data are provided by the Michigan Department of Health and Human Services (MDHHS) Childhood Lead Poisoning Prevention Program (CLPPP). Some blood lead levels are reported to CLPPP as decimal values, but currently all are recorded in the data warehouse as integers (decimals are rounded up at ≥0.5).</td></tr>
<tr><td>Significance:</td><td>Exposure to lead, which can enter the body through ingestion or inhalation, can result in negative health effects. Children less than six are vulnerable to the effects of lead poisoning, especially at younger ages when they are likely to put contaminated hands and items (such as toys) into their mouths. Exposure to high levels of lead can result in brain damage and even death in extreme cases. Low levels of lead in the body have been shown to affect IQ, the ability to pay attention, and academic achievement. Capillary blood lead tests are considered to be screening tests, and are prone to false positives. It is important to obtain a confirmatory venous test before interventions are initiated.</td></tr>
</table>

SPM 2 - Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4313314 series)
Population Domain(s) – Child Health

Measure Status:	Active
Goal:	To increase the percent of all children 19 to 36 months of age to have a completed immunization series for all vaccines recommended by the Advisory Committee on Immunization Practices.
Definition:	**Numerator:** Number of 19-36 month old children who have a completed 4313314 series. **Denominator:** Population of 19-36 month old children **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	80% of children aged 19 to 35 months who receive the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella and pneumococcal conjugate vaccine (PCV).
Data Sources and Data Issues:	Data will be obtained from the Michigan Care Improvement Registry (MCIR). Since 1998, Michigan has operated the MCIR to collect all immunizations administered to individuals less than 20 years of age and born after December 31, 1993. MCIR has become a robust immunization tool used by immunization providers to assure that all children are vaccinated according to the ACIP schedules. Tracking immunizations in the MCIR help immunization providers forecast for needed doses of vaccine and at the same time prevent over-vaccination of individuals due to poor record-keeping or moving from one provider to another.
Significance:	Children die or are hospitalized every year from vaccine preventable diseases. These are avoidable outcomes if we can assure that all children have received all recommended vaccines based on the schedule recommended by the ACIP. Note: This was formerly a two-part measure. As of 2018, the second part of this measure (Percent of adolescents age 13-18 who have received a completed HPV vaccine series) is included in a separate SPM.

SPM 3 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine
Population Domain(s) – Adolescent Health

Measure Status:	Active
Goal:	To increase the adolescent HPV coverage rate.
Definition:	**Numerator:** Number of 13 to 18 year old adolescents in the MCIR who have a completed the HPV 3 dose series **Denominator:** Population of 13 to 18 year old adolescents in MCIR **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	80% of adolescents 13-15 years of age to receive 3 doses of HPV vaccine
Data Sources and Data Issues:	Data will be obtained from the Michigan Care Improvement Registry (MCIR). MCIR is a population-based registry. Since 1998, Michigan has operated the MCIR to collect all immunizations administered to individuals less than 20 years of age and born after December 31, 1993. MCIR has become a robust immunization tool used by immunization providers to assure that all children are vaccinated according to the ACIP schedules. Tracking immunizations in the MCIR helps immunization providers forecast for needed doses of vaccine and simultaneously prevent over-vaccination of individuals due to poor record-keeping or moving from one provider to another.
Significance:	HPV is a safe and effective vaccine. It is estimated that 79 million Americans are currently infected with HPV. Every year in the United States, 27,000 people are diagnosed with cancer caused by HPV in both females and males. In 2011, over 11,000 newly diagnosed cases of cervical cancer in women and 4,000 attributable deaths occurred. Routine vaccination will prevent over 90% of cases of cervical cancer. Data from other countries have shown that obtaining at least a 50% coverage level has decreased the prevalence of HPV by at least 68%.

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty
Population Domain(s) – Children with Special Health Care Needs

Measure Status:	Active
Goal:	To reduce the proportion of CYSHCN who are unable to obtain, or are delayed in obtaining, necessary medical care.
Definition:	**Numerator:** The combined score of respondents who reported they usually or always got an appointment for their child to see a specialist as soon as needed and it was easy to get the care, tests, or treatment their child needed in the past 6 months **Denominator:** Number of questions contributing to the numerator **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	AHS-6: Access to Health Services: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines.
Data Sources and Data Issues:	Consumer Assessment of Healthcare Providers and Systems (CAHPS) – Children with chronic conditions custom survey. Challenges with the data include the following: the survey is conducted bi-annually; limited number of respondents when controlled for certain demographic factors.
Significance:	This measure is significant because it provides insight into parents'/caretakers' assessment of their ability to get needed care for their child with special needs. The numerator for the measure is determined by taking the average score from two questions of the CAHPS survey: "In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?" and "In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?" Questions are scored by calculating the percentage of respondents that answer "Usually" or "Always."

SPM 5 - Percent of women who had a live birth and reported that their pregnancy was intended
Population Domain(s) – Women/Maternal Health

Measure Status:	Active
Goal:	Increase the proportion of women with an intended pregnancy
Definition:	**Numerator:** Women who had a live birth who reported, at the time of conception, that they had wanted to get pregnant either right then or had wanted to be pregnant sooner. **Denominator:** All Michigan mothers of live born infants **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	FP-1: Increase the proportion of pregnancies that are intended (target: 56.0%)
Data Sources and Data Issues:	Data collected from the Michigan Pregnancy Risk Assessment Monitoring System (MI PRAMS) survey. MI PRAMS uses responses from a randomly selected sample of new mothers each year in Michigan to describe characteristics for the whole population of mothers of live born infants. Pregnancy intention is related to the concept of desired pregnancy timing. PRAMS responders are asked the question: "Thinking back to just before you got pregnant with your new baby, how did you feel about becoming pregnant?" Women who respond "I wanted to be pregnant sooner" or "I wanted to be pregnant then" are classified as having an intended pregnancy. Women answering, "I wanted to be pregnant later," "I didn't want to be pregnant then or at any time in the future," or "I wasn't sure what I wanted" are not classified as having an intended pregnancy.
Significance:	Assisting women and families to decide when and if they want to have children leads to improved health outcomes and financial stability. Assuring that women enter pregnancy in the best possible health is critical for both healthy babies and mothers. For women, reproductive health is critical in that nearly three decades are spent avoiding an unintended pregnancy (Sonfield, Hasstedt, & Gold, 2014) to address educational attainment, career prospects, and financial stability. When pregnancies are unintended, entering pregnancy healthy can prove difficult and result in higher health care costs for mothers and infants. Short inter-pregnancy intervals are associated with increased risk for preterm birth, low birthweight, small for gestational age, and perinatal death. Optimal birth spacing allows for recovery from pregnancy and parent/infant attachment. Two key tools for increasing intended pregnancy and healthy birth spacing are access to contraception and assessing pregnancy intention. While no single method of contraception is right for everyone, the type of method used by women is strongly associated with her risk of unintended pregnancy. Assessing pregnancy intention assists individuals to think about when and under what circumstances they would like to become pregnant or conversely, how pregnancy will be prevented, with the primary focus on increasing the overall health and well-being of the individual regardless of reproductive intentions. American College of Obstetricians and Gynecologists. Prepregnancy counseling. Committee

Opinion No. 762. Obstet Gynecol 2019; 133(1): e78-89. https://www.acog.org/Committee-Opinions/no.762

Gavin L, Moskosky S, Carter M, et al. Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of Population Affairs, 2014. MMWR Recomm Rep 2014:63 (No. RR-4): 1-29. DOI: http://dx.doi.org/10.15585/mmwr.rr6304a1

SPM 6 - Support access to developmental, behavioral, and mental health services through Title V activities and funding
Population Domain(s) – Cross-Cutting/Systems Building

Measure Status:	Active
Goal:	Support the work of state and local MCH programs that are addressing developmental, behavioral, and mental health services and needs.
Definition:	**Numerator:** N/A **Denominator:** N/A **Unit Type:** Text **Unit Number:** Yes/No
Healthy People 2020 Objective:	N/A
Data Sources and Data Issues:	State Title V and MCH Programs
Significance:	During Michigan's five-year needs assessment, needs related to mental and behavioral health were identified throughout the Mobilizing for Action through Planning and Partnerships (MAPP) assessments. These needs were identified across population domains but especially within women's health, adolescent health, and children with special health care needs. A person's mental health impacts their thoughts, behaviors, and overall well-being. Access to timely and appropriate mental and behavioral health services is critical, and yet access to care remains a barrier (America's Mental Health 2018; Cohen Veterans Network and the National Council for Behavioral Health). This SPM was created to 1) better capture Title V work related to mental and behavioral health and 2) promote an increased focus on mental and behavioral health across Title V and MCH programs.

Form 10
State Outcome Measure (SOM) Detail Sheets

State: Michigan

No State Outcome Measures were created by the State.

Form 10
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Michigan

ESM 2.1 - Number of birthing hospitals participating in Michigan AIM
NPM 2 – Percent of cesarean deliveries among low-risk first births

Measure Status:	Active
Goal:	Increase the number of birthing hospitals participating in Michigan AIM
Definition:	**Numerator:** Number of birthing hospitals participating in Michigan AIM **Denominator:** N/A unit is count **Unit Type:** Count **Unit Number:** 80
Data Sources and Data Issues:	Michigan AIM
Significance:	For some medical indications, like placenta previa, cesarean birth is the safest delivery method and at times can be a life-saving measure. However, for most low-risk pregnancies, a cesarean delivery increases preventable risks for maternal mortality and morbidity outcomes. Such outcomes include mortality due to hemorrhage or morbidities such as infection, uterine rupture, cardiac arrest and anesthesia complications. A low-risk delivery is often defined as full-term (at least 37 completed weeks of gestation), singleton pregnancy (not a multiple pregnancy), with vertex presentation (head facing downward position in the birth canal). From 2012-2016, 15.3 % of pregnancy-related deaths in Michigan were due to hemorrhage and 54.2% of pregnancy-related deaths were deemed preventable. In 2018, the percentage of low-risk cesarean deliveries in Michigan was 28.7%, which is above the Healthy People 2020 goal (24.7%) and the average in the United States (25.9%). In addition, Michigan also has a higher percentage of low-risk cesarean deliveries in women of color. To address the high percentage of low-risk cesarean deliveries, including the disparate numbers among women of color, Michigan will increase the number of birthing hospitals participating in Michigan AIM. It is expected that birthing hospitals engaging and participating in Michigan AIM will experience improved birth outcomes.

ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	By increasing the number of Michigan birthing hospitals with Baby-Friendly designation, the proportion of live births that occur in Michigan birthing hospitals that provide recommended care for lactating mothers and their babies will increase
Definition:	**Numerator:** Number of Michigan birthing hospitals with Baby-Friendly designation **Denominator:** Number of Michigan birthing hospitals **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	Baby-Friendly USA, Inc. (BFUSA)
Significance:	Baby-Friendly designated birthing hospitals and centers 1) promote breastfeeding as the best method of infant feeding; 2) implement evidence-based practices to support breastfeeding and lactation; 3) facilitate informed health care decision-making for mothers and families; 4) ensure health care delivery that is sensitive to cultural and social diversity, 5) protect mothers and families from false or misleading product promotion and advertising, and 6) educate parents on safe and appropriate methods for formula mixing, handling, storage, and feeding when a mother has chosen not to breastfeed or has chosen to supplement. The Baby-Friendly Hospital Initiative is a global program launched by the World Health Organization and the United Nations Children's Fund in 1991 to encourage and recognize hospitals and birthing centers that provide the best level of care for infant feeding and mother/baby bonding. Baby-Friendly designation is built on the implementation of Ten Steps to Successful Breastfeeding and the International Code of Marketing of Breast-Milk Substitutes, which empowers birthing facilities to examine maternity care policies and procedures, requires training and skill building for all levels of staff, and involves the development of quality assurance mechanisms within all aspects of maternity care operations. Baby-Friendly designated birthing hospitals and centers support healthy outcomes for both baby and mom, and can help to reduce breastfeeding disparities, especially within communities of color and low socioeconomic status communities.

ESM 5.1 - Increase the number of Maternal Infant Health Program agencies that have staff trained to use the concepts of motivational interviewing with safe sleep
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Improvements in how home visitors talk to families about infant safe sleep will lead to improvements in parent behavior, with the ultimate goal to reduce the number of sudden unexpected infant deaths.
Definition:	**Numerator:** N/A - this is a count **Denominator:** N/A - this is a count **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	Maternal Infant Health Program (MIHP). MIHP Agencies provide the data after staff have completed the training Helping Families Practice Infant Safe Sleep (Safe Sleep 201).
Significance:	Positively impacting parental behavior requires addressing known barriers to implementing safe sleep practices: parental knowledge and misconceptions, preference and situation; social determinants of health; and family practices and culture. Increased skills by MIHP providers on how to promote behavior change will increase the likelihood families will follow the safe sleep guidelines. MIHP agencies serve approximately 20,000 pregnant moms on Medicaid annually. Targeting MIHP providers helps to reach the most high-risk mothers and families.

ESM 5.2 - Increase the number of agencies that have implemented or revised/updated a safe sleep policy/protocol
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Ensure agency staff are knowledgeable about safe sleep guidelines and how to support parents. Ensure parents receive safe sleep messaging and resources, thereby reducing the number of sudden unexpected infant deaths.
Definition:	**Numerator:** N/A – this is a count **Denominator:** N/A – this is a count **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	Data Source will be the Infant Safe Sleep Program. The Infant Safe Sleep Program will track all the agencies that have implemented or revised/updated their safe sleep policy/protocol.
Significance:	Strategies to increase the percentage of infants sleeping safely include supporting the implementation of safe sleep practices through policies and protocols. When agencies implement an infant safe sleep policy/protocol, they are more likely to have staff knowledgeable about safe sleep and how to educate and support parents.

ESM 5.3 - Increase the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Ensure parents receive safe sleep messaging in birthing hospitals and that infant safe sleep is modeled by hospital staff, thereby reducing the number of sudden unexpected infant deaths.</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Numerator:</td><td>N/A – this is a count</td></tr>
<tr><td>Denominator:</td><td>N/A – this is a count</td></tr>
<tr><td>Unit Type:</td><td>Count</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Data Source will be the Infant Safe Sleep Program. The Infant Safe Sleep Program will track all hospitals that have implemented or revised/updated their safe sleep policy/protocol for the NICU.</td></tr>
<tr><td>Significance:</td><td>When health care providers, including nurses, are educated on infant safe sleep, families are more likely to follow recommended infant safe sleep practices. One study showed that those who are educated on safe sleep by their health care provider were more likely to intend to sleep safely and follow through with that intention (Factors Associated with Choice of Infant Sleep Position, http://pediatrics.aappublications.org/content/140/3/e20170596).

Nursing education and role modeling increases parental adherence to infant safe sleep practices (TodaysBaby Quality Improvement: Safe Sleep Teaching and Role Modeling in 8 US Maternity Units, http://pediatrics.aappublications.org/content/early/2017/10/11/peds.2017-1816).</td></tr>
</table>

ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity
NPM 9 – Percent of adolescents, ages 12 through 17, who are bullied or who bully others

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Annually increase by six the number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Numerator:</td><td>The number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity</td></tr>
<tr><td>Denominator:</td><td>N/A</td></tr>
<tr><td>Unit Type:</td><td>Count</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Teacher implementation logs. Classroom teachers will complete implementation logs tracking the lessons taught from the Michigan Model for Health™ Social and Emotional Health Module. The measure will reflect a cumulative count over time.</td></tr>
<tr><td>Significance:</td><td>Bullying takes a toll on the entire school community, with potentially lasting harm. Nearly 30% (29.6%) of Michigan high schools students report experiencing bullying (MI YRBS 2017). For those who are bullied, the resulting emotional trauma can persist into adulthood. The link between bullying and suicide has also illuminated the need to recognize the damage bullying can inflict. At the school level, educational achievement can be impacted through reduced test scores when bullying is prevalent. A student who is stressed and feeling unsafe struggles to succeed academically. Educational success can be hampered by bullying experiences in school. But students who bully also suffer emotionally and academically, with a higher likelihood of defiant and delinquent behaviors, school drop-out and poor academic performance.

A lack of respect for and understanding of others increases stress, violence and trauma. Addressing the environment that allows bullying to thrive means teaching all students the importance of empathy, respect for differences and managing emotions. Social emotional learning (SEL) incorporates the skills that serve to prevent bullying behavior. Teaching all students those skills arms them against participating, on any level, in bullying.
The Michigan Model for Health™ (MMH) is a Pre-K-12, comprehensive school health education curriculum recognized by the Collaborative for Social and Emotional Learning (CASEL) as an evidence-based SEL program. Evaluators found in a 2011 randomized control study that students who received the MMH curriculum showed statistically significant positive changes, including better interpersonal communication skills, stronger social and emotional health skills, and less reported aggression in the past 30 days. SEL is a structured way to improve a wide range of students' social and emotional competencies and impact bullying at the individual and peer levels.</td></tr>
</table>

ESM 12.1 - Percent of CSHCS clients age 18 to 21 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider
NPM 12 – Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care

Measure Status:	Active
Goal:	To monitor and increase the number of young adults that appropriately transfer care from a pediatric to an adult health care provider.
Definition:	**Numerator:** The number of CSHCS enrollees, aged 18 to 21, that have transferred care from a pediatric to an adult provider. **Denominator:** The total number of CSHCS enrollees, aged 18 to 21, that have received care from a pediatric provider. **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	This ESM combines three separate data sources: 1) the CSHCS database, 2) the CHAMPS (Medicaid Claims) database, and 3) a University of Michigan provider database. These three databases provide information on CSHCS clients, and the providers they see.
Significance:	This measure is significant as it allows us to evaluate the percentage of adolescents and young adults with special needs that are transferring care from a pediatric to an adult provider. By analyzing the providers these young adults are seeing (CSHCS authorized providers and Medicaid Claims), we can determine if new providers have been identified, and if the initial visit with the adult provider was completed.

ESM 13.1.1 - Number of medical and dental professionals who receive perinatal oral health education through MDHHS
NPM 13.1 – Percent of women who had a preventive dental visit during pregnancy

Measure Status:	Active
Goal:	Increase provider knowledge of perinatal oral health as well as provider comfort in discussing the importance of oral health with patients.
Definition:	**Numerator:** N/A - This is a count **Denominator:** N/A - This is a count **Unit Type:** Count **Unit Number:** 1,000
Data Sources and Data Issues:	The data source for this measure will be a tracking database developed by the MDHHS oral health program. This database includes a monthly count of the number and types of providers trained in perinatal oral health as well as the location and mechanism of education.
Significance:	Studies indicate that the medical community may not be prepared to discuss the importance of oral health with patients, specifically during pregnancy. Furthermore, the dental community may be misinformed about practices and protocol surrounding dental treatment during the perinatal period. By educating providers, patients will in turn be better informed of the significance of perinatal oral health and will be more likely to seek dental care during the perinatal period.

ESM 13.1.2 - Percent of pregnant women who receive at least one oral health service through Medicaid during the perinatal period
NPM 13.1 – Percent of women who had a preventive dental visit during pregnancy

Measure Status:	Active
ESM Subgroup(s):	Pregnant Women
Goal:	To increase the percentage of women who utilize the perinatal adult dental benefit for pregnant women within the state of Michigan
Definition:	**Numerator:** Number of pregnant women on Medicaid with at least one oral health service between the time the plan becomes aware of her pregnancy until 3 months postpartum (perinatal period) **Denominator:** Number of pregnant women on Medicaid during the perinatal period **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	The MDHHS Oral Health Program will obtain data on an annual basis through a data use agreement and IRB with the CHEAR (Child Health Evaluation and Research) Center at the University of Michigan. CHEAR has access to the data warehouse and the technical ability to analyze the data. Data issues may include delays in obtaining data as well as the inability to determine type of oral health services rendered.
Significance:	To improve outcomes and increase dental benefit utilization for pregnant women in Michigan, significant effort has been made to enhance the adult dental Medicaid benefit. Pregnant women are now placed within a Medicaid health plan which leads to greater availability of providers who accept that plan. Thus far, analysis has been unavailable as to utilization, but data are anticipated to be available beginning in 2020. The data will be analyzed with the anticipation that a targeted analysis of racial and geographic disparities will be able to be completed.

ESM 13.2.1 - Number of students who have received a preventive dental screening through the SEAL! Michigan program
NPM 13.2 – Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

Measure Status:	Active
Goal:	Increase the number of students who have received a preventive dental screening within a school based dental program
Definition:	**Numerator:** N/A - This is a count measure **Denominator:** N/A - This is a count measure **Unit Type:** Count **Unit Number:** 10,000
Data Sources and Data Issues:	The SEAL! Michigan annual all grantee report will be used for the data source. Annual data are gathered each October at the end of the fiscal year and reports are developed by the following August. This timeframe could cause the annual indicator to be delayed by one year. In addition, the Sealant coordinator position and epidemiologist position are funded under the CDC cooperative agreement.
Significance:	A school-based dental program is an ideal environment to prevent dental decay across the population. This goal helps meet the Healthy People 2020 indicator for oral health, with the objective to increase the amount of dental screenings that are completed in children ages 1 to 17.

Form 10
Evidence-Based or -Informed Strategy Measure (ESM) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 1.1 - Percent of women aged 18-44 who have ever discussed reproductive life planning during a visit with a doctor, nurse, or other health professional
2016-2020: NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Increase the number of women 18-44 who have contraceptive and other reproductive health needs identified; increase the number of intended pregnancies; and ultimately lead to a reduction in adverse pregnancy-related outcomes</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Numerator:</td><td>Number of female respondents aged 18-44 who indicated ‘Yes’ to having ever discussed pregnancy planning or prevention during a visit with a doctor, nurse, or other health professional</td></tr>
<tr><td>Denominator:</td><td>Total number of female respondents aged 18-44 who indicated ‘Yes,’ or ‘No'</td></tr>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Data source will be the Michigan Behavioral Risk Factor Survey (BRFS). The reproductive life planning variable that will be used to quantify the identified strategy measure was a state-added question to the Michigan BRFS starting in 2015. The Centers for Disease Control and Prevention is currently in the process of weighting Michigan’s 2015 BRFS data. The final weighted data file will not be available until August 2016. Once available, the proportion of female respondents aged 18-44 who indicated ‘Yes’ to having ever discussed pregnancy planning or prevention during a visit with a doctor, nurse, or other health professional will be used as a baseline and annual targets will be developed for subsequent years. NOTE: Until the BRFS variable and baseline data are available, PRAMS data were used as a proxy measure to set annual objectives. Once available, BRFS baseline data will be used to revise the proxy annual objectives.</td></tr>
<tr><td>Significance:</td><td>Reproductive life planning provides an opportunity for providers to assess patients’ personal goals about pregnancy planning or prevention, opening the door for providers to educate patients on how their reproductive life plan impacts their contraceptive and other reproductive health decision-making, and actively involving patients in developing personal strategies to enhance their reproductive health and wellness (e.g., selecting a contraceptive method that fits well with their life circumstances). Reproductive life planning has the potential to reduce unintended pregnancies, increase the use of highly effective contraception, increase the number of adequately spaced births, and foster healthy pregnancy-related outcomes for mom and baby. The Centers for Disease Control and Prevention and the Office of Population Affairs recognize reproductive life planning as a component of quality family planning services, a national standard of care.</td></tr>
</table>

2016-2020: ESM 3.1 - Number of CenteringPregnancy sites in Michigan
2016-2020: NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Measure Status:	Active
Goal:	Support and maintain the existing CenteringPregnancy sites in Michigan
Definition:	**Numerator:** N/A – This is a count measure **Denominator:** N/A – This is a count measure **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	Centering Healthcare Institute https://centeringhealthcare.secure.force.com/WebPortal/ListOfCenteringSites?stateName=MI
Significance:	The CenteringPregnancy group prenatal care model has been proven effective in reducing premature births and eliminating racial disparities. Funding for new CenteringPregnancy sites is not secured beyond FY2017; therefore, the goal of this ESM currently focuses on maintenance and support of existing sites. Maintaining and helping to strengthen the current sites in Michigan will assist in improvements in the NPM and associated NOMs.

2016-2020: ESM 5.1 - Number of birthing hospitals trained on infant safe sleep
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Increasing the number of birthing hospitals trained on infant safe sleep will help ensure parents receive safe sleep messaging and that infant safe sleep is modeled by hospital staff, thereby reducing the number of sudden unexpected infant deaths.
Definition:	**Numerator:** N/A - this is a count **Denominator:** N/A - this is a count **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	Data Source will be the Infant Safe Sleep Program. The Infant Safe Sleep Program will track all trainings provided to birthing hospitals.
Significance:	When health care providers, including nurses, are educated on infant safe sleep, families are more likely to follow recommended infant safe sleep practices. One study showed that those who are educated on safe sleep by their health care provider were more likely to intend to sleep safely and follow-through with that intention (Factors Associated with Choice of Infant Sleep Position, http://pediatrics.aappublications.org/content/140/3/e20170596). Nursing education and role modeling increases parental adherence to infant safe sleep practices (TodaysBaby Quality Improvement: Safe Sleep Teaching and Role Modeling in 8 US Maternity Units, http://pediatrics.aappublications.org/content/early/2017/10/11/peds.2017-1816).

2016-2020: ESM 10.1 - Of the health care providers who complete the Motivational Interviewing web course and the Motivational Interviewing professional development training, the percent who report skills in effectively counseling youth on changing risky behaviors
2016-2020: NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>The completion of both trainings will lead to skills in counseling adolescents on behavior change and in communicating with adolescents overall; thereby promoting a better provider-patient relationship and increased access of preventive services.</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Numerator:</td><td>Number of providers who complete both the Motivational Interviewing web course and professional development training that report skills to effectively counsel youth on changing risky behavior.</td></tr>
<tr><td>Denominator:</td><td>Number of providers who complete both the Motivational Interviewing web course and professional development training</td></tr>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>MDHHS (participant assessment tool)</td></tr>
<tr><td>Significance:</td><td>Quality adolescent care is delivered in a developmentally-appropriate, adolescent-friendly and confidential manner. Positively impacting adolescent care requires significant system changes aimed at addressing known barriers to quality care: health professional lack of training, lack of effective communication skills, and low self-efficacy in providing adolescent preventive services. The combined impact of completion of both the Motivational Interviewing web course and professional development training will lead to higher quality care for adolescents. Increased skills in not only counseling adolescents on behavior change, but in communicating with adolescents overall, promotes a better provider-patient relationship and increases the likelihood that adolescents will access care (including preventive services) with that provider.</td></tr>
</table>

Form 11
Other State Data

State: Michigan

The Form 11 data are available for review via the link below.

Form 11 Data