

**Maternal and Child
Health Services Title V
Block Grant**

Michigan

**FY 2023 Application/
FY 2021 Annual Report**

Created on 5/10/2022
at 3:28 PM

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I. General Requirements

I.A. Letter of Transmittal

A Letter of Transmittal will be uploaded prior to submission.

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 2021 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: January 31, 2024.

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: January 31, 2024.

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 MCH programs and policies, including oversight of program-specific work and statewide multisystem collaboratives, as discussed throughout this application. Since March 2020, Michigan's MCH programs have responded to the impact of the COVID-19 pandemic on the MCH population. Information related to the COVID-19 pandemic is included in the Overview of the State, the Needs Assessment Update, and state action plans.

Michigan's Fiscal Year (FY) 2021-2025 state priorities were determined by the five-year needs assessment completed in early 2020, prior to the COVID-19 pandemic. The assessment identified needs for preventive and primary care services for women, mothers, infants, children, and services for CSHCN. Stakeholders and community members representing the Title V population domains were engaged in the process. 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 state priority needs and performance measures for Title V.
- Identify opportunities to address needs beyond the scope of Title V.

Based on the needs assessment, the current Title V state priorities are:

- Develop a proactive and responsive health system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, age, 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 per federal requirements, National Performance Measures (NPMs) and State Performance Measures (SPMs) were chosen to align with the priority needs and are discussed below by population domain. The needs assessment also identified three key “pillars” across population domains: achieving equitable health outcomes; engaging families and communities; and delivering culturally and linguistically appropriate health education.

Detailed state action plans for NPMs and SPMs (which include information on objectives and strategies, metrics, program planning and improvement, and family and consumer engagement) are included in Section III.E. A brief summary of each NPM and SPM is presented below.

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 no change to slight increases in low-risk cesarean deliveries to Black birthing individuals (from 29.6% in 2012 to 30.9% in 2020) while the percentage of low-risk cesarean deliveries to White birthing individuals has decreased (from 29.5% in 2012 to 27.4% in 2020, MDHHS, Division of Vital Records & Statistics). 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 Michigan Alliance for Innovation on Maternal Health (MI-AIM) bundle, providing bias and equity training for providers, and increasing the number of birthing hospitals participating in MI-AIM.

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 (MI PRAMS). Non-Hispanic Black mothers saw a particularly large decrease in preventive dental care during pregnancy, from 47.6% in 2016 to 39.2% in 2018 (MI PRAMS). Strategies to increase dental visits include training for medical and dental providers who treat and refer pregnant women; increasing the number of socioeconomically disadvantaged pregnant people receiving oral health care services; 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 rates of pregnancy intention from 2012 (52.2%) to 2019 (59.8%), White mothers (64.6%) were 2.4 times as likely as Black mothers (26.9%) to report their most recent pregnancy was intended (2019) (MI PRAMS). The state action plan focuses on increasing access to contraception by making most or moderately effective contraceptive methods readily available and by improving the quality of contraceptive care by assessing client-centeredness and offering equity trainings for reproductive health care providers.

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 still fell short of the Healthy People 2020 goal. In Michigan, 82.5% of infants are ever breastfed (2020) and 25.8% are exclusively breastfed through six months (MDHHS, Division of Vital Records & Statistics; National Immunization Survey 2020 Breastfeeding Report Card). According to PRAMS, initiation rates among Black mothers in Michigan continue to be 20% lower than White mothers (2019). To increase breastfeeding rates, MDHHS will implement strategies to support and promote access to breastfeeding professionals and peer counseling and increase the number of Baby-Friendly[®] hospitals. To address disparities, Michigan will support non-Hispanic Black women who initiate breastfeeding through promotion of culturally responsive messages, racially and culturally diverse

breastfeeding professionals, and community-based breastfeeding organizations.

The second goal is to increase the percent of infants placed to sleep in safe sleep environments (infants placed to sleep on their backs, in cribs without objects) (NPM 5). In 2019, 149 sleep-related infant deaths occurred in Michigan (Centers for Disease Control and Prevention Sudden Unexpected Infant Death Case Registry, 2010 to 2019, Michigan Public Health Institute, 2021). Sleep-related infant deaths are a leading type of death for infants aged 1-12 months old (2018-2020 Michigan Resident Infant Death File, Division for Vital Records & Health Statistics, MDHHS). Data between 2016 and 2020 reveal state level improvements in infants reported as sleeping with no soft objects and in a separate approved sleep surface (Michigan PRAMS). MDHHS strategies focus on increasing safe sleep behaviors by all families, while also addressing the disparity for non-Hispanic Black infants. Strategies include supporting local safe sleep activities; working with providers to ensure safe sleep education and resources for families; developing tools for client/patient centered safe sleep conversations; 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). The percentage of Michigan children ages 1-17 who receive preventive dental care in the previous year dropped slightly from 77.9% in 2016-to 76.6% in 2019-2020 (National Survey of Children's Health). 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 and support Detroit Public Schools Community District to increase dental screenings and sealants.

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 2021 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 2.3%. 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 45.3% in 2021. However, due to the COVID-19 pandemic and recalls in blood lead testing kits, Michigan has seen a significant drop in blood lead testing for children under 6 years old. To continue to make progress, Michigan will screen for lead exposure risk factors in children; conduct provider education; and work to increase blood lead testing for all children, especially those who are Medicaid-enrolled.

MDHHS is working to increase the percentage of children ages 19-35 months who are up-to-date with all recommended vaccines (SPM 2). The estimated percentage of children in this age group who received all age-appropriate recommended vaccines was 69.9% in 2021 (Michigan Care Improvement Registry). The COVID-19 pandemic negatively impacted childhood vaccination rates in Michigan. Strategies to increase vaccination rates include targeted outreach to parents of children who are overdue for a vaccine; vaccine outreach to areas with a high social vulnerability index; working with LHDs to reach under-vaccinated populations; and partnering with the City of Detroit Health Department to increase vaccination rates in Detroit.

Adolescent Health

The first goal in this domain is to decrease the percent of adolescents who are bullied or who bully others (NPM 9). According to the Youth Risk Behavior Survey (YRBS), from 2011 to 2019 just under one-third of Michigan

adolescents reported being bullied at school or online. Among CSHCN, the percentage rises to 53.6% (NSCH). In 2019, 36.4% of Michigan adolescents reported feeling sad or hopeless for two or more weeks; 18.7% of Michigan adolescents reported considering suicide (YRBS). Key objectives for MDHHS are to work with secondary schools to implement bullying prevention initiatives; provide schools with guidance on state laws and model policies with protections for LGBTQ+ youth; and support bullying prevention activities 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 2021, 72.6% of adolescents ages 13 through 17 years were current with immunizations, but that percentage dropped to 42.5% when HPV series completion was included (MCIR). However, Michigan has improved the percentage of adolescents receiving at least one dose of the HPV vaccine, and in 2020 61.3% of Michigan adolescents were up to date with the HPV series (NIS-Teen). The COVID-19 pandemic has had a negative impact on HPV vaccination rates in Michigan. To boost HPV completion rates and increase protection from HPV-related diseases, MDHHS will update HPV materials to ensure an equitable approach to vaccine hesitancy; increase vaccine confidence among parents and adolescents; and work with local health departments, providers, and health systems to implement quality improvement strategies and 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, 26.7% of CYSHCN reported they received services necessary to transition to adult health care, which is higher than the US at 22.5% (NSCH 2019-2020). To improve transitions to adult care, key efforts will include promoting Health Care Transition (HCT) to students through school-based clinics; piloting an HCT letter for 14-year-old CSHCS enrollees; and increasing the number of health care professionals who have received training on transition to adult health care.

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. During FY 2021, 53,474 individuals were enrolled in CSHCS. Strategies to increase access to high-quality services include covering specialty care and treatment costs for qualifying conditions; expanding access to high quality specialty clinics and the use of telemedicine; improving outreach and advocacy services; and enhancing the CYSHCN system of care.

Cross-Cutting

The needs assessment identified unmet mental health needs in the women/maternal health, adolescent health, and CSHCN domains. A goal across these domains is to support access to developmental, behavioral, and mental health services (SPM 6). In 2020, over 25% of Michigan women ages 18-44 years reported more than two weeks of poor mental health during the prior 30 days (Behavioral Risk Factor Surveillance System). Postpartum depression symptoms were reported by 14.8% of mothers in 2019 (MI PRAMS). In 2019, 36.4% of adolescents reported two or more weeks of sad or hopeless feelings and 18.7% considered suicide (YRBS). Only 68.1% of CSHCN with a mental or behavioral health diagnosis received appropriate treatment in 2019-2020 (NSCH). The Title V program will support the work of local health departments in addressing behavioral health needs; support perinatal screenings among RPQCs; increase collaboration between Title V CSHCS and behavioral health partners; and support the Handle with Care initiative for school-aged children and adolescents.

III.A.2. How Federal Title V Funds Complement State-Supported MCH Efforts

The Title V block grant provides a critical funding source for Michigan MCH priority needs, in conjunction with state MCH funds and other federal funds. Title V funding is used to address needs across the MCH pyramid of services (direct services, enabling services, and public health infrastructure) and supports the delivery of core MCH services as well as the expansion of new or innovative programs. In accordance with federal requirements, a minimum of 30% of Title V funding must support services for Children with Special Health Care Needs (CSHCN) and a minimum of 30% of funding must support preventive and primary care services for children ages 1 through 21 years. To meet these requirements, Title V funding in Michigan is used to support comprehensive medical care and treatment for CSHCN and a variety of services for children and adolescents including immunizations; oral health initiatives including a school-based dental sealant program; childhood lead poisoning prevention; fetal alcohol spectrum disorder services; bullying prevention; and reproductive health and prevention services. Services for women and infants are also supported by Title V funding, including infant safe sleep, breastfeeding, Regional Perinatal Quality Collaboratives (RPQCs), Pregnancy Risk Assessment Monitoring System (PRAMS), fetal infant mortality review, and maternal mortality surveillance. Title V also supports public health systems activities related to needs assessment, parent leadership, and health equity.

In addition to state-level MCH programs and initiatives, Title V funding supports the MCH work of all 45 Local Health Departments (LHDs). Collectively, LHDs are allocated approximately 35% of Michigan's Title V dollars through annual noncompetitive grants. LHDs serve as Michigan's local public health "arm" through community-based services and systems. Title V funding administered through the Local MCH (LMCH) program helps to ensure the delivery of core MCH services and is used to address state-identified priorities as well as locally identified needs. These local activities complement the state's public health infrastructure and state-led work in supporting the health of the MCH population. For example, Title V funding at the local level provides the MCH population with increased access to and provision of gap-filling services such as immunizations and childhood lead screening. Title V funding is also used for enabling services such as lead case management and safe sleep training for parents and providers. Public health services and systems are supported by Title V funding through health promotion campaigns, health in all policies initiatives, needs assessments, and local surveillance of birth outcomes. Throughout the COVID-19 pandemic, LHDs have also been able to redirect LMCH funds to support COVID-19 activities related to the MCH population, as needed.

III.A.3. MCH Success Story

The most recent Title V needs assessment identified bullying prevention for Children and Youth with Special Health Care Needs (CYSHCN) as an important need. In response and with oversight from the CSHCS Advisory Committee, CSHCS established a subcommittee that includes a diverse array of personal and professional experiences and perspectives. Subcommittee representation includes CSHCS staff, Family Center staff, Division of Child and Adolescent Health, Michigan Department of Education, CSHCS Advisory Committee leadership, families of CYSHCN, and the Family Center Youth Consultant.

To gather additional information on the bullying experience for CYSHCN, CSHCS convened a focus group at the Family Center's Family Leadership Network (FLN) Annual Meeting. The focus group consisted of 12 parent participants for a two-hour virtual interview and identified several themes. Parents agreed the bullying experience is unique for individuals, has individual consequences, and is resolved in individual ways. Parents shared that bullying experiences for youth with special health care needs are different than those of typically developing youth. Overwhelmingly, parents stressed the challenge of identifying bullying concerns when CYSHCN are non-verbal or struggle with conventional communication. Significant concerns were identified regarding cyberbullying, the rapidly developing nature of the cyberbullying space, and the lack of documented ways to address cyberbullying. Parents shared frustration with inconsistent responses in schools and the lack of initiatives specifically aimed to help the CYSHCN population. Families in the focus group agreed that peer-to-peer (P2P) support and restorative justice approaches have been helpful in addressing bullying.

To address this issue, Title V funding was allocated to establish a small grants program to support bullying prevention efforts. School districts and schools were able to apply for grants up to \$10,000 to create or expand P2P support programs. In FY 2021, 30 grant applications were received and 13 organizations were granted a total of \$106,000. CSHCS formed a partnership with Grand Valley State University's START (Statewide Autism Resources & Training) Program to provide support to grantees. START offers resources and training to schools interested in P2P programs. Grantees will have access to monthly webinars highlighting aspects of P2P program creation such as review of the P2P Program Playbook, implementing P2P Program Surveys, and P2P Medium of Exchange Ideas. The grant program continues to develop. In the FY 2023 grant cycle, grantees will be required to implement pre- and post-program surveys with parents, participating students, and teaching staff. The data will be used to assess and demonstrate the efficacy of the small grants program.

In part due to Michigan's interest in bullying experiences among CYSHCN, a HRSA collaborative was formed with Regions IV and V. The collaborative partners meet at least quarterly to share successes and challenges related to addressing bullying in this population. Five states from the collaborative prepared a panel discussion presentation for the 2022 Association of Maternal and Child Health Programs (AMCHP) annual conference. The goal of the presentation was to share lessons learned and gather feedback from other states working to address this issue.

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. Comprised of 83 counties, Michigan is the 10th most populous state and 11th largest state by total square mileage. Approximately 10 million people live in the state (2020 Census). Birth rates have decreased over the past 20 years, and the state saw a 0.18% decline in population from 2019 (U.S. Census Bureau). 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 1.8 million people live in rural areas. The median age of the population is 39.7 years. Out of the total population, approximately 21.5% are ages 0-17 and 78.5% are ages 18 and over. Michigan's population is 78.7% Caucasian, 13.9% Black or African American, 2.9% Asian and Pacific Islander, 2.9% two or more races, 1.4% other races, and 0.5% Native American. Out of the total population, 4.9% identify as Hispanic or Latino.

Michigan's economy saw improvements over the nine years leading up to 2020, but the COVID-19 pandemic had immediate impacts on the economy. While the seasonally adjusted unemployment rate decreased from 14.9% in June 2009 to 4.0% in January 2019, the unemployment rate spiked in April 2020 to 22.7% percent and varied throughout 2020 and 2021. The economic impact of COVID-19 has been significant but appears to be improving. Michigan's unemployment rate was 5.5% in January 2022 in comparison to 3.6% in February 2020. The economic recovery has been uneven across the state, with the [University of Michigan](#) (February 2022) reporting that Detroit's unemployment rate was 20%. According to the [Carsey School of Public Policy](#) (October 2021), Michigan recovered 74% of jobs lost during the pandemic. The [Ford School of Public Policy](#) reports that "As of spring 2021, 39% of Michigan local officials report their local economies have suffered significant (33%) or even crisis-level (6%) impacts over the past year of the pandemic. However, this is down sharply from the 86% of jurisdictions that reported the severe economic impacts at the beginning of the pandemic in 2020."

According to the 2021 ALICE (Asset Limited, Income Constrained, Employed) report, 38% of households in Michigan struggled to afford the basic needs of housing, childcare, food, technology, health care and transportation. In Michigan, 58% of jobs were low wage jobs, paying less than \$20 per hour; two-thirds of those jobs paid less than \$15 per hour. According to the 2021 Kids Count, Michigan ranks 22nd in health, 24th in both economic and family wellbeing, and 41st in education for children. One in five children (19%) ages 0-17 live in poverty and certain areas of the state experience higher levels of poverty. Statewide, 50.5% of students are eligible for free or reduced-price lunches. Given this environment plus the impacts of COVID-19, family support programs such as WIC and childcare are critical safety net resources for families. The long-term effects of the COVID-19 pandemic on Michiganders' physical, mental, and economic well-being will continue to be revealed over time.

Roles and Priorities of the State Health Agency

The Title V program is overseen by the Division of Maternal and Infant Health (DMIH), which is housed in the Bureau of Health and Wellness (BHW) in the Public Health Administration. DMIH includes Family Planning, the Maternal Infant Health Program, infant safe sleep, breastfeeding, the statewide Perinatal Quality Collaborative (PQC) and Early Hearing Detection and Intervention. DMIH works in partnership with the Children's Special Health Care Services (CSHCS) Division and the Division of Child and Adolescent Health (DCAH) to administer Title V. CSHCS includes CSHCS Customer Support, Policy and Program Development, Quality and Program Services, and the Family Center for CYSHCN. DCAH oversees the Title V funding awarded to Michigan's 45 local health departments, as well as oral health, school-based health centers, and teen pregnancy prevention. Title V works collaboratively with other programs in the Michigan Department of Health and Human Services (MDHHS) which includes public health; Medicaid; environmental health; emergency preparedness and response; communicable and chronic disease; food

and cash assistance; migrant and refugee services; juvenile justice; child protective services; foster care; and adoption.

The MDHHS vision to “Deliver health and opportunity to all Michiganders, reducing intergenerational poverty and promoting health equity” is supported by 11 goals:

- Public health investment
- Racial equity
- Address food and nutrition, housing, and other social determinants of health
- Improve the behavioral health service system for children and families
- Improve maternal-infant health and reduce outcome disparities
- Reduce lead exposure for children
- Reduce child maltreatment and improve rate of permanency
- Implement the Families First Preservation Services Act state plan
- Expand and simplify safety net access
- Reduce opioid and drug-related deaths
- Manage to outcomes and invest in evidence-based solutions

Michigan’s MCH programs align with several of these goals. The 2020-2023 [Mother Infant Health & Equity Improvement Plan](#) (MIHEIP) focuses on the mother-infant dyad and provides a framework for expanding partnerships and strategies to enhance local and state efforts to address the root causes of adverse outcomes—social determinants of health and drivers of health inequity. A [Year Two Update](#) was released in September 2021 to recognize stakeholder success and update indicator data. Annual updates will highlight progress on achieving the vision of “Zero preventable deaths, Zero health disparities.”

The MIHEIP was developed collaboratively by MDHHS and stakeholders, and efforts to implement the MIHEIP are also informed by input garnered from the Mother Infant Health and Equity Collaborative (MIHEC), Regional Perinatal Quality Collaboratives (RPQCs), Michigan families, MCH stakeholders, health care providers and community leaders. Implementation of the MIHEIP includes alignment of programs within MDHHS; quality improvement efforts within RPQCs; and external implementation through community partners and health providers. Further alignment and action occur through [Maternal Infant Health \(MIH\) Action Committees](#) which are aligned with MIHEIP priorities to impact systems through policy and practice change. Each Action Committee is co-chaired by content experts.

Improving maternal and infant health outcomes is a priority of Governor Whitmer. In 2020, Gov. Whitmer released the [Healthy Moms, Healthy Babies](#) initiative to address health disparities and ensure all women have access to high-quality health care. The FY 2021 and FY 2022 state budgets allocated funds to support and expand the initiative through increased access to evidence-based home visiting programs and continuous Medicaid coverage to beneficiaries for 12 months postpartum. The FY 2022 budget also supported the largest increase in childcare funding in Michigan’s history plus initiatives to support health equity, such as screening for health-related social needs.

Michigan is expanding home visiting to better support families that historically have a higher risk of child welfare involvement and family separation. The first expansion is under the Families First Prevention Services Act (FFPSA). The Children’s Services and Public Health Administrations are partnering to implement evidence-based home visiting (EBHV) expansion in seven high-risk counties. The second expansion is through new funding in FY 2022 to support families with infants who have been exposed prenatally to substances, by expanding EBHV in 10 communities with high numbers of infants impacted by substance misuse. The project is piloting Peer Navigators within the healthcare system to break down barriers of shame, stigma, and fear. Peer navigators will connect families

to resources, including EBHV, and will provide support 12 weeks postpartum.

Additionally, the Home Visiting Advisory, which launched in 2019, is charged with building an integrated home visiting system for Michigan's families. Michigan's evidence-based home visiting system includes the Maternal Infant Health Program (MIHP), Nurse-Family Partnership, Healthy Families America, Early Head Start-Home Based, Parents as Teachers, and Family Spirit. The Advisory is intended to have an active role in system development through discussions about centralized access, professional development, and equity. Title V leadership participates in the Advisory.

Early childhood partnerships and systems building are also critical to supporting children and their families. The Office of Great Start (OGS) within the Michigan Department of Education (MDE) leads the integration of the state's healthy development and early learning investments for prenatal to age 8. MDHHS collaborates with OGS to support the development of early childhood systems that meet the needs of children and families. The Great Start Operations Team (GSOT) convenes state agencies and partners to provide strategic direction for early childhood integration and coordination. Several MDHHS program areas, including Title V and home visiting, serve on the GSOT. The GSOT work is grounded in Michigan's four early childhood outcomes which include "children born healthy" and "children healthy, thriving, and developmentally on track from birth to third grade."

Michigan was awarded an Early Childhood Comprehensive Systems (ECCS) Grant in 2021. The five-year project is intended to foster the development and integration of maternal and early childhood systems of care that are equitable, sustainable, comprehensive, and inclusive of the health system. The grant will explore integration into the Early Childhood Advisory and how to support health integration across sectors at the local level. The ECCS Advisory Committee is housed within the MIHEIP structure, meeting perinatal health professionals where they are already working.

Advancing equity is a priority both within MDHHS and the State of Michigan. At the state level, several initiatives implemented in 2020 continue to address implicit bias, racism, and racial disparities:

- Gov. Whitmer's [Executive Directive 2019-09](#) established Equity and Inclusion Officers within each state department. The 2021 Strategic Plan includes goals to build Diversity, Equity, and Inclusion (DEI) infrastructure and leadership and measure DEI efforts across state departments.
- Gov. Whitmer's Executive Directive in July 2020 requires implicit bias training for 26 licensed health professional classifications to address racial disparities. Requirements are effective as of June 2022.
- In August 2020, Gov. Whitmer issued an executive directive recognizing racism as a public health crisis. All state employees were required to complete an implicit bias training. Effective November 2021, State of Michigan new hires must complete implicit bias training within 90 days of start date.
- Gov. Whitmer signed an Executive Order in April 2020 creating the Michigan Coronavirus Task Force on Racial Disparities. The Task Force investigated causes of COVID-19 racial disparities and recommended actions to address the disparities, including transparency in data reporting; remove barriers to physical/mental health care; reduce the impact of medical bias in testing and treatment; mitigate factors that contribute to increased exposure; and develop systems to support long-term economic recovery and physical/mental health care.
 - MDHHS collaborated with the Task Force to establish 22 Neighborhood Testing Sites in 15 communities. A data-driven approach used the CDC's Social Vulnerability Index and mortality data for six comorbid conditions associated with increased risk of adverse COVID-19 outcomes. MDHHS partnered with churches and colleges to establish neighborhood testing sites. To date, over 300,000 tests have been collected.
 - The Task Force initiated MDHHS funding to Wayne State University/Wayne Health, Genesee Health

Systems, and three health departments to serve rural and urban communities at the highest risk of infection. During the last quarter of 2021, six mobile health units administered 44,950 COVID-19 tests, 19,045 COVID-19 vaccinations, and 438 flu vaccinations. Approximately 3,075 residents were assisted with wrap-around services addressing determinants of health; 5,649 residents received services for hypertension and diabetes, primary care referrals, needle exchanges, blood pressure screenings, food and housing, mental health, or sexual health services.

At the departmental level, MDHHS is working to assess and change policies and programs to address DEI.

- The MDHHS [DEI Plan](#) details the Department’s “commitment to eliminating systematic inequities and promoting diversity, equity and inclusion.” A DEI Council was created to promote and foster a culture that values DEI throughout MDHHS and the diverse communities it serves.
- In October 2020, MDHHS created the Race, Equity, Diversity, and Inclusion (REDI) Office to address racial, health, social and wealth disparities.
- The MDHHS [Office of Equity and Minority Health](#) (OEMH) is part of REDI and delivers an annual report to the state legislature on health disparities and departmental progress. The [2020 Report](#) focused on COVID-19, including MDHHS actions to respond to the pandemic within communities of color and lessons learned for addressing racial and ethnic inequities. The OEMH also provides training and technical assistance to the MDHHS workforce on unconscious bias, systemic racism, cultural competency, health equity, and community engagement.
- The DEI Council and REDI/OEMH created a Countering Bias in the Interview training that is required for all MDHHS interview panelists.
- Starting in 2021, all MDHHS position postings require a Valuing Diversity and Inclusion competency in the posting questions as well as DEI questions in the interview. A DEI objective is also required for annual performance management plans.
- “Introduction to Health Equity” and “Systemic Racism” trainings are required for all MDHHS staff. Introduction to Health Equity describes health equity and health disparities; factors that contribute to inequities; the impact of health inequities; and how MDHHS can help to achieve health equity for all Michiganders. The Systemic Racism training identifies how state or national systems may produce or perpetuate inequitable outcomes. The training is open to MDHHS employees, contractors, and the public.
- MDHHS and the Michigan Department of Civil Rights developed a two-day in-person workshop “Inside Our Mind: Hidden Biases.” MDHHS is currently developing a computer-based implicit bias training.
- In the Executive Directive announcing racism as a public health crisis, the Governor announced the piloting of an Equity Impact Assessment (EIA) process in MDHHS, with potential rollout to other state departments. The EIA process can be used to inform decisions when developing budgets, programs, procedures, and policies. OEMH is leading the pilot in three MDHHS administrations:
 - Policy: Provide Medicaid coverage for doulas.
 - Practice: Eliminate obstacles for individuals with visual disabilities who apply for Economic Stability Administration programs.
 - Procedure: Training to Community Mental Health agencies on screening and trauma-focused Cognitive Behavioral Therapy.
- In response to Gov. Whitmer’s Executive Directive on State/Tribal Government Relations, MDHHS issued a training on working with Michigan’s Tribal Governments in 2022. The training is mandatory for MDHHS employees and is intended to increase understanding of the history of Michigan’s 12 tribal nations and ways to support tribal relations to address disparities and improve health outcomes.
- The MDHHS Office of Policy and Planning is developing a social determinants of health strategy to align,

collaborate, and create innovative solutions to support health equity.

Within Title V, the 2020 five-year needs assessment identified three key “pillars” that were important to all MCH populations: achieving equitable health outcomes, engaging families and communities, and delivering culturally and linguistically appropriate health education. Strategies related to these pillars are included in the state action plans.

Strengths and Challenges that Impact the MCH Population

The Title V needs assessment, which was completed prior to the COVID-19 pandemic, identified several strengths and challenges that impact the MCH population. These are discussed in detail in the FY 2021 application. Strengths include longstanding relationships with local public health, a robust home visiting network, commitment to addressing health disparities and pursuing equity, health campaigns that leverage technology and community voice, recognition of the impact of social determinants on health, resources and services to meet basic needs, and elevation of family voices to serve CSHCN.

Challenges facing Michigan’s MCH system and families include the impact of poverty coupled with system limitations to address poverty as a driver of health disparities; gaps in capacity and access to services for basic needs like transportation, childcare, and healthcare; inconsistent distribution of culturally or linguistically relevant health information; gaps in respite care for caregivers of CSHCN; barriers to accessing behavioral health services; and racism and other drivers of health inequity.

Over the past two years, the most significant public health challenge has been the COVID-19 pandemic. In 2022, the Title V program conducted a second assessment to gauge the pandemic’s ongoing impact on the MCH population. Findings are included in the Needs Assessment Update. Findings from the 2021 assessment are included in the previous application. The NPM/SPM annual reports and state action plans also include information about the impact of the pandemic on programs and service delivery.

Michigan’s first presumptive positive COVID-19 case was reported on March 10, 2020. Gov. Whitmer declared a state of emergency on the same day. Comprehensive information on the state’s COVID-19 response is available on the [Coronavirus website](#). As of March 7, 2022, Michigan reported 2,062,354 confirmed cases and 32,134 COVID-19 deaths. Cumulative data including trends, demographics, and testing information is available on the State’s [COVID-19 Data Dashboard](#). The pandemic has disproportionately affected certain populations in Michigan. Cases per million are 156,079 for Black/African American in comparison to 142,788 for White. Deaths per million by race are also highest for Black/African American (4,104 per million) and American Indian/Alaska Native (3,841 per million) compared to 2,888 per million for White. While total cases by age group are currently highest among 20-29 years, total deaths by age group are highest among 80+ years. Research by Lichtenberg and Tarraf (2021) indicates that the COVID-19 pandemic has had a negative impact on Michiganders’ mental health, especially for people of color^[1].

The State of Michigan utilized Executive Orders and MDHHS Orders (e.g., related to mask wearing and social distancing) to mitigate and contain the spread of COVID-19 and to prevent overwhelming the state’s healthcare systems. The [Protect Michigan Commission](#) was created by executive order in December 2020 to serve in an advisory capacity to the Governor and MDHHS and to provide leadership to elevate the COVID-19 vaccine. Throughout the pandemic, local health departments have been critical partners in education, mitigation, and vaccination efforts. Since the first COVID-19 vaccinations were administered in Michigan on December 14, 2020, vaccination has been the key strategy to prevent the spread of COVID-19. According to the [COVID-19 Vaccination Dashboard](#), 6,174,354 residents have initiated vaccination (i.e., one or more doses of any vaccine) as of March 8, 2022, which is 65.5% of eligible residents (i.e., 5 years of age and older); 60.0% (5,655,530) have completed

vaccination. Eleven counties have vaccination initiation rates of 70% or above. In January 2021, MDHHS launched a [media campaign](#) to inform Michiganders about the safe and effective COVID-19 vaccines and to address vaccine hesitancy. The campaign included a “My Why” series of TV and radio ads (see an example [here](#)). Significant effort took place in Summer 2021 to prepare for COVID-19 vaccinations for children, which were authorized in November 2021. To prepare for the anticipated long-term presence of COVID-19, in February 2022 MDHHS adopted a new [Readiness \(pre-surge\) – Response \(surge\) – Recovery \(post-surge\) cycle](#). The cycle will allow the state to prepare and respond to surges in COVID-19 and adapt public health recommendations accordingly.

Activities to address COVID-19 and to support vaccination efforts among the MCH population include the following:

- Michigan’s public schools, teachers, and students continued to feel the burden of the pandemic in 2021. Efforts to bring resources to schools included establishing onsite COVID-19 testing; launching the School Backpack Program in high-risk communities to send home tests for families; and embedding Health Resource Advocates and School Liaisons to support testing, contact tracing, and other mitigation strategies.
- The Division of Maternal and Infant Health hired a Nurse Consultant in 2021 to focus on immunization efforts in the Maternal Infant Health Program (MIHP). The Consultant will work with a marketing firm to develop and launch a communication campaign to increase awareness of immunizations (tentative launch Summer 2022). A vaccine education toolkit is being developed for MIHP agencies that will include resources to communicate with families about vaccines during pregnancy and vaccines for infants. A required training module for MIHP agencies will focus on vaccine communication, using a motivational interviewing approach. A session in Summer 2022 will focus on state immunization rates, navigating vaccine hesitancy, and mitigating disparities in vaccination. Vaccine information is being integrated into newsletters, web-based vaccine resources for families and MIHP agencies, and programmatic expectations such as agency protocols for immunization assessments.
- To reduce COVID-19 vaccine disparity rates, the Division of Child & Adolescent Health, Division of Immunization, Detroit Public Schools Community District, and the Governor’s Office partnered to stand up vaccination clinics in all Detroit Public Schools. The project focused on schools without a school-based health center and utilized existing district School Nurses to administer vaccines during the school day. The intention is that holding clinics during the school day will remove barriers to access and will increase parents’ support of vaccination. Nurses also have a trusted relationship with parents and students that will be leveraged as vaccine hesitancy continues to be a challenge.
- Child and Adolescent Health Centers (CAHCs) provide school-based or school-linked comprehensive primary care and preventive health services and mental health services in an atmosphere friendly to children and adolescents ages 5-21. CAHCs are poised to help students and families keep vaccination status up to date and can provide any needed vaccines to youth. CAHCs directly supported influenza and COVID-19 vaccination efforts during the pandemic. At the end of 2020, CAHCs delivered 4,251 influenza vaccines through 322 special events. In FY 2021 these sites delivered 24,399 COVID-19 vaccines to youth and are continuing to deliver COVID-19 vaccines as a part of routine care in FY 2022.
- The CSHCS Vaccine Initiative addresses vaccination gaps in CYSHCN and their families. Funding is provided to LHDs to improve access to COVID-19 vaccines; expand vaccination education, messaging, and partnerships; and improve understanding of barriers to vaccination.

Components of the State’s Systems of Care

Health Services Infrastructure and Financing

Michigan’s health care infrastructure includes 176 hospitals, including 37 critical access hospitals that serve rural

areas (Michigan Health & Hospital Association). The state has 80 birthing hospitals and 21 Neonatal Intensive Care Units. Michigan also has six children's hospitals (Children's Hospital Association). The health care system includes 39 Federally Qualified Health Centers (FQHCs) and three FQHC look-alikes with over 250 delivery sites (Michigan Primary Care Association); 122 school-based/school-linked health centers (MDHHS); 33 Family Planning agencies providing services at 92 clinic sites (MDHHS); and 195 rural health clinics (Michigan Center for Rural Health). The public health infrastructure to protect and promote community health is supported by 45 local health departments (LHDs) that serve all 83 counties and the City of Detroit. MDHHS works closely with LHDs to provide comprehensive public health services. This decentralized structure allows for local efforts to remain connected to the state for support, funding, and other resources.

After the implementation of Medicaid expansion in 2014, coverage expansions under the Affordable Care Act (ACA) 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 federal poverty level (FPL) could enroll in private health insurance coverage through the Marketplace. In April 2014, Michigan expanded HMP to cover residents who were at or below 133% of the FPL and who were not previously eligible for traditional Medicaid. According to the [HMP website](#), the plan provides health care coverage to Michigan residents who:

- Are age 19-64 years.
- Have income at or below 133% of the FPL.
- Do not qualify for or are not enrolled in Medicare.
- Do not qualify for or are not enrolled in other Medicaid programs.
- Are not pregnant at the time of application.

As of January 24, 2022, 979,004 beneficiaries are enrolled in HMP ([HMP County Enrollment Report](#)) which is a significant increase from March 23, 2020 (674,853 beneficiaries). Under the Families First Coronavirus Response Act of 2020 the Medicaid program will keep Medicaid eligibility cases open until the end of the COVID-19 Public Health Emergency.

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 via 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. A Health Risk Assessment provides beneficiaries the opportunity to earn incentives for 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 cost-sharing reductions.

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 FQHCs grew as additional centers were funded and look-alike sites were approved. According to the [Michigan Primary Care Association](#), Michigan's Health Centers are health care homes to more than 615,000 Michiganders.

ACA consumer protections improved access to private insurance for CSHCN by eliminating preexisting condition exclusions and discrimination based on health status, the two most frequent enrollment barriers for families. The ACA also expanded access to parent employer coverage for adults 19-26 years of age. CSHCS/Healthy Michigan enrollment for December 2021 was 1,625 (MDHHS Health Services Data Warehouse, 3/8/2022). LHDs, Family Resource Centers and designated state staff work with families and community partners to help families understand and access private and publicly funded resources to meet 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. Private insurance may not include any covered benefit for a specific, medically necessary service. In other cases, only a limited benefit may be available. 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. CSHCS helps to limit costs to families and continues to be a significant resource for achieving 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.

Integration of Services

MDHHS recognizes the importance of integrating physical health and behavioral health services to improve health and address individual or family needs. The COVID-19 pandemic highlighted the critical nature of behavioral health services and gaps in current systems. In March 2022, MDHHS announced a behavioral health restructuring to ensure that services are supported across community-based, residential, and school locations. The restructuring is described in the Cross-Cutting/Systems Building state action plan. MDHHS initiatives to better address behavioral and mental health needs include the following:

- The [Michigan Warmline](#) is a statewide, anonymous warmline for any Michigander experiencing a mental health or substance use condition. The warmline is staffed by certified peer support specialists and recovery coaches and is available seven days a week from 10am-2am. In 2021, MDHHS piloted the [Michigan Crisis and Access Line](#) (MiCAL) in the Upper Peninsula and Oakland County. MiCAL is staffed 24/7 and provides crisis and warmline services, informational resources, and coordination with local systems of care such as Community Mental Health Services Programs and Prepaid Inpatient Health Plans. It is anticipated that MiCAL will be rolled out statewide over the next two years.
- The Expanding, Enhancing Emotional Health (E3) model helps to address the need for mental health services for children and youth. E3 is a designated model through the Child & Adolescent Health Center (CAHC) Program. E3 programs provide on-site comprehensive mental health services from mild to moderate severity of need by a full-time licensed Mental Health Professional. Services include assessments, brief intervention, ongoing therapy, referrals, and follow-up. E3 sites are open year-round and provide telehealth when school is not in session. Services are designed for children and adolescents 5-21 years of age when access to behavioral health resources are limited or inaccessible in the community. Currently, 93 E3 sites operate across Michigan in 43 counties. An [RFP process](#) in FY 2022 will enable further expansion.
- The CAHC Program (Michigan's School-Based Health Centers) is utilizing \$4.25 million in MI Kids Now funding to expand mental health services for youth throughout the state. These funds will allow for expansion of mental health staffing from 0.5 FTE to 1 FTE per CAHC site.
- In 2021, Michigan continued to roll out expanded coverage for nursing and mental health services for general education students through a CMS approved Medicaid waiver. The Caring 4 Students (C4S) expansion allows schools that provide mental health and nursing services to general education students to receive Medicaid reimbursement. All 56 Intermediate School Districts participate in C4S. In 2021, over 385,000 students were served.
- In August 2020, MDHHS was approved for a two-year CMS Certified Community Behavioral Health Clinic (CCBHC) Demonstration. CCBHC demonstration sites provide nine core behavioral health services, including formal care coordination with primary and other care providers, and must meet standards for service provision, staffing, quality and financial reporting, and governance.

- MDHHS was awarded the Promoting Integration of Primary and Behavioral Health Care (PIPBHC) Grant in FY 2019. PIPBHC is a five-year grant to promote integration and collaboration in clinical practice between primary and behavioral health care, and to support improvement of integrated care models for primary and behavioral health care to improve the overall wellness of adults with serious mental illness (SMI) or children with serious emotional disturbance (SED). Grantees promote integrated care for screening, diagnosis, prevention, and treatment of mental and substance use disorders and co-occurring physical health conditions and chronic diseases.
- The [Michigan Child Collaborative Care \(MC3\)](#) was expanded to all 83 Michigan counties (through HRSA funding) to increase access to mental health treatment for underserved children, adolescents and high-risk perinatal women. The expansion is significant given the shortages of specialty providers, especially in rural areas. MC3 provides psychiatry support to primary care providers who have patients with behavioral health concerns. Behavioral Health Consultants are linked with or embedded in pediatric primary care practices to assess and link children to appropriate mental health services. Patients are linked to evidence-based interventions if specialty services are not available. MC3 also provides behavioral health education for primary care providers, including cultural sensitivity. MC3 is administered collaboratively by MDHHS, the University of Michigan, and Michigan State University.
- MC3 for MOMs was launched in FY 2021 to engage and enroll Michigan's perinatal providers and their patients in targeted areas. The initiative is intended to improve perinatal providers' knowledge of and comfort with perinatal behavioral health screening and treatment (e.g., mood and anxiety disorders, substance/opioid use disorders). Universal psychiatric screening is important since up to 25% of perinatal women experience depression and anxiety. Behavioral Health Consultants are being trained in interventions to address behavioral health issues that impact the perinatal period. A perinatal resource and referral list will also be developed to help ensure that pregnant and postpartum women are referred to home visiting programs, have access to basic needs, and are enrolled in other relevant services.
- Michigan supports over 30 Children's Multi-Disciplinary Specialty (CMDS) Clinics in seven tertiary care and teaching hospitals. The clinics offer a highly coordinated, interdisciplinary approach to the management of specified complex medical diagnoses, which include teams that consist of a specialist/pediatrician, nurse, social worker, and dietician. Families receive a comprehensive, patient-centered Plan of Care (POC). The POC includes an assessment and ongoing treatment plan which is monitored and updated. Patients also receive health education, transition, and referral services.
- CSHCS continues to work with Behavioral Health partners to identify challenges accessing services experienced by populations served by the mental/behavioral health, intellectual/developmental disabilities, and physical health systems. Work includes cross-sector education, tools to assist families, and addressing systemic access issues.

Title V and Medicaid

Michigan's Title V and Title XIX programs are both housed within MDHHS and 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 strategies to address social determinants of health and reduce health disparities. Areas of collaboration include maternal and infant care, perinatal care, child and adolescent health, developmental screening and referral, home visitation, oral health, and CSHCS. Key partnerships are discussed in the Title V–Title XIX section of this application.

In January 2022, 2,192,260 Medicaid beneficiaries were enrolled in the Medicaid Health Plans (MHPs) and 682,936 beneficiaries were enrolled in fee for service. Medicaid uses 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 nine Medicaid Health Plans (MHPs) to achieve these goals through evidence- and value-based care delivery models; health information technology; strategies to prevent chronic disease; and coordination of care that includes assessing social determinants of health such as transportation, housing, and food access. The Managed Care Plan Division (MCPD) requires MHPs to annually report the Healthcare Effectiveness Data and Information Set (HEDIS) and uses a Pay for Performance Incentive Program with 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. MHPs must actively recruit CSHCS beneficiary parents/guardians to participate in non-compensated governing bodies or consumer advisory councils.

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 comorbidities. 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.

The DMIH 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. In FY 2021, MIHP provided services to 11,564 adults and 14,991 infants.

Another area of coordination is for CSHCN. In March 2022, CSHCS program data indicate that 26,553 CSHCS beneficiaries were dually enrolled in an MHP. MHPs are responsible for the medical care and treatment of CSHCS members while community-based services beyond medical care and treatment are 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 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.

Information Systems

MDHHS utilizes 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 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 DMIH, CC360 will help to improve communication within MIHP by sharing care elements that can aid in successful case management, so 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. It will also allow for comparison of population health data across counties or regions.

MI Bridges is another key component of the MDHHS service platform to better meet consumer needs through technology. MI Bridges is an online site managed by MDHHS that enables users to apply for benefits (including healthcare coverage, food and 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 a specialist. In the fall of 2020, new functionality was built in MI Bridges to include home visiting. Families in need of home visiting can receive a custom list of models that are available in their community and, if the parent chooses, they can self-refer to a specific model. This new feature launched in December 2020 and averages over 300 referrals each week.

MDHHS also uses 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.

State Statutes Relevant to Title V (Effective September 29, 2021)

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 2022, state funding for MCH and CSHCS programs was appropriated through Public Act 87 Enrolled Senate Bill 82 Health and Human Services of 2021. 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 funds for MCH programs are itemized in Sec. 116, Family Health Services, of Public Act 87 of 2021, and CSHCS is addressed in Sec. 117. Additional MCH details are provided in Sec. 1301-1305, 1307-1317, 1320-1321, 1342, 1343, 1347, 1348. The sections identify how funding shall be used; MDHHS and contractor requirements; and requirements for evidence-based programs to reduce infant mortality; pregnancy and parenting support services; prenatal care education; rural home visiting; Healthy Start; fetal alcohol syndrome services; oral health initiatives; Michigan Model for Health™; and immunization policy and practices.

Requirements in the FY 2022 Health and Human Services budget for CSHCS included criteria in Sec. 1360 for MDHHS to provide services; Sec. 1361 authorizes that some appropriated funding be used to develop and expand telemedicine capabilities and to support chronic complex care management.

[1] Sloomaker, E. (2021). [Michigan grapples with COVID-19's disproportionate impact on people of color's mental health](#). Second Wave Michigan.

III.C. Needs Assessment

FY 2023 Application/FY 2021 Annual Report Update

Title V needs assessment activities in FY 2022 have focused on a second COVID-19 MCH Impact Assessment and a review of state action plans to assess family and community engagement. Ongoing or emerging issues that impact the MCH population are also discussed in this section, including infant and maternal mortality, COVID-19 and pregnancy, substance use, fluoridation, and health concerns specific to children and youth with special health care needs (CYSHCN).

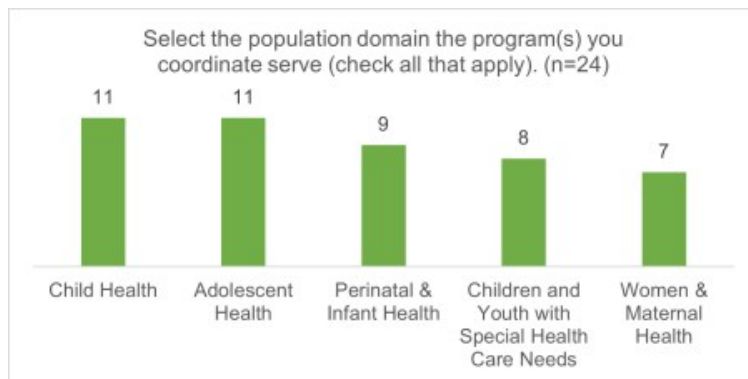
COVID-19 MCH Impact Assessment

As the COVID-19 pandemic persisted, Michigan's MCH and Title V programs continued to focus on identifying and responding to the needs of women, mothers, infants, children, and CYSHCN. The impact assessment used several methods to explore impacts in 2021, including an MCH impact survey, analysis of local MCH (LMCH) workplans, and a literature review. Findings are described below.

COVID-19 MCH Impact Survey

MDHHS MCH program staff completed an 18-item online survey in February 2022. The survey asked respondents to share their experiences and observations about the impact of COVID-19 on the populations served by their programs. Questions focused on provision of services and health information, workforce challenges, and emerging needs. Michigan Public Health Institute (MPHI) analyzed findings from 24 respondents which included, but was not limited to, Title V programs.

Figure 1. MCH Populations Served by Survey Respondents

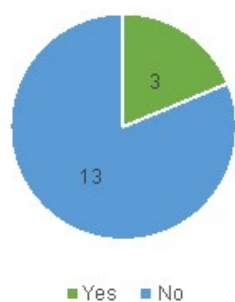


Seventeen out of 24 respondents indicated their program provided information, technical assistance, or education on COVID-19 and/or COVID-19 vaccines to individuals, families, providers, or local grantees in 2021. In addition to COVID-19 information, programs indicated they provided guidance on telehealth services and resources on mental health and social isolation. Programs shared information via websites, flyers, newsletters, toolkits, and townhalls.

Notably, most state programs that received Title V funding indicated that they did *not* use funding for COVID-19 related activities in 2021.

Figure 2. Use of Title V Funding

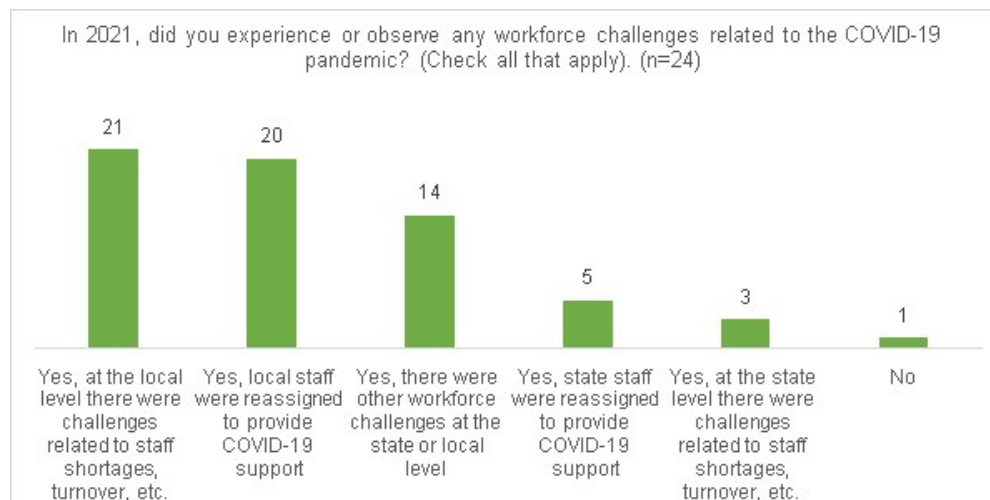
If your program receives Title V funding, was any portion of Title V funding used to purchase supplies, equipment, or support increased staffing as part of the program's COVID-19 response during 2021? (n=16)



COVID-19 presented challenges for MCH programs in service delivery and staffing capacity. Twenty-three respondents indicated that their program provided services virtually or via telehealth due to limited ability to provide in-person services. Programs such as home visiting, nutrition support, family planning, and mental health services adapted to virtual and telephonic delivery. Exemptions for telehealth reimbursement eased service delivery. Virtual programs made services more accessible for harder to reach populations, and some programs are interested in continuing to offer this option.

Most survey respondents noted workforce challenges and indicated they were most pronounced for local programs, as illustrated in Figure 3.

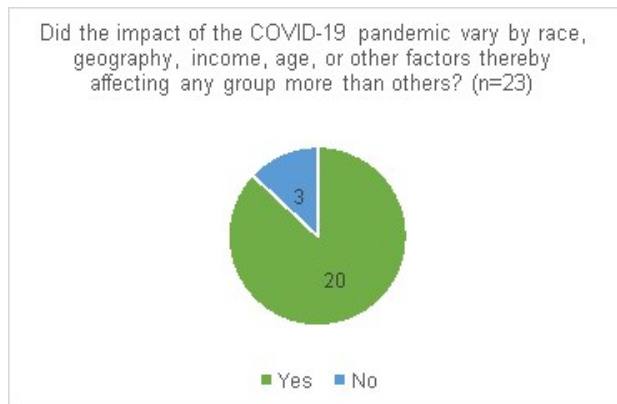
Figure 3. Workforce Challenges



In addition to staff shortages, turnover, and reassignment due to COVID-19, respondents indicated that other challenges included staff burnout and mental health concerns.

Struggles with social isolation, stress, job security, housing, and food access affected Michiganders across MCH domains centering the need for mental health support. Provider shortages impeded addressing this need. Programs leveraged technology to provide virtual case managers and therapy sessions to address the critical need. Most respondents indicated that COVID-19 impacted groups differently, as indicated in Figure 4.

Figure 4. COVID-19 Impact



These impacts are discussed below.

Findings by Population Domain

Programs that served **women and infants** identified persistent barriers to in-person activities, such as lactation and breastfeeding support, WIC redemption, and oral health services. Populations with low-income, people living in both rural and urban areas, and people of color had exacerbated experiences from the pandemic's economic impacts. Job and food security, affordable housing, and childcare were common concerns. However, programs continued to provide concrete supports, such as pack and plays, through no contact means.

Child and adolescent programs reported a heightened need for mental and oral health services, in-person screenings, and academic supports. School closings, academic delays, and social isolation were noted as challenges. School restrictions also limited screenings and services for vision, hearing, blood lead testing, and oral health which particularly impacted low-income, rural, and urban youth. Adaptations extended the reach of school-based programs by connecting with target populations outside of school. For example, technology allowed case managers to meet with clients, deliver mental health services to youth, and use the Michigan Model for Health.

Programs that served **CYSHCN** reported challenges navigating the telehealth landscape and the stress of exposure at in-person visits, causing some families to delay medical care. Private nurses and respite care for families with CYSHCN were also more difficult to access. However, policies and exemptions reduced burdens for medication and medical equipment access, telehealth reimbursement, and vaccine administration. Collaboration was noted as a strength. For example, grants to local health departments promoted vaccine delivery to CYSHCN.

Local MCH Workplan Analysis

Year-end LMCH reports from Local Health Departments (LHDs) were analyzed with a focus on understanding the effects of the pandemic on the LMCH program, which is funded by Title V. Expenditures and persons served were quantified and categorized by performance measure, and workplans were analyzed for qualitative themes.

Across the state, LHDs addressed over 120 goals and served 360,850 individuals. Out of 45 LHDs, 18 LHDs expended \$892,060 (14.6%) in Title V funding to combat COVID-19, serving 187,799 clients. Over half of total individuals served by LMCH were reached with COVID-related services, most commonly vaccinations.

LHDs noted many challenges. For example, the pandemic forced programs to divert both funding and staff to address needs related to contact tracing, case investigation, testing, vaccination, and information hotlines. Limited

in-person services were also a barrier to meeting goals. Virtual WIC appointments resulted in fewer immunizations, screenings, and lactation support services. Canceled community events also limited programs' ability to implement outreach and education activities. While programs adjusted to provide services via telehealth, several programs reported difficulty sustaining virtual programming due to providers' lack of comfort, poor phone access or internet connections (especially in rural areas), or patient preference. Collecting evaluation data also proved difficult in a virtual format.

LHDs shared successful efforts to serve their community despite limited in-person interaction. Many used alternative communication methods such as print and radio ads, and especially social media, to educate the public on COVID-19 and other health topics. Some programs used virtual events to engage community members. Several LHDs reported partnering with local providers and businesses to reach more people.

Literature Review & Annotated Bibliography

MPHI reviewed recent peer-reviewed and grey literature on the impacts of COVID-19 on MCH populations. Search criteria included COVID-19 references and one or more Title V population domains, with a focus on articles about Michigan. Other key terms were service delivery, health equity, pregnancy, breastfeeding, vaccine, insurance, mental health, and substance use.

The review reinforced prior findings on the physical, mental, and social impacts of the pandemic across all population domains and the disparities among demographic groups. In addition, emerging research highlights the direct and indirect long-term impacts on individuals and society.

Scholars continued to assess the phenomenon of 'long COVID' and 'long haulers' who experience symptoms for months after testing positive for the virus, which can include children (University of California Davis, 2022). A University of Michigan study found 27% of Michiganders who contracted COVID-19 in 2020 reported having a disability following their illness versus 15% before onset (Michigan News, 2022). In turn, specialty clinics have arisen to research and treat higher risk 'long hauler' adult and pediatric patients coping with multisystem inflammatory syndrome in children (Michigan Medicine, 2021).

COVID-19 vaccines saved lives in the U.S. and in Michigan (Gupta, 2021; Samson, 2021). Yet inequity and access barriers, mis/disinformation about the vaccine, and mistrust of healthcare systems affected the adoption of this intervention (Clay, 2021). As of March 30, 2022, 67% of Michigan residents had received their first dose—markedly lower than the overall U.S. rate of 82% (MDHHS, 2022; CDC, 2022). Rates vary by race in Michigan, with only 45% of Black residents having their first dose, compared to 56% of White residents (MDHHS, 2022).

Impacts on mental health continued in Michigan, often contributing to substance use issues (Slootmaker, 2022). From April 2020 to April 2021, Michigan opioid-related drug overdoses rose 19% over the prior year. Factors included "isolation, boredom, financial stress, loss of loved ones," and lack of basic needs. Black, Indigenous, and Hispanic populations, people under age 24, people involved in the criminal justice system, and mothers and infants were especially affected by opioid use and deaths.

To address mental and other health concerns, telehealth options expanded, but access was inequitable. Income and insurance status limited access to telehealth, as did internet access (Darrat, 2020). To reduce inequities, the U.S. Department of Health and Human Services launched the Telehealth Broadband Pilot Program to expand access and improve broadband connectivity in rural areas of many states including Michigan (Augenstein, 2022).

In addition to these overarching impacts, the review highlighted insights unique to each MCH domain.

A Southeast Michigan study confirmed research that **pregnancy** elevates the risk of severe illness from COVID-19; suggests pregnant people have a higher risk of early preeclampsia after COVID-19 infection; and indicates that Black pregnant people are twice as likely as White pregnant people to contract early preeclampsia after COVID-19 (Ismailova, 2022). While studies have shown that COVID-19 vaccination of pregnant women is safe and effective (even in protecting the baby), the vaccination rate in this group has remained low.

A national study described the pandemic's impact on birthing practices, including elevated emotional distress and adverse breastfeeding experiences due to lack of postpartum social support, shifting birthing plans due to hospital policy changes, a disconnect between expectation and reality, and some surprising benefits (such as better bonding with partner and infant) (Shuman, 2022). The pandemic "increased patients' and policymakers' interest in alternative care models like birth centers and doula services" over traditional interventions and hospitals (Burroughs, 2021). Expanding access to health insurance and telehealth can facilitate these options, and "expanding and diversifying the maternal health workforce is critical for promoting more culturally and linguistically effective care and addressing inequities" in birth outcomes.

Healthcare disruptions also impacted **infants** needing neonatal intensive care. Barriers to infants receiving care from NICU nurses included difficulty establishing skin-to-skin contact, problems caused by personal protective equipment, and fear of COVID-19 (Celik, 2021). Mothers faced barriers to providing care to their infants such as lack of family visits, interrupted kangaroo care, and difficulties breastfeeding.

Children also experienced barriers to healthcare during the pandemic. According to a national survey, "26.4% of households reported that ≥ 1 child or adolescent had missed or delayed a preventive visit because of COVID-19." This was more likely among respondents who reported material hardships. Common reasons for missing or delaying preventive visits were concern about visiting a health care provider, limited appointment availability, and closed provider locations (Lebrun-Harris, 2022). Missed appointments led to fewer opportunities for lead testing, which decreased during the pandemic nationally and in Michigan (Michigan CLPPP, 2021; Courtney, 2020). Similarly, opportunities were missed to immunize children against vaccine-preventable illnesses. In May 2020 in Michigan, "vaccination coverage declined in all milestone age cohorts [year over year], except for birth-dose hepatitis B coverage...and coverage was lower for Medicaid-enrolled children than their peers" (Bramer, 2020).

As of March 30, 2022, COVID-19 vaccination of Michigan youth aged 5-19 was 41%, with a racial disparity of 40% of White youth compared to 28% of Black youth receiving at least one dose. Asian American and Hispanic/Latinx American youth rates were higher, 66% and 43% respectively, which increased the overall rate. Youth aged 5-11 lagged at 28% compared to 52% for youth aged 12-19 (MDHHS, 2022).

Abrupt school closures in 2020 worsened food insecurity for many students. States struggled to obtain and disburse funds for student meals due to administrative and data sharing barriers (Waxman, 2021). The adverse implications of distance learning on students were also documented (Harvard, 2021). Mental health care infrastructure for children has been overwhelmed by surges in emergency mental health needs and severe labor shortages. This unmet need is especially acute in rural areas of Michigan, such as the Upper Peninsula and northern Lower Peninsula (NIHCM Foundation, 2021; Erb, 2021).

As adult and pediatric COVID-19 cases and hospitalizations peaked due to the Omicron variant, hospitals were short-staffed and had difficulty providing surgeries for serious non-COVID illnesses (Fromson, 2022). Michigan Medicine found many Omicron cases were among younger children and adolescents displaying pneumonia and multisystem inflammatory syndrome.

Adolescents experienced increased mental health issues, with some groups at higher risk due to social and environmental factors (Office of the Surgeon General, 2021). These groups include youth with intellectual and

developmental disabilities, racial and ethnic minority youth, youth who have low-income or live in rural areas, youth in immigrant households, foster care or justice system-involved youth, and youth who identify as LGBTQ+. The pandemic elevated stress levels among LGBTQ+ youth with almost half indicating their mental health counseling needs were unmet (The Trevor Project 2021).

Similarly, high school students reported increased “feelings of boredom, anxiety, depression, loneliness, worry, difficulty sleeping, and other negative mental health indicators since the beginning of the pandemic” (NIH, 2021). However, they also reported the largest single-year drop in substance use since the study began in 1975, including alcohol, marijuana, and vaped nicotine. Authors attributed this behavior change to changes in the daily life of adolescents related to “drug availability, family involvement, differences in peer pressure, or other factors.”

Parents of **CYSHCN** experienced increased stress caused by persistent challenges including “disruption in day care, health care, and employment, and loss of technological and therapeutic supports.” Many of these parents reported substance use including alcohol, cannabis, or other drugs (American, 2021).

Many policies improved CYSHCN access to health care by relaxing Medicare and Medicaid requirements, reducing administrative requirements for specialty services (Silow-Carrol, 2021). Expanded telehealth largely benefited CYSHCN, but low-income and rural families faced barriers such as lack of a device or broadband access. Experts emphasize the need to include CYSHCN and caregivers in emergency preparedness planning to reduce inequities and ensure that diverse needs are met. The U.S. Surgeon General also emphasized the need to address mental health needs, given unique pandemic challenges: “youth with intellectual and developmental disabilities...found it especially difficult to manage disruptions to school and services such as special education, counseling, occupational, and speech therapies” (2021).

Overall, this review emphasized the growing mental health crisis and the need for support. Groups that have been marginalized are disproportionately impacted by the pandemic, and efforts to address the impacts must target upstream social determinants and root causes. The unique needs of each MCH population require attention, including supporting new mothers and their infants, encouraging COVID-19 vaccination and childhood immunizations, and preventing and treating substance use.

Family and Community Engagement Action Plan Review

Michigan’s Title V five-year needs assessment identified three cross-cutting “pillars” that are critical across all MCH population domains. In 2022, Michigan focused on the 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.” To further integrate this pillar, MDHHS partnered with MPHI to review each Title V state action plan using a family and consumer engagement rubric. The aim was to identify strengths and opportunities to improve family and consumer engagement across plans.

MPHI reviewed all state actions plans and provided completed rubrics to Title V program staff. Feedback included examples and resources from the literature, and virtual technical assistance was provided upon request. During the TA sessions, program staff discussed the rubrics and ideas for integrating increased family and consumer engagement into FY 2023 state action plans or future activities.

Ongoing and Emerging Issues that Impact MCH

Infant and maternal mortality remain critical public health issues. Other current issues include COVID-19 and pregnancy, COVID-19 vaccination, substance use, community water fluoridation, and issues that impact CSHCN.

Infant and Maternal Mortality

MDHHS closely monitors infant and maternal mortality and has seen the following trends and emerging concerns. The infant mortality rate in Michigan for 2020 was 6.8 deaths per 1,000 live births, which represents a slight increase from 2019 (6.4 deaths per 1,000 live births). This increase in infant mortality could partially be attributed to a corresponding increase in the infant mortality rate within the City of Detroit. From 2019 to 2020, the infant mortality rate in the City of Detroit increased from 11.0 infant deaths per 1,000 live births in 2019 to 14.6 infant deaths per 1,000 live births in 2020. Although improving, racial and ethnic disparities remain a major contributor to Michigan's infant mortality rates. The Black infant mortality rate has continued to be nearly three times that of the White infant mortality rate (13.6 versus 5.2 per 1,000 live births in 2020). The pregnancy-related mortality ratio in Michigan for 2018 was 10.9 maternal deaths per 100,000 live births^[1]. As with infant mortality, disparities between Black and White mothers exist, with the Black pregnancy-related mortality ratio nearly three times that of the White rate (24.1 versus 8.5 per 100,000 live births based on 2014-2018 data). In addition to maternal deaths caused by pregnancy-related issues, addressing pregnancy-associated mortality^[2] remains important: 36.1% of all pregnancy-associated, not related deaths from 2014-2018 were caused by accidental poisoning/drug overdose. Michigan's maternal mortality committees have focused on developing recommendations to help prevent current and expecting mothers from developing opioid use disorders.

COVID-19 and Pregnancy

Michigan continues to participate in the CDC COVID-19 Pregnancy and Neonate Surveillance Project. For the project, women who have received a confirmed diagnosis of COVID-19 during pregnancy are identified through the Michigan Disease Surveillance System (MDSS) which is then linked with birth and death certificates to track pregnancy outcomes. After each pregnancy outcome has taken place, medical records for both mother and infant are requested to obtain details regarding the impacts of COVID-19 on the health of mother and infant.

For the 2020 cohort, 1,378 Michigan women were identified with a confirmed COVID-19 diagnosis during pregnancy. A pregnancy outcome was confirmed for 1,288 (93.5%) with the remaining 90 women (6.5%) lost to follow-up. The 1,288 documented pregnancy outcomes resulted in 1,316 live births and less than five fetal deaths. The majority of pregnancy outcomes were to White mothers (65.6%) while 18.9% were to Black mothers. Among the 1,316 live births, 10.4% were classified as preterm births, which is similar to the state average of 10%. The NICU admission percentage among this group was 9.3%, which is higher than Michigan overall at 7.5%. Lastly, the infant COVID-19 positive rate was very low at less than one percent of live births to COVID-19 infected mothers. Michigan recently started working on the 2021 cohort.

In addition to this surveillance project, the Michigan Pregnancy Risk Assessment Monitoring System (MI PRAMS) added COVID-19 questions to the survey. Results from the 2020 MI PRAMS COVID-19 questions indicate that an estimated 2.6% of new Michigan mothers reported that a health care worker told them they had COVID-19 during their most recent pregnancy, and it was confirmed through testing. When including mothers that were told by a health care worker that they had COVID-19 during their most recent pregnancy but they weren't tested, this number increases to an estimated 3.7% (which represents 3,589 new mothers in 2020). Black, non-Hispanic mothers were nearly twice as likely to report COVID-19 during their most recent pregnancy when compared to white, non-Hispanic mothers.

COVID-19 Vaccination

The chart below provides Michigan COVID-19 vaccine coverage percentages by age group as of March 5, 2022. Initiation is defined as the percentage of Michigan residents who have received 1 or more doses of any vaccine, while completion is defined as the percentage receiving 2 doses of Pfizer or Moderna or 1 dose of Johnson &

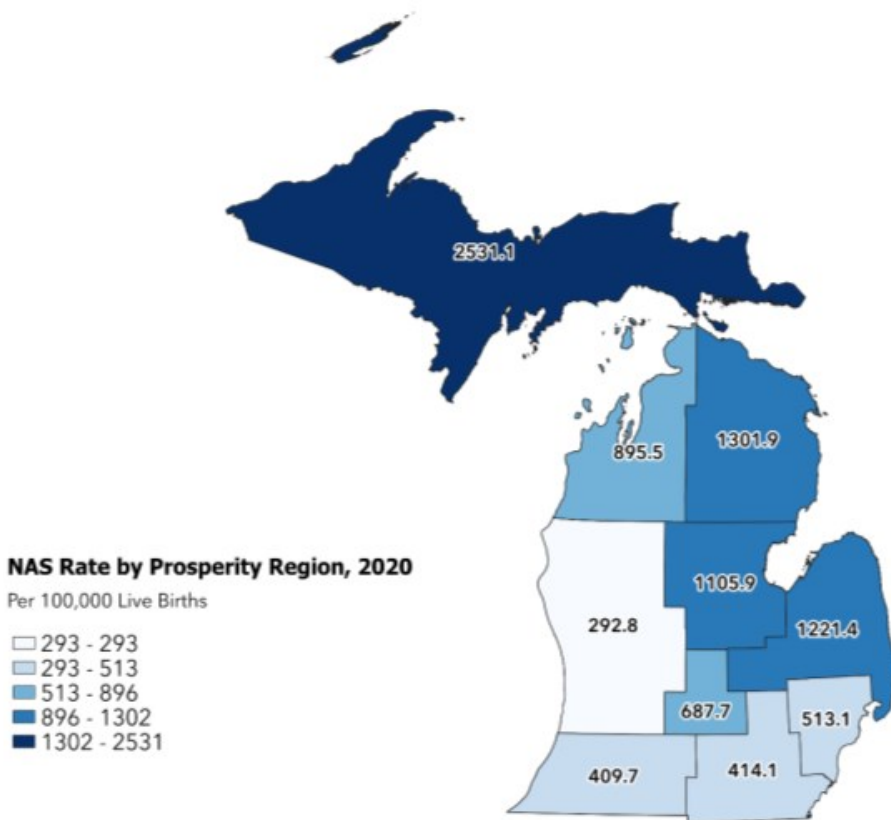
Johnson. Approximately one quarter of Michigan residents aged 5-11 years have either initiated or completed a COVID-19 vaccination. Initiation and completion rates increase to around 50% for those aged 12-29 years and increase to 60% or above for Michigan residents aged 30 years and above.

Administration Age Group	Initiation			Completion		
	Cumulative Coverage	Residents Vaccinated	Population	Cumulative Coverage	Residents Vaccinated	Population
5-11 years	27.4%	226,209	825545	24.1%	198,564	825545
12-15 years	48.2%	239,993	497959	44.4%	221,083	497959
16-19 years	54.4%	281,716	517739	49.4%	255,878	517739
20-29 years	53.8%	742,357	1379576	47.5%	655,262	1379576
30-39 years	64.4%	781,171	1213131	57.9%	702,087	1213131
40-49 years	66.6%	785,740	1179375	61.1%	721,130	1179375
50-64 years	76.0%	1,552,051	2041683	70.9%	1,447,881	2041683
65-74 years	89.5%	929,028	1037580	83.6%	867,331	1037580
75+ years	86.1%	626,463	727821	79.2%	576,488	727821

Substance Use

Opioid use during pregnancy and, as a result, an increase in the number of infants diagnosed with Neonatal Abstinence Syndrome (NAS) continues to be an issue in Michigan. 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 2020 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, Michigan Department of Health and Human Services, 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 Michigan Department of Health and Human Services, Maternal and Child Health Epidemiology Section.

Additionally, infants hospitalized and treated for drug withdrawal symptoms has increased^[3]. In 2010, 478 infants in Michigan received a diagnosis code of 779.5 (ICD-9-CM) which indicates a drug withdrawal syndrome, not specifically related to opioids. In 2020, 650 infants received a diagnosis code of P96.1 (ICD-10-CM), which indicates neonatal withdrawal symptoms from maternal use of drugs of addiction. This represents a jump from 416.7 per 100,000 live births in 2010 to 624.1 per 100,000 live births in 2020. The opioid epidemic has also impacted maternal deaths. In 2011, 9% of maternal deaths were opioid related compared to 32% of maternal deaths in 2018^[4].

MDHHS remains committed to supporting substance use disorder (SUD) prevention for pregnant and parenting people and people of childbearing age; increasing screening and identification of SUD; maintaining data collection and reporting; optimizing resource allocation to target resources to those in greatest need; and improving workforce development and training programs.

DMIH has partnered with the MDHHS Office of Recovery Oriented Systems of Care to provide funding to three health systems to implement 'rooming in' programs in birthing units. The rooming-in program is a family-centered model that encourages parent-infant bonding and utilizes non-pharmacological care of infants born substance-exposed, ensuring they remain with their birthing parent or caregiver in a private hospital room that is less stimulating for the infant (e.g., room-darkening shades, softer flooring). The rooms are often equipped with murphy beds or sleeper chairs to enable an additional caregiver to stay at the hospital. Hospital staff provide education and support to the birthing parent and family (e.g., breastfeeding, skin-to-skin contact, calming techniques, and referrals to services).

The rooming-in program supports bonding between parent and infant, decreases the length of stay for babies born substance exposed, and promotes positive parenting and recovery from substance use disorder.

Fluoridation

In 1945, Community Water Fluoridation (CWF) began in Grand Rapids, Michigan. Over the last 75 years, it has proven to be a safe and effective measure in the prevention of cavities. Over the past few years and during the pandemic, anti-fluoridation groups have attempted to tie faulty science to community water fluoridation. Nationally, municipal water systems that have had an interruption in their supply line for fluoride have come under pressure to stop fluoridating. In Michigan, three cities have seen a push to stop fluoridating. As an overlapping challenge, the once robust School Mouth Rinse Program has ended with the last manufacturer discontinuing production. CWF continues to be the most equitable form of oral public health. The removal of this fluoride delivery system would leave many children at risk of tooth decay and poorer oral health outcomes.

Children with Special Health Care Needs

There is an emerging focus on Children with Medical Complexity (CMC) who suffer from one or more chronic conditions that affects three or more organ systems or one-life limiting illness or rare pediatric disease. Nationwide, CMC make up less than 4% of the total children's population but are estimated to account for 40% of Medicaid's pediatric spending. To address the complex needs of this population, CSHCS is collaborating with the Michigan Health Endowment Fund, Michigan Medicine, University of Michigan, and other Michigan-based Children's Hospitals to explore the establishment of a CMC Health Home in Michigan. The goals of the CMC Health Home are to improve patient outcomes, increase patient and family satisfaction, and reduce health care costs.

Efforts to apply a health equity lens have contributed to a greater awareness of disparities in access to health care experienced by individuals with sickle cell disease (SCD) which disproportionately affects African Americans. An estimated 3,500 to 4,000 Michiganders are living with SCD. Of those, 798 are children enrolled in CSHCS and 2,317 are adult Medicaid recipients. Individuals with SCD are prone to higher rates of hospitalization, emergency room utilization, and premature death. In FY 2021, CSHCS partnered with the Lifecourse Epidemiology and Genomics Division to submit a proposal to the Governor's Office to expand CSHCS eligibility to adults with SCD, expand clinical services, and enhance the system of care serving clients with SCD. The proposal was included in the Governor's FY 2022 budget recommendation and implemented on October 1, 2021. CSHCS continues to implement outreach strategies to reach adults who can benefit from the CSHCS eligibility expansion. In addition, CSHCS is implementing strategies to expand the CMDS clinic model to include adult clinics caring for patients with SCD and developing toolkits for transition programs to improve transition to adulthood in this population.

Improved access to respite care for families with children with special health care needs was identified as a need in the 2020 Needs Assessment. According to the 2019-2020 National Survey of Children's Health, parents/caregivers of children with special health care needs in Michigan are five times more likely to have left a job, requested a leave of absence, or reduced their work hours due to the stress of their child's health or health conditions. In response, CSHCS has convened a workgroup comprised of representatives from Program Review Division, CSHCS, Office of Medical Affairs, and the Managed Care Plan Division to assess the current landscape for respite care in Michigan and explore opportunities to expand the CSHCS respite benefit.

^[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, 2014-2018 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 Inpatient Database Files.

^[4] Division for Vital Records and Health Statistics, Michigan Maternal Mortality Surveillance System, MDHHS.

Click on the links below to view the previous years' needs assessment narrative content:

[2022 Application/2020 Annual Report – Needs Assessment Update](#)

[2021 Application/2019 Annual Report – Needs Assessment Summary](#)

III.D. Financial Narrative

	2019		2020	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$19,193,200	\$19,238,763	\$19,316,300	\$18,757,073
State Funds	\$46,999,800	\$41,868,576	\$48,158,300	\$45,760,081
Local Funds	\$0	\$0	\$0	\$0
Other Funds	\$500,000	\$763,473	\$500,000	\$560,970
Program Funds	\$68,309,200	\$58,013,859	\$68,599,500	\$54,711,675
SubTotal	\$135,002,200	\$119,884,671	\$136,574,100	\$119,789,799
Other Federal Funds	\$381,595,500	\$312,150,786	\$344,942,800	\$342,780,969
Total	\$516,597,700	\$432,035,457	\$481,516,900	\$462,570,768
	2021		2022	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$19,415,900	\$19,007,027	\$19,474,600	
State Funds	\$42,008,500	\$49,686,928	\$51,089,300	
Local Funds	\$0	\$0	\$0	
Other Funds	\$790,000	\$574,036	\$790,000	
Program Funds	\$7,868,700	\$6,955,280	\$7,897,800	
SubTotal	\$70,083,100	\$76,223,271	\$79,251,700	
Other Federal Funds	\$315,888,100	\$314,180,132	\$365,627,200	
Total	\$385,971,200	\$390,403,403	\$444,878,900	

	2023	
	Budgeted	Expended
Federal Allocation	\$19,480,200	
State Funds	\$52,970,400	
Local Funds	\$0	
Other Funds	\$790,000	
Program Funds	\$8,363,000	
SubTotal	\$81,603,600	
Other Federal Funds	\$340,960,300	
Total	\$422,563,900	

III.D.1. Expenditures

Financial Narrative Overview

Title V federal funding, in conjunction with non-federal state funding 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. Additional Title V funding and match funding supports other MCH priorities such as immunizations, childhood lead poisoning prevention, oral health for children, infant safe sleep and breastfeeding initiatives, reproductive health, fetal alcohol spectrum disorders, regional perinatal quality collaboratives, home visiting, rural home visiting, health equity initiatives, adolescent parenting support, staff support for Michigan Model for Health™, Pregnancy Risk Assessment Monitoring System (PRAMS), and Fetal Infant Mortality Review. 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 2021 and budget plans for FY 2023 are discussed in Sections III.D.1 and III.D.2, respectively.

Expenditures (FY 2021 Annual Report Year)

In FY 2021, 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 82.7% of Michigan's state match is comprised of state general funds for CSHCS medical care and treatment. The remaining 17.3% includes state general funds that support family planning local agreements; family, maternal and children's health; pregnancy prevention services; prenatal care and outreach; non-emergency medical transportation for CSHCN; CSHCN administration; 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. CSHCS only spends the earnings of the fund, which in FY 2021 was \$574,036. Program Income (Form 2, line 6) includes 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 2021 including: Women, Infants and Children (WIC); State Systems Development Initiative; Title XIX (Medicaid); Immunization; Lead Poisoning Prevention, Abstinence Education Grant Program, Personal Responsibility Education Program (PREP), Home Visiting, Early Hearing Detection, Awareness and Access to Care for Children and Youth with Epilepsy; Universal Newborn Hearing Screening, Pregnancy Risk Assessment, and Title X (Family Planning).

MCH priorities across the Title V population health domains were supported by federal and state dollars in FY 2021. For example, in the Title V child health domain, a state priority is to "expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems." One state priority need that links to this priority is childhood lead poisoning prevention. Other federal awards helped to support this Title V priority such as the CDC Childhood Lead Poisoning Prevention Program (CLPPP). In the perinatal/infant health domain, a state priority is 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.” 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 2021, expenditures were tracked by CSHCN; preventive and primary care for children ages 1-21; pregnant women, mothers and infants; and others. Expenditures track the required amount, variance, percent of total and percent required to assure legislative compliance. In FY 2021, 36.8% of Title V expenditures were for services for CSHCN; 33.9% of expenditures were for preventive and primary care for children; and 2.8% of expenditures were for Title V administrative costs. The remaining 26.5% 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, reproductive health, oral health, safe sleep, fetal alcohol spectrum disorders (FASD), childhood lead poisoning prevention, immunizations, Regional Perinatal Quality 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 types of individuals served, the Local MCH (LMCH) program has specific budget project titles in the Electronic Grants Administration & Management System (EGrAMS) and in the LMCH Year End Report. The LMCH Year End Report has a table to capture the types of individuals served and another table that mirrors the federal reporting of the MCH Types of Services. The FY 2021 budget project titles in EGrAMS included the following two categories:

- MCH – Children
- MCH – All Other

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 and young adults, teen pregnancy prevention and parenting support, childhood lead poisoning prevention and case management, special projects such as services for children with FASD, and other LMCH activities. Michigan has also implemented a mid-year check-in to assure expenditures are on track for the 30% children requirement.

In Form 2, Annual Report Expended, the following line items had a variance of 10% or more of the original budgeted amount, for the following reasons:

- Line 1.C, Title V Administrative Costs, were lower than expected due to a vacant position.
- Line 3, State MCH Funds, were lower than expected due to realized Medical Care and Treatment expenses being lower than anticipated.
- Line 5, Other Funds, were lower than expected due to the Children with Special Needs Fund earnings being lower than anticipated.
- Line 6, Program Income, was lower than budgeted due to Newborn Screening earnings being less than

appropriated.

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 each selected national, state and/or local performance measure. Activities and expenditures within the work plan are categorized by population characteristic. Expenditures are also documented in a separate MCH Pyramid of Services Table.

Table 1 summarizes spending by 45 LHDs in FY 2021 by the MCH Pyramid of Services (i.e., direct, enabling, and public health services and systems).

Table 1. LMCH Spending by MCH Pyramid of Services

Federal MCH Block Grant	FY 2021 Expended
1. Direct Services (sum of a, b, & c)	\$1,475,805
A. Preventive and primary care services for pregnant women, women, mothers, and infants up to age one	\$225,193
B. Preventive and primary care services for children 1-21	\$1,250,613
C. Services for CSHCN	\$0
2. Enabling Services	\$3,024,174
3. Public Health Services and Systems (i.e., Infrastructure)	\$1,597,883
Total (sum of lines 1, 2, & 3)	\$6,097,862

For FY 2021, each LHD was encouraged to select one to two national or state performance measures and/or locally identified measures. Six LHDs chose one performance measure; 20 chose two performance measures; 8 chose three performance measures, 3 chose four performance measures; 7 chose five performance measures; and 1 chose six performance measures. Table 2 summarizes the number of LHDs choosing each performance measure, the amount expended, and the number of clients served.

Table 2. LMCH Spending by Performance Measure

Performance Measure	Number of LHDs selecting	Amount Expended	Number of Clients Served
NPM 2 (Low-risk Cesarean Delivery)	0	\$0	0
NPM 4 (Breastfeeding)	18	\$669,683	4,613
NPM 5 (Safe Sleep)	10	\$534,560	4,822
NPM 9 (Bullying prevention)	0	\$0	0
NPM 12 (Transition)	3	\$83,158	275
NPM 13 (Preventive Dental Visit)	6	\$131,506	72,332
SPM 1 (Lead Poisoning Prevention)	12	\$647,536	4,468
SPM 2 (Children immunizations)	14	\$670,366	21,020
SPM 3 (Adolescent immunizations)	11	\$268,424	30,156
SPM 4 (Provision of Medical Services and Treatment for CSHCN)	3	\$102,541	411
SPM 5 (Intended pregnancy)	3	\$74,775	225
SPM 6 (Behavioral/mental health)	4	\$97,239	3,252
Local Performance Measure defined by LHD	19	\$1,926,014	31,477
COVID-19 response	18	\$892,060	187,799
Total		\$6,097,862	360,850

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 534,264. This count includes individuals who received a service funded by Title V federal dollars or non-federal state match dollars as reported on Form 2, line 8. For FY 2021 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), PREP Michigan Organization on Adolescent Sexual Health, breastfeeding support, FIMR family interviews, Parent Leadership in State Government, 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 100% of pregnant women, 100% of infants, 72% of children, 72% of CSHCN and 5% of others which includes males and non-pregnant women of childbearing age. For more details, see Form 5 field notes.

Michigan continuously explores 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, nine RPQCs represent all ten Prosperity Regions in Michigan. In FY 2021, eight RPQCs received financial support from Title V and/or state match funds. The RPQCs supported MCH 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, immunizations, oral health, 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.

III.D.2. Budget

Budget (FY 2023 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. The Title V state action plan narrative includes information on how Title V funding is utilized within each population domain. 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 2023. Funding projections are primarily based on the state's legislatively approved Executive Budget.

Table 1. Title V Appropriations

Appropriation Name	FY 2023 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	\$597,200
Administration	\$505,000
Dental Programs	\$335,400
Sudden Infant Death Syndrome Prevention	\$321,300
Pregnancy Prevention Services	\$185,500
Bequests for Care and Services	\$105,200
Indirect	\$130,800
Total	\$19,480,200

As previously discussed, Michigan's 2020 Title V needs assessment identified a new set of state priority needs and performance measures. Through local health department activities and/or state level work, it is anticipated that Title V appropriations will support activities related to the state-selected National Performance Measures (NPMs) in FY 2023:

- NPM 2 (Cesarean delivery)
- NPM 4 (Breastfeeding)
- NPM 5 (Safe Sleep)
- NPM 9 (Bullying)
- NPM 12 (Transition)
- NPM 13 (Preventive Dental Visit)

The annual LMCH Plans for FY 2023 are not available at the writing of this application. In FY 2022, Local Health Departments (LHD) selected NPMs 4, 5, 12 and 13. 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. In FY 2021, 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. Additionally, webinars on integration of NPM 2 (Cesarean delivery) and NPM 9 (Bullying) into workplans were conducted in FY 2021. This technical assistance was intended to provide ideas and examples on how LHDs might operationalize activities to address these measures in the future.

At 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 SPM program areas have allocations in the FY 2023 Title V budget. Although FY 2023 LMCH plans are not yet available, it is anticipated that local health departments will also implement work across all SPMs, based on FY 2022 LMCH plans.

The programs and activities that will support work on the above NPMs and SPMs in FY 2023 are detailed in the state action plans. LHDs use an MCH Needs Assessment to inform the creation of FY 2023 LMCH plans, including a focus on the state's identified NPMs and SPMs as well as distinct local priorities and needs. As of the writing of this application, FY 2023 LMCH plans have not been submitted.

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 2023, this commitment is again reflected in Form 2 (Lines 1A, 1B, and 1C) in the Application Budgeted. For FY 2023, 33.2% of the total Title V budget is designated for preventive and primary care for children; 35.9% is designated for Children with Special Health Care Needs; and 3.4% 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 \$52,970,400, 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; Family Planning local agreements; prenatal care and outreach; pregnancy prevention services; CSHCS and Family, Maternal and Child Health administration; non-emergency medical transportation; and bequests for care and services. Most of this match (approximately 85.3%) 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 2023 are indicated in Form 2, line 9.

Form 3a and 3b

Each year, Michigan's Title V administrative staff also completes an 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.

At the local level, the LMCH Plan was transformed in 2021 based on recommendations from a workgroup (consisting of LHDs and state LMCH and Title V staff) to be in closer alignment with the Title V application. To better align with Form 3a, LHDs are now required to report types of individuals served and amount expended by population classifications. Additionally, LHDs are required to report expenditures by essential services as identified in the Title V Pyramid of Services in a "Types of Services" table in their annual plan and year-end report. The table mirrors the federal Form 3b table. Beginning in FY 2021, budget categories in EGrAMS were reduced from five 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 reporting table.

At the state level, Title V funding is budgeted across MCH population groups and is in alignment with the 30-30-10 rule. For example, Michigan's Title V 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" aligns with the Title V child health domain through SPM 1 (childhood lead poisoning prevention). In turn, the Title V allocations for SPM 1 support services that contribute to the 30% requirement for primary and preventative services for children 1-21. The 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 SPM 4 (medical care and treatment for CSHCN) which contributes to the 30% requirement for CSHCN.

For state level activities that align with Form 3b, Title V allocations 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 (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 center (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, age, and gender identity." Systems level work is being implemented through the Michigan Perinatal Quality Collaborative and other systems work that focuses on core public health services.

Form 5

The total Federal-State partnership funding is evaluated when completing Form 5. MCH programs that receive Title V federal and/or state match funds are asked to provide counts of individuals served. These counts of individuals in Form 5 relate to the total expenditures provided by population serviced on Form 3. Form 5 demonstrates the reach of Title V funds and state match across MCH population groups.

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 Behavioral and Physical Health and Aging 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 (CAH) 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 Title V national goals, including:

- Assure access to quality MCH services for mothers and children, especially those with low incomes or limited availability of care;
- Reduce infant mortality;
- Provide access to prenatal, delivery, and postnatal care to women, especially pregnant women, who are low income and at-risk;
- Provide regular screenings and follow-up diagnostic and treatment services for children;
- Provide access to preventive and primary care services for children who are low income and rehabilitative services for children with special health needs; and
- Implement family-centered, community-based, systems of coordinated care for children with special health care needs.

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. As discussed throughout this application, many recent and current initiatives have focused on health equity as both an urgent and core driver of MCH work. MCH program areas have convened or contributed to much of this work for initiatives that impact the MCH population. For example, the DMIH hosts quarterly Mother Infant Health and Equity Collaborative (MIHEC) meetings, which have been held virtually since March 2020. 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 and/or partner with the Michigan Alliance for Innovation in Maternal Health, Maternal Infant Health Summit, 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 the Michigan Perinatal Quality Collaborative comprised of 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 CSHCS. 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.

The CSHCS Division Director, who is also the Title V CSHCN Director, is a member of the Michigan Developmental Disabilities Council, representing Title V. The mission of the Developmental Disabilities Council is "to support people with developmental disabilities to achieve life dreams." The CSHCS Division Director seeks to ensure that the activities and efforts of the Developmental Disabilities Council are not exclusively focused on adults with developmental disabilities but are also responsive to the needs of children with developmental disabilities and their families. The Developmental Disabilities Council is comprised of 21 members who are appointed by the governor. Members include people with disabilities; family members and advocates of people with disabilities; and representatives from state and local agencies that serve people with developmental disabilities.

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; the private sector; managed care plans; community-based organizations; MCH advocates; faith-based organizations; schools; and universities. Within MDHHS, program and policy activities are coordinated with Medicaid, MICHild, behavioral 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.

Across population domains, many of Michigan's MCH and Title V programs work collaboratively with MDHHS behavioral health partners. Several of those partnerships are described throughout this application. In March 2022, MDHHS announced a behavioral health restructuring to ensure that services are supported across community-based, residential, and school locations. The changes are intended to benefit people of all ages; to prioritize addressing the needs of children and their families; to streamline and coordinate resources; and to improve policies and processes to make them more effective. Additional information about the restructuring is included in the Cross-cutting/Systems Building state action plan.

Title V Framework

Michigan's Title V program recognizes that a wide range of factors shape health outcomes, including health and social context. Therefore, efforts to achieve optimum health for all Michigan families require developing and applying a health equity lens; recognizing and addressing the impact of social determinants of health; implementing evidence-based programs and promising practice programs and interventions; addressing behavioral and physical health; focusing on outcomes; and engaging families and consumers. Michigan's Title V five-year needs assessment (completed in 2020) identified three broad and overarching drivers of health outcomes and system effectiveness across all five Title V population domains. These were recognized as Title V "pillars" as follows:

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.

These Title V pillars support the goals of Title V and have been used to inform NPM and SPM state action plans and other Title V activities. The FY 2021 ongoing Title V needs assessment included a review of NPM and SPM state action plans using a health equity rubric, with the goal to further strengthen health equity strategies within plans. The FY 2022 ongoing needs assessment included a review of state action plans using a family and community engagement rubric. For both reviews, program staff were provided with feedback on strengths, potential strategies for improvement, and information on research and best practices (e.g., white papers, data briefs, federal or state guidance). Program staff also had an opportunity to discuss the rubrics and ideas for implementation with Michigan Public Health Institute staff.

Ongoing MCH projects beyond Title V have also begun to incorporate social determinants of health and geographic measures of inequity, such as the Concentrated Disadvantage Index (CDI) and Social Vulnerability Index (SVI) to better target program resources to marginalized communities with high degrees of need across the life course, but especially for maternal and child health. For example, CDI data was used to inform identification of sites in need of home visiting programs and SVI data was applied to Michigan's COVID-19 response.

The life course model, which emphasizes that early life experiences have a lasting impact on health and development, is also recognized by the Title V program. 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 promoting health equity". The Title V program also supports several of the department's strategic priorities, which include investing in public health; improving maternal and infant health and reducing outcome disparities; reducing childhood lead exposure; expanding safety nets; addressing social determinants of health; reducing opioid and drug-related 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 and response to emerging health issues, such as the COVID-19 pandemic and previous outbreaks of Hepatitis A and measles; and education and empowerment around public health issues such as infant 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. State MCH Capacity to Advance Effective Public Health Systems

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

The Title V program recognizes the importance of building and maintaining a strong workforce, which is the backbone of public health. To best serve the MCH population, the workforce must include personnel with MCH subject expertise and strong program leadership. Michigan's MCH programs include a range of personnel, including public health consultants, epidemiologists, departmental specialists, program managers, and division directors, 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 is a critical component of MCH. Throughout the COVID-19 pandemic, state and local MCH staff have rapidly adapted to a remote work environment and identified ways to effectively coordinate and deliver MCH services. Additional information related to the MCH workforce, as gathered through the 2020 needs assessment, was included in the Five-Year Needs Assessment.

Recruitment and Retention of MCH Staff

As discussed in the 2020 Needs Assessment, a core group of MDHHS staff work on Title V as well as other MCH programs and initiatives. Key positions that support Title V activities include the following:

- **Director, Division of Maternal and Infant Health**, serves as Title V MCH director and leads other key maternal and infant health programs including Title X Family Planning, 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 CSHCN program and policy, customer support, quality improvement, contract management, and the Children with Special Needs Fund.
- **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.
- **Director, Division of Child and Adolescent Health**, provides leadership for programs and services related to child, adolescent, and school health; early childhood; home visiting; Title V local MCH; and oral health.
- **CSHCS Policy and Program Development Section Manager**, provides oversight to staff responsible for policy, medical transition services, specialty clinics, contracts, insurance premium payment benefit, and billing assistance.
- **Title V MCH Block Grant Coordinator**, coordinates all activities related to the Title V block grant, including oversight of grant application and reporting activities across the department.
- **MCH Nurse Consultant and Public Health Consultant**, two positions provide oversight, contract management, and technical assistance to the Local MCH (LMCH) program which administers Title V funding to all 45 local health departments.
- **MCH Epidemiology Section Manager**, manages several MCH epidemiology staff and provides epidemiologic analysis and interpretation to inform and guide MCH program leaders and policy makers about population health.
- **Child, Adolescent & School Health (CASH) Epidemiologist**, provides epidemiological and data support to the Title V program, including needs assessment activities and annual reporting.
- **CSHCS Transition Specialist**, provides resources and technical assistance to families, providers, local health departments, and Medicaid Health Plans to help adolescents transition from pediatric to adult health care.

Four of these positions are currently supported by Title V funding to provide administrative support to the Title V

block grant. The MCH nurse consultant position is the only position fully funded by Title V. The block grant coordinator, public health consultant, and CASH epidemiologist are supported through blended funding (i.e., Title V and state general funds or Medicaid), as the positions have responsibilities in addition to Title V. The public health consultant position is currently vacant.

In addition to positions that provide administrative support to the block grant, Title V funding is also used for MCH and CSHCN programmatic positions. Title V supports part of an Oral Health epidemiology position, part of a Home Visiting epidemiology position, a Childhood Lead Poisoning Prevention Program position, and staffing for the Family Center for CYSHCN.

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 as part of their broader work, but without Title V funding for state-level staffing. 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, MDHHS MCH programs work with MDHHS Human Resources to announce positions through MCH listservs or Indeed.com, in addition to the State of Michigan job postings website. 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 overseen by the Office of Race Equity, Diversity and Inclusion (REDI). REDI was created in 2020 “to address racial, health, social and wealth disparities, that impact both internal and external partners”. The DEI plan is being implemented in the areas of Leadership, Culture and Climate, Recruiting and Hiring, Training and Professional Development, and Service Delivery. In 2021, MDHHS implemented a new requirement that all MDHHS position postings include a Valuing Diversity and Inclusion competency in the posting questions as well as a standard set of DEI interview questions.

Beginning in 2019, Diversity Hiring Team (DHT) trainings were rolled out to individuals in two cohorts with the goal of applying a Diversity, Equity, and Inclusion (DEI) lens to various phases of the hiring process. Cohort members participated in a series of DHT trainings. The goal was for DHT alumni to assist hiring managers with the process of screening, interviewing, scoring, and selecting job candidates in an equitable way to ultimately have a workforce that is more reflective of the diversity of the state. MDHHS has decided to more widely adopt the DHT training curriculum. Later this year, the program will be transitioned to the Office of Human Resources for broader implementation.

In 2022, the MDHHS Diversity, Equity, and Inclusion (DEI) Council's Recruitment, Hiring and Retention Action team introduced the MDHHS Toolkit for Managers: *Recruiting, Hiring, and Retaining a Diverse and Inclusive Workforce*. The toolkit provides practical information, tips, and resources for integrating DEI into hiring and retention processes. The toolkit is for all managerial levels and work areas.

Training and Professional Development

Opportunities and needs for Title V program staff, including family leaders from the Family Center, are continuously assessed to identify areas for professional development. Many current staff development activities build upon Health Equity Learning Labs and Guiding NEAR (neuroscience, epigenetics, ACEs and resilience) training that began in 2018. The Learning Labs focused on health equity education and how to assess policies, programs, and hiring practices through a health equity lens. The Guiding NEAR training is designed for emerging leaders and the goal is to work with stakeholders to design programs and services that interrupt the progression of adversity for Michigan residents. Other Health Equity and Social Justice workshops are also available to staff. MDHHS launched mandatory “Introduction to Health Equity” and “Systemic Racism” online trainings in 2019 for all staff. Another training, “Inside

Our Mind: Hidden Biases,” was provided to help staff better recognize and reduce the impact of biased decision making.

The Division of Maternal and Infant Health and the CSHCS Division, which serve as Michigan’s Title V MCH and CSHCN leads, recognize the importance of training and professional development. In 2021, the CSHCS Division had a team participate in the MCH Workforce Development Center Virtual Skills Institute “Strengthening Skills for Health Equity.” The institute provided opportunities to define health equity within organizations; learn from peers about effective ways to advance health equity through concrete action; and explore strategies to center the voices of those with lived experiences related to health equity.

CSHCS continued its participation in Boston University’s Care Coordination Academy in FY 2022. Through participation in this national, HRSA-funded program, CSHCS is learning about care coordination best practices including tiering for complexity and social determinants of health assessments, and the use of evidence to measure system improvements. The CSHCS team includes CSHCS and Medicaid staff as well as family, LHD, and university partners. The focus of the current project is children with medical complexities. The CSHCS Division also established a Health Equity Workforce Development Committee which produces a monthly virtual bulletin board for state and local CSHCS staff. The virtual bulletin board content includes diagnoses that CSHCS families live with and through every day; disparities that different communities face; and awareness days to honor and acknowledge different cultures and health conditions.

In FY 2022, CSHCS has one Family Center staff member participating in the MCH Leadership Lab Family Leaders Cohort. The Leadership Lab provides an opportunity for state staff to accelerate their professional development in a way that is framed by MCH Leadership Competencies and guided by adult learning principles.

The DMIH also provides training and technical assistance to support health equity efforts in the MCH workforce. For example, in 2021 several equity learning opportunities were available for DMIH staff as well as Title V affiliated programs through a contract with the MPH Center for Health Equity Practice. Trainings focused on action planning for equity; moving data to action; understanding power; and understanding power through collective impact. Additional workforce development initiatives include the following:

- 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 (RPQCs). RPQC efforts are required to address health inequities, the social determinants of health and disparate outcomes.
- 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).
- Numerous on-demand trainings and resources are available on the Division of Maternal Infant Health webpage for use by anyone visiting the website (e.g., internal staff, partner networks, community members).
- Maternal Infant Health and Equity Updates are shared on a regular basis (at least twice monthly) via a listserv that is distributed to over 7,780 primary contacts and an additional 1,000 individuals through secondary sharing by MDHHS programs and professional organizations. The listserv reaches a broad array of state and local partners, including practitioners and parents.
- Discussions and opportunities for peer sharing occur through the quarterly Mother Infant Health and Equity Collaborative meetings. Recent meeting topics have focused on individual birthing hospital efforts caring for infants born substance exposed, elevating family voices and experiences, and reproductive justice.

- Since its inception in 2018, the Maternal Infant Health Summit has centered its keynote breakout sessions on health equity. The conference seeks to create synergy and align priorities between public and private organizations and provide educational opportunities that will enable attendees to keep abreast of the latest developments in the field and explore the root causes of inequities. For example, the 2021 Summit included presentations on Advancing Black Maternal Health, Rights and Justice, Integrated Infant Mental Health, Birth Justice and the Role of Midwifery Care, and Using Your Power and Privilege. Over 600 attendees participated in the 2021 Summit. Attendees indicated that their areas of interest were health equity, disparities in birth outcomes, structural racism, and implicit bias. Based on this feedback, the planning team will ensure the 2022 Summit is focused on equity and offers an array of learning opportunities for the MCH workforce that center health equity and justice. Additionally, attendees indicated a greater interest in inclusivity especially when discussing family make-up, LGBTQ+ families, and male engagement. The planning committee is dedicated to focusing more thoroughly on inclusion for the 2022 Summit and future conferences. The 2022 Summit will be held in June 2022 on a virtual platform, with the theme “Community Stories and Solutions: Stronger Together.”
- The Division of Child & Adolescent Health formed an internal Health Equity and Social Justice (HESJ) Workgroup in 2020 which continues to meet bimonthly and is focused on individual growth and consciousness around race/equity issues, with the intention that as MCH professionals grow and are more aware of equity and social justice, their work will be authentically impacted. The workgroup has 26 members, and agendas focus on topics such as structural racism in healthcare and implicit bias.
- Mental health services and staffing for Child and Adolescent Health Centers (CAHCs) will be expanded through \$4.25 million in MI Kids Now funding. The funding will allow expansion of program requirements for mental health staffing from 0.5 FTE to 1.0 FTE per CAHC site which will provide significant expansion in mental health services for youth throughout the state.

MCH staff also 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 the CASH Conference, Michigan Home Visiting Conference, and Teen Parent Summit. MCH staff participate in the Mother Infant Health and Equity Collaborative (MIHEC). An MCH team from Michigan (including a family leader) participates in the annual AMCHP conference. The Family Center hosts an annual meeting for the Family Leadership Network. Each year, the CSHCS Division also invites a parent to attend a CSHCS 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 Council.

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, Oral Health, and Maternal Infant Health Program. 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 2020 Maternal Infant Early Childhood Home Visiting (MIECHV) needs assessment, Health Equity Learning Labs, and home visiting evaluation. MPHI also partners with the Family Center to host online education modules for transition and parent mentor trainings. More broadly, MDHHS partners with MPHI on public health projects which have included the State Innovation Model and the State Health Assessment.

Another innovative staffing structure is utilized by the Family Center for Children and Youth with Special Health Care Needs. Family Center staff are affiliate staff, contracted through the Southeastern Michigan Health Association (SEMHA). The Family Center requires that all staff hired within the Family Center are parents of children with special health care needs. In addition, the relationship with SEMHA allows the Family Center to hire a Youth Consultant. This improves the Family Center's ability to provide a family and youth perspective to all CSHCS programming.

Lastly, Michigan's Leadership Education in Neurodevelopmental and Related Disabilities (MI-LEND) program is an interdisciplinary leadership training program, funded under the Autism Collaboration, Accountability, Research, Education and Support (CARES) Act. MI-LEND is coordinated by the Michigan Developmental Disabilities Institute (MI-DDI) in partnership with the Family Center and eight Michigan universities. Since its start in 2016, MI-LEND has trained 3,768 graduate and/or professional students, family members, and self-advocates in interdisciplinary leadership and culturally competent, family-centered care. Training includes information about health care transition and the role pediatric health care providers have in supporting youth and families as they transition to adult systems of care.

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

In the Title V Five-Year Needs Assessment, findings across population domains reinforced the importance of family and consumer partnership in MCH programs. Stakeholders identified the need to collaborate, partner, and seek advisement from clients, families, and communities to address needs and find solutions. This need was reflected in a newly established 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.” Effective family partnership includes respecting a person’s culture, language and consideration of those factors in program development and service provision. Understanding unique family and community needs helps to improve outcomes and eliminate service barriers.

Strategies to partner with families and clients are discussed within each Title V state action plan. Numerous committees, coalitions, and advisory boards across MCH population domains support and inform programs and services, especially by elevating the voices of families, providers, and community members. These include the Children’s Special Health Care Services Advisory Committee; Family Leadership Network; Michigan Maternal Mortality Surveillance Committee; Michigan Oral Health Coalition; and Regional Perinatal Quality Collaboratives. Additional examples include the following:

- The Early Hearing Detection and Intervention (EHDI) program seeks to engage families to improve services and reach EHDI goals. EHDI 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 (D/HH). Families may also connect with adults who are D/HH through a mentor and family guide program. Families are involved when updating EHDI materials, which are available in Spanish and Arabic. Arabic and Spanish speaking guides are also available to meet with families. Most recently EHDI has partnered with MHV to host a Family Matters 2022 conference aimed at families with children who are deaf or hard of hearing. In addition, EHDI is working with MHV to update its website and create videos to better engage and connect with families. 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 in an EHDI learning collaborative to share their unique perspectives. EHDI also sponsors an annual scholarship for parents 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 involve parents as parent educators and speakers. MDHHS convened Action Committees aligned with the priorities of the Mother Infant Health and Equity Improvement Plan. MDHHS regularly partners with two parents with an infant loss who are also part of the Infant Safe Sleep Action Team.
- 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 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” (PPC) leadership training. Training topics include leadership skills; how to use your voice to tell your story; effective meetings; and handling conflict. Since 2008, 1,417 parents have participated in the training. In 2020, PPC participants

reported utilization of the following MCH-related services: WIC 58.3%; food assistance 58.3%; Healthy Kids 25%; Healthy Kids Dental 41.7%; MI Child 33.3%; and home visiting 25%. Due to the COVID-19 pandemic, updates were made to the training to ensure that the curriculum could be delivered in an online platform. This delivery mode has continued to be the primary way to access the trainings throughout the pandemic.

- 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 also convenes 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. Michigan is building parent voice into state level home visiting initiatives to ensure parents are partners in policy and programming decisions and has a Parent Coordinator staff position (filled by a parent who received home visiting services) to help develop and support parent leaders and parent leadership initiatives.

Children's Special Health Care Services (CSHCS) uses a multifaceted approach to ensure services reflect the needs of the CYSHCN population. A critical component of administering services is the intentional involvement of families of CYSHCN in decision making. To achieve this goal, CSHCS works closely with the CSHCS Advisory Committee (CAC) and the Family Center for CYSHCN. The CAC is comprised of professionals and family members who are involved in the care for children with special needs, with approximately 50% of CAC members being parents or family members of CYSHCN. The CAC makes policy and program recommendations to the CSHCS Division and promotes awareness to ensure 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 assists in recruiting family members to serve on the CAC, the Children with Special Needs Fund (CSN Fund) Advisory Committee, and other committees within the CSHCS Division as needed.

The Family Center, in addition to serving as a resource and liaison to children with special health care needs and their families, serves functionally as a sounding board for all CSHCS programming and administration. Being organizationally housed in the CSHCS Division, the Family Center provides a tangible reminder to program staff of the importance of its mission and goals resulting in the family perspective being integrated at all levels of the program. Sharing and promoting leadership opportunities within Michigan is an important role of the Family Center. The Family Center has supported family members from the CAC and the CSN Fund to attend AMCHP's annual conference. The Family Center also recognizes the importance of providing internal team members with leadership opportunities. Currently a Parent Consultant is participating in AMCHP's Family Leadership Lab. The Family Center Director, a Parent Consultant, and the CSHCS Division Director will also attend AMCHP's annual conference. The Division Director (also the Title V CSHCN Director) had been an active member on the AMCHP Family Leadership, Education, and Development (Family LEAD) Committee until his third term ended September 30, 2021.

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. The Family Center's parent-to-parent program is Michigan's statewide Parent to Parent Support Network. The Family Center is an alliance member of Parent-to-Parent USA which is the national center for parent-to-parent mentoring and matching.

Parent to Parent USA was created through an evidenced-based model of peer-to-peer support. This partnership allows Michigan to connect with other states that are also Alliance Members, enabling the Family Center to have a broader reach when seeking out mentor matches for parents in Michigan. Michigan's parent-to-parent program network consists of parents who have been trained as Parent Mentors through the Family Center to support other parents who have a child with the same or similar diagnosis as their own child's. Parent-to-Parent connections provide emotional and informational support to Michigan parents.

Through the statewide Parent-to-Parent Support Network, the Family Center 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 also 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 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. For example, the Family Center and Family to Family co-produce a quarterly newsletter called Michigan Family Connections. In partnership, the two entities lead the Family Leadership Network and have ongoing planning and partnership meetings. The Family Center also contributes to the Michigan Family to Family online repository of resources. With Michigan Family Voices, the Family Center and CSHCS conduct ongoing planning and identify opportunities to collaborate. Michigan Family Voices has helped share Family Center information, recruit family leaders, and co-present on topics relevant to children with special health care needs and their families.

The Family Center creates significant impact through several projects:

- The Family Center Director and a Parent Consultant serve on the quality improvement efforts within the CSHCS Division related to program evaluation and care coordination. The Family Center is currently in the process of finalizing a Family Guide, which is a family resource packet providing links and information relevant to family support and services. The Family Center is currently exploring use of the Pediatric Integrated Care Survey, created by Boston Children's Hospital, to help the Family Center with internal planning and addressing gaps in the state.
- Based on the most recent Title V Needs Assessment, and the selection of the Title V National Performance Measure to address Bullying, the Family Center and CSHCS are partnering to implement a small grant opportunity to local school districts to support a bullying prevention initiative.
- 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.
- The Family Center offers Sibshop Grants to support siblings of children with special health care needs using the evidence-based Sibshop model. The goal of the grant is to provide statewide opportunities for brothers and sisters of children with special health and developmental needs to obtain peer support and education within a recreational context with a certified Sibshop.

In response to the COVID-19 pandemic, the Family Center has moved to offering trainings on a virtual platform. Virtual options include both the Parent Mentor Trainings and Bereaved Parent Mentor Trainings. In response to family feedback during the pandemic, the Family Center now offers opportunities twice a month for parents to connect:

Parent Connect Calls and Professional Connect Calls. These calls feature speakers from several different areas including disability, education, and other state initiatives. Families that participate in the meetings provide input and assist the Family Center on decisions regarding topics, frequency, and other factors for the meetings.

III.E.2.b.iii. MCH Data Capacity

III.E.2.b.iii.a. MCH Epidemiology Workforce

Michigan Department of Health and Human Services (MDHHS) epidemiologists are primarily housed within the Bureau of Infectious Disease Prevention (BIDP) and the Bureau of Epidemiology and Population Health (BEPH). Each Bureau includes three Divisions. Within BIDP are Immunization, HIV & STI Programs, and Communicable Diseases. Within BEPH are Vital Records and Health Statistics, Environmental Health, and Lifecourse Epidemiology and Genomics. Most of the MCH Epidemiology workforce capacity for MDHHS is housed within the Maternal and Child Health Epidemiology (MCH Epi) Section which is housed within the Lifecourse Epidemiology and Genomics Division. The roles and responsibilities for epidemiologist positions within the MCH Epi Section are summarized below.

Maternal and Child Health Epidemiology Section Manager (1.0 FTE)

Chris Fussman, MS, became the MCH Epi Section Manager in November 2016. Chris received his Master of Science in Epidemiology from Michigan State University in 2004. As the MCH Epi Section Manager, Chris provides scientific, administrative, and program direction and leadership to MCH Epi Section staff. He meets with Title V leadership and program staff to assist with Title V needs assessment processes, including establishing projections for Title V performance measures and evaluating Michigan's progress on performance measures. Chris also works with the MCH Epi team to expand data analyses associated with the Minimum/Core indicators and has routine discussions with internal partners regarding data linkages to improve Michigan's Title V program efforts. Chris and the MCH Epi team also remain focused on the expansion of data collection efforts associated with MCH emerging issues, including neonatal abstinence syndrome, maternal mortality, COVID-19 mortality, and the impact of COVID-19 among mothers and babies. This position is funded by a combination of State Systems Development Initiative (SSDI) funding and other state infant mortality funding.

Child, Adolescent, and School Health (CASH) Epidemiologist (1.0 FTE)

Lindsay Townes, MPH, started as the CASH Epidemiologist in August 2018. Lindsay received her MPH from the University of Michigan in 2011. As the CASH Epidemiologist, Lindsay is responsible for providing epidemiological analysis and support to Michigan's Child and Adolescent School Health Section, which includes teen pregnancy prevention, school based/linked health centers, school nursing, comprehensive health education, and coordinated school health programs. Lindsay also provides epidemiological and statistical support to Title V MCH and CSHCS programs, providing data analysis and support for needs assessments, annual reports/applications, performance measure reporting and goal setting, and funding allocations for local maternal and child health programs. This position is funded by Title V and other federal funding sources.

Infant Health Epidemiologist (1.0 FTE)

Haifa Haroon, MPH, started as the Infant Health Epidemiologist in May 2021. Haifa received her Master's in Public Health from the University of Michigan in 2013. As the Infant Health Epidemiologist, Haifa is responsible for analyzing infant health statistics for Michigan, including infant mortality, preterm birth, low birthweight, feto-infant mortality, stillbirths, and neonatal abstinence syndrome rates. These indicators have been incorporated into the Mother Infant Health and Equity Improvement Plan and are regularly integrated into Title V workplans and performance measures. Haifa also presents the latest infant health data to the Michigan regional perinatal quality collaboratives on a regular basis. This position is funded entirely by state-level infant mortality funding.

Newborn Screening Epidemiologist (1.0 FTE)

Isabel Hurden, MPH, started as the Newborn Screening (NBS) Epidemiologist in August 2017. Isabel received her Master's in Public Health from Grand Valley State University in 2016. As the NBS Epidemiologist, Isabel is responsible for linking NBS records to birth certificate records, generating quarterly reports for birthing hospitals, creating yearly NBS annual reports, pulling specimens for BioTrust research projects, assisting the University of Michigan with the sickle cell registry, and all other data analysis related to NBS records. This position is funded by state newborn screening funds and by a CDC sickle cell grant.

Home Visiting and ECHO Epidemiologist (1.0 FTE)

Carlotta Allievi, MPH, started as the Home Visiting/ECHO Epidemiologist in August 2018. Carlotta received her Master's in Public Health from Grand Valley State University in 2018. Carlotta is responsible for analyzing Home Visiting program data for annual reports such as the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) report and Michigan's Public Act 291 Home Visiting Legislative Report, as well as updating the county-level Needs Assessment for the MIECHV Initiative. Carlotta also conducts regular Kitagawa analyses to assist communities in determining the populations in greatest need of home visiting services. Data from these reports are used to inform related MCH activities. This position is funded through HRSA and NIH grants.

Pediatric Genomics and Early Hearing Epidemiologist (1.0 FTE)

Evan Withrow, MS, started as the Pediatric Genomics and Early Hearing Epidemiologist in November 2017. Evan received his Master of Science in Epidemiology from Michigan State University in May 2017. As the Pediatric Genomics and Early Hearing Epidemiologist, Evan is responsible for surveillance of pulse oximetry screening practices throughout the state, conducting research regarding pulse oximetry screening for critical congenital heart diseases, providing analyses for EHDI populations to illustrate the public health impact of hearing loss, and to assist with surveys and studies that evaluate and monitor the health status of EHDI populations. This position is funded through state newborn screening funds and two federal grants that support Michigan's EHDI activities.

Birth Defects and Family Planning Epidemiologist (1.0 FTE)

Amy Rakowski, MS, started as the Birth Defects and Family Planning Epidemiologist in October 2019. Amy received her master's degree from The University of Iowa in 2018. As the Birth Defects and Family Planning Epidemiologist, Amy is responsible for the analysis of birth defects trends and the investigation of potential birth defects clusters that occur in Michigan. Amy is also working on the linkage of birth defects data with other internal data sources, including immunizations, hospital discharge data, Children's Special Health Care Services, congenital syphilis, and substance use data. This position is also responsible for the annual analysis of Family Planning Annual Report (FPAR) data and supports this program in its transition to encounter-level data collection. This position is funded by the CDC and the Office for Population Affairs.

PRAMS Project Coordinator (0.75 FTE)

Peterson Haak, BS, (MS and PhD pending) started as the PRAMS Project Coordinator in January 2015. Pete received his bachelor's degree from Grand Valley State University in 2002 and has completed all coursework in support of an MS and PhD in epidemiology from Michigan State University. As the PRAMS project coordinator, Pete oversees the collection and analysis of data for the PRAMS survey. PRAMS provides data on Title V performance measures for infant safe sleep and numerous state-level measures for breastfeeding and perinatal substance use. This position is funded by the CDC PRAMS cooperative agreement and through other state and federal funding sources.

Adverse Childhood Experiences Epidemiologist (0.3 FTE)

Kim Hekman, MPH, started as the Adverse Childhood Experiences (ACEs) Epidemiologist in January 2021. Kim received her MPH in epidemiology from the University of Michigan in 2010. As the ACEs Epidemiologist, Kim is responsible for building capacity for the surveillance, statistics and reporting of ACEs at the state and local levels. ACE indicators that are generated through this work may be included in future Title V work plans for the Child and Adolescent Health Domain. This position is funded entirely by the CDC through a cooperative agreement led by the Michigan Public Health Institute.

Preventable Mortality Epidemiologist (1.0 FTE)

Heidi Neumayer, MPH, started as the Preventable Mortality Epidemiologist in March 2019. Heidi received her Master of Public Health degree from Grand Valley State University in 2016. As the Preventable Mortality Epidemiologist, Heidi is responsible for monitoring and analyzing severe maternal morbidity, maternal mortality, and sleep-related infant deaths. Infants safely sleeping and healthy girls, women and mothers are two of the primary priorities of the Mother Infant Health and Equity Improvement Plan. Statistics related to these priorities are regularly utilized within Title V work plans. This position is funded by Title V and other federal funding sources.

The remaining positions within the MCH Epi Section focus on PRAMS operations, maternal mortality surveillance, and most recently COVID-19 mortality review. PRAMS operations and maternal mortality surveillance are partially supported through Title V. Title V funding is used within PRAMS to help support web, mail, and phone data collection activities for this critical public health surveillance system. For maternal mortality surveillance, Title V also supports the maternal mortality project coordinator and case abstractor positions that are responsible for requesting/collecting the necessary case records, abstracting information from case records, developing summaries of cases for review, and guiding cases through the review committee process. Although not funded by Title V or SSDI, the COVID-19 mortality review team (one project coordinator and two case abstractors) conduct a similar committee review process for a sample of COVID-19 deaths that have occurred in Michigan.

In addition to positions within the MCH Epi Section, epidemiology positions within other MDHHS Divisions also play a critical role in advancing the state's MCH epi data capacity. Roles and responsibilities for these positions are summarized below.

Vaccine Preventable Disease (VPD) Epidemiologist (1.0 FTE)

Thrishika Balasubramanian, MPH, started as the VPD Epidemiologist in June 2021. Ms. Balasubramanian received her MPH from the Tulane University School of Public Health and Tropical Medicine in 2021. As the VPD Epidemiologist, Thrishika is responsible for coordinating testing and activities relating to disease prevention and control; conducting analyses of vaccine preventable disease occurrence, disease trends, and risk factors; and providing other analyses and reports as requested. Child and adolescent vaccination coverage have been incorporated into the Mother Infant Health and Equity Improvement Plan and are integrated into Title V performance measures. This position is funded by a CDC Core Component grant.

Michigan Care Improvement Registry (MCIR) Epidemiologist (1.0 FTE)

Hannah Forsythe, PhD, started as the MCIR Epidemiologist in December 2020. Dr. Forsythe received her PhD from Michigan State University in 2018. As a MCIR Epidemiologist, Dr. Forsythe is responsible for analyzing, interpreting, and disseminating data from the MCIR to identify pockets of need, immunizations levels by antigen, and other analyses or reports as requested. Child and adolescent vaccination coverage have been incorporated into the Mother Infant Health and Equity Improvement Plan and are regularly integrated into Title V work plans. This position is funded under a CDC Core Component grant.

Oral Health Epidemiologist (0.5 FTE)

Prudence Kuyangna, MS, started as the Oral Health Epidemiologist in May 2020. Prudence received her Master of Science in Epidemiology from Michigan State University in 2019. As the Oral Health Epidemiologist, Prudence is responsible for analyzing oral health statistics for Michigan, including school-based dental sealants, community water fluoridation rates, oral health utilization of pregnant women and adults, Medicaid dental claims and HIV dental utilization. These indicators have been incorporated into Oral Health Program activities and are regularly integrated into Title V oral health work plans. This position is funded by Title V and other private funding.

Childhood Lead Poisoning Prevention Program (CLPPP) Epidemiologist (1.0 FTE)

RoseAnn Miller, MS, started as a CLPPP Epidemiologist in October 2016. RoseAnn received her MS from Michigan State University in 2004. As the CLPPP Epidemiologist, RoseAnn is responsible for analyzing various child health statistics, including blood lead surveillance metrics, blood lead levels in Michigan residents, and risk factors associated with elevated blood lead levels in children. These indicators have been incorporated into the MDHHS Lead Strategy and are integrated into the Title V work plans and performance measure. This position is funded by state-level Flint Supplemental funding and the CDC Childhood Lead Poisoning Prevention grant.

Childhood Lead Poisoning Prevention Program (CLPPP) Epidemiologist (1.0 FTE)

Mary Franks, MPH, started as a CLPPP Epidemiologist in January 2022. Mary received her Master's in Public Health from Grand Valley State University in 2015. As the CLPPP Epidemiologist, Mary is responsible for analyzing child health statistics, including information about childhood blood lead testing, confirmatory testing, and elevated blood lead levels. These indicators have been incorporated into the MDHHS Lead Strategy and are regularly integrated into the Title V work plan. This position is funded by state-level Flint Supplemental funding.

WIC Epidemiologist (1.0 FTE)

Madhur Chandra, PhD, started as the WIC Epidemiologist in October 2021. Madhur received her PhD in Epidemiology from Michigan State University in 2020. As the WIC Epidemiologist, Madhur is responsible for providing epidemiological knowledge and guidance to the WIC Division for the MCH population it serves. The position creates, manages, and links multiple large datasets related to Pediatrics and Pregnancy Surveillance Systems (PNSS & PedNSS) and USDA Participant Characteristics. Data calculated by the WIC Epidemiologist are integrated into many WIC-related activities that intersect with other MCH programs (e.g., breastfeeding). This position is fully funded by WIC.

Ongoing MCH Epidemiology Workforce Activities

As the COVID-19 pandemic continues to heavily impact Michigan and the nation, several MCH Epi staff within MDHHS are still involved in various COVID-19 response projects. The MCH Epi Section is responsible for the COVID-19 Mortality Review and the COVID-19 Pregnancy and Neonate Surveillance Project. These projects are discussed in detail in the "Other MCH Data Capacity Efforts" section.

III.E.2.b.iii.b. State Systems Development Initiative (SSDI)

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 MCH block grant program and capitalizing on MCH epidemiology resources to inform the Title V block grant. The MCH Epidemiology Section Manager and the Child, Adolescent and School Health (CASH) Epidemiologist meet with core Title V staff to ensure that epidemiologic needs are being met for all Title V activities. 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.

In addition to the ongoing needs assessment activities, the MCH Epidemiology Section continues to provide the Bureau of Health and Wellness with routine statistics in support of Michigan's Title V activities. The MCH Epidemiology Section has placed a focus on expanding the depth and breadth of the infant and maternal health statistics that are provided to the Title V program. These expanded statistics are also presented to each of the state's regional perinatal quality collaboratives on a routine basis. The CASH Epidemiologist has also presented data related to specific national performance measures (e.g., bullying) to local health department staff as a way of promoting the integration of performance measures into local Title V plans. The MCH Epidemiology Section also continues to assist in the evaluation of 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 several data sharing agreements with DVRHS which allow 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 to 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. Although regular and/or direct access to a multitude of different MCH data sources has already been established (see Form 12 of this application), the MCH Epidemiology Section Manager continues to meet with MCH program staff on a routine basis to discuss additional data that could further support the Title V program or other MCH programs. The MCH Epidemiology Section documents the barriers that prevent these linkages from taking place and regularly reaches out to data owners to set up meetings to discuss these barriers and how to resolve them.

III.E.2.b.iii.c. Other MCH Data Capacity Efforts

The SSDI funds that are received by MDHHS are used to cover a portion of the MCH Epidemiology Section Manager's salary. Although these funds do not directly support any other positions within the MCH Epidemiology Section, they do provide the framework for managing the data needs of the MCH program. Numerous MCH Epidemiology Section staff, which are funded by sources other than SSDI, are involved with the Title V needs assessment, performance monitoring, and work plan development activities.

- The Child, Adolescent and School Health (CASH) Epidemiologist is responsible for compiling MCH data for the Title V needs assessment, establishing annual objectives for national performance measures, assisting with state performance measures and evidence-based strategy measures, and evaluating annual progress on Title V related measures.
- The Infant Health Epidemiologist is responsible for calculating Michigan infant mortality, preterm birth, low birthweight, prenatal care, and neonatal abstinence syndrome statistics for inclusion in the Mother Infant Health and Equity Improvement Plan and for presentation to the regional perinatal quality collaboratives.
- The Preventable Mortality Epidemiologist is responsible for the development and dissemination of Michigan infant safe sleep, maternal morbidity, and maternal mortality statistics.
- The Newborn Screening Epidemiologist is responsible for calculating statistics for newborn screening disorders that are tested in Michigan.
- The Home Visiting Epidemiologist is responsible for calculating a multitude of indicators for Michigan's home visiting population and data required by the state's home visiting program.
- The Pregnancy Risk Assessment Monitoring System (PRAMS) team is responsible for calculating numerous MCH indicators that are collected through this surveillance system and used to measure performance on various Title V activities.
- The Pediatric Genomics and Early Hearing Epidemiologist is responsible for calculating trends for critical congenital heart disease and assessing early hearing testing lost to follow-up.
- The Birth Defects and Family Planning Epidemiologist is responsible for calculating Michigan birth defects trends and analyzing the data collected by Michigan's family planning agencies.
- The Adverse Childhood Experiences (ACEs) Epidemiologist is responsible for analyzing ACEs data from a multitude of different data sources and assisting in the development of a dashboard that can be used by child and adolescent health partners throughout the state.

In addition to the epidemiologic activities described above, the MCH Epidemiology Section is also responsible for managing Michigan's maternal mortality and COVID-19 mortality review committee processes. SSDI supports the MCH Epidemiology Section Manager's role in managing the data component of the Michigan Maternal Mortality Surveillance (MMMS) project, while Title V supports the MMMS Project Coordinator and Case Abstractor in their maternal death case identification, case summary development, committee review, and recommendation development and implementation activities.

As the COVID-19 pandemic continues to heavily impact Michigan and the nation, several MCH Epidemiology staff are still involved in various COVID-19 response projects. The MCH Epidemiology Section is responsible for the COVID-19 Mortality Review and the COVID-19 Pregnancy and Neonate Surveillance Project. SSDI funds continue to partially support the MCH Epidemiology Section Manager's activities related to COVID-19 death identification and sample pulling, while Epidemiology and Laboratory Capacity (ELC) funding from the Centers for Disease Control and Prevention supports the COVID-19 Project Coordinator and Case Abstractors in their case abstraction, case summary development, review committee coordination, and recommendation development activities.

For the COVID-19 Mortality Review, medical records are requested, and next-of-kin interviews are conducted for a

sample of COVID-19 deaths that occurred in Michigan. This information is then reviewed by a panel of subject matter experts to identify contributing factors, assess COVID relatedness and preventability of the death, and develop recommendations that may help prevent future deaths due to COVID-19.

For the COVID-19 Pregnancy and Neonate Surveillance Project, women with a confirmed diagnosis of COVID-19 during pregnancy are identified through a link between the Michigan Disease Surveillance System and Vital Records. These women are then followed through the end of pregnancy to determine the impact of COVID-19 on pregnancy outcomes (e.g., infant mortality, preterm birth, and maternal mortality), maternal and infant ICU admissions, and infant COVID-19 infections. The 2020 project cohort will soon be finalized, and we have recently started follow-up for the 2021 cohort. MCH Epidemiology Section staff will soon begin working with the Michigan Care Improvement Registry (MCIR) Epidemiologist to assess the COVID-19 vaccination status of Michigan's MCH population.

The MCH Epidemiology Section also continues to work on expanding its data analyses associated with the Minimum/Core indicators and has started several discussions with internal partners regarding data linkages that will be used to improve Title V program efforts and other MCH activities. The MCH Epidemiology Section is currently working to establish several new MCH-related data linkages, including Birth Defects Registry data linked to Immunizations, CSHCS, and hospital discharge data, PRAMS data linked to hospital discharge data, and Medicaid data linked to Vital Records and Immunizations. Furthermore, the MCH Epidemiology Section continues to work with MCH data owners to improve data collection among marginalized populations that are currently underrepresented within many MCH data sources. For example, the Michigan PRAMS team is currently in conversation focusing on a PRAMS-like survey for fathers within the City of Detroit. The MCH Epidemiology Section also continues to work with the DVRHS in improving the timeliness of the link between Birth Defects Registry and birth certificate data.

Timely data sharing is another focus area for the MCH Epidemiology Section. MCH Epidemiology Section staff present the most current MCH indicator data to internal and external MCH partners on a regular basis. These presentations provide a forum for MCH program staff to ask questions about the data and request additional data analyses which in turn support the development of data-driven Title V work plans. The MCH Epidemiology Section also houses current MCH data on an MDHHS website to make the data accessible to local MCH partners that MDHHS staff work with on a routine basis.

Ongoing MCH Epidemiology Workforce Activities

While Michigan has developed a strong MCH epidemiology workforce, there is always room for improvement. Michigan still has a few MCH program areas that do not have specific epidemiologist positions in place to support program activities. Furthermore, the utilization of the Medicaid data warehouse by MCH programs is still not optimal. Obtaining funding to hire additional epidemiologists and data analysts to fill these important roles will allow Michigan to further its MCH data capacity in future years.

The MDHHS MCH Epidemiology Section is also committed to continue our work to identify and develop new data sources, improve data quality, effectively measure health outcomes, and develop stronger MCH performance metrics. Equally important is the need to communicate findings in a participatory manner to MCH programs and partner organizations. A coordinated data-to-action approach provides the foundation for systems and outcomes evaluation, data-based information to educate policy makers, and support for the state's goal of improving the health and wellness of people across the life course. Capacity within Michigan's MCH epidemiology workforce and coordination with MCH programs must continuously be strengthened to maximize the ability to provide meaningful data analysis, interpretation, and communication.

III.E.2.b.iv. MCH Emergency Planning and Preparedness

The Michigan Department of Health and Human Services (MDHHS) recognizes the importance and necessity of strong emergency planning. Over the past two years, the COVID-19 pandemic has illustrated the critical role of emergency preparedness and response and its impact on the lives of all people, including the MCH population. MDHHS has an Emergency Operations Plan (EOP) that is reviewed annually and updated as needed based on lessons learned, real world experiences, new guidance, and best practices. According to the plan, “The EOP was developed using a functional approach in accordance with the Federal Emergency Management Agency (FEMA) Comprehensive Preparedness Guide (CPG) 101, Version 2.0 titled: *Developing and Maintaining Emergency Operations Plans*, published November 2010. It is organized around critical functions that the department will perform in response to an actual, imminent or potential emergency.”

The EOP and the Michigan Emergency Management Plan (MEMP) describe planning consideration and outreach for “populations with functional needs” which includes young children, pregnant women, and individuals with disabilities. Staff from the MDHHS Bureau of Health and Wellness (BHW) have been actively involved in both the planning and response to emergencies and disasters. The BHW includes the Division of Maternal and Infant Health (which oversees the Title V MCH Block Grant); the Division of Child and Adolescent Health (which oversees Title V funding to local health departments); the Division of Local Public Health; the Division of Chronic Disease & Injury Prevention; and the Division of Women, Infants, and Children (WIC). The WIC director is part of MDHHS Executive Leadership Team that reviews the EOP when it is updated. Additionally, WIC is involved with local MDHHS offices that provide human services to community members (which may include recipients of Title V services or other MCH services, such as safe sleep or breastfeeding support, immunizations, lead screening, or CSHCS). The BHW also falls within the Incident Command Structure (ICS) as a key team member of the Community Health Emergency Coordination Center (CHECC). The CHECC structure is in accordance with the National Incident Management System (NIMS).

Following the response to any incident resulting in the participation of various subject matter experts (SMEs), which includes the Bureau of Health and Wellness, an After-Action Report (AAR) is developed, along with an Improvement Plan (IP) that is based on lessons learned. These AARs and IPs are reviewed on a regular basis to ensure that processes are amended to improve efficacy and efficiency of programs’ response activities during an emergency or disaster. This is tested by incorporating the improvement action items into training and exercises, to enable MDHHS to better respond to future incidents.

The Title V role in emergency preparedness and response has been the most evident in the state’s response to the COVID-19 pandemic. Title V leadership and MCH staff have participated in departmental COVID-19 response efforts including staffing provider hotlines; contact tracing; standing up alternative care sites; convening and participating on COVID-19 workgroups and committees; and other projects as needed. Staff from the Division of Immunization have led the COVID-19 vaccine distribution effort and the Director of the Bureau of Health and Wellness has led the Department’s efforts with local health departments, which included testing, contact tracing, and vaccine distribution and promotion.

Pregnant and parenting families were identified as a potential vulnerable population early in the pandemic. As a result, a “Pregnant and Parenting” workgroup was created with members representing Title V, home visiting, Medicaid, WIC, Behavioral Health and other MCH areas. The workgroup shares relevant information and routes critical and/or emerging issues to the Michigan Community Health Emergency Coordination Center (CHECC). In partnership with the CHECC, COVID-19 resources for families were developed and made available. Assuring timely communication with Maternal and Infant Health (MIH) partners was also critical and resulted in Maternal Infant Health & Equity updates being emailed to thousands of MIH partners on a regular basis.

Early in the pandemic, CSHCS worked within the Medical Services Administration on the formulation of policies and procedures that ensured access to care and continuity of services for CSHCS program enrollees. Policy and procedure adjustments were designed to remove barriers to program participation (i.e., enrollment and renewals), protect clients from unnecessary viral exposure by eliminating face-to-face requirements, and increase utilization of telemedicine. Adjustments were also made to ensure access to medications and durable medical supplies (by adjusting prior authorization requirements and modifying requirements related to obtaining durable medical equipment and medications) and to ensure compliance with Centers of Medicare/Medicaid Services and with the Governor's Executive orders. CSHCS maintained ongoing communication with local health departments (LHDs) and provided guidance and direction to LHDs related to the completion of programmatic functions. In 2021, CSHCS helped to amplify and elevate the voices of parents of children with special needs to revise the state's vaccine priority groups to move family caregivers of CYSHCN into a higher priority category.

The Title V program participates in the development of coordination plans with other MCH programs to enhance statewide preparedness efforts, as needed. For example, MDHHS staff who are part of Title V and/or Michigan's broader MCH programs worked with state and local partners to develop program specific guidance and best practice recommendations to address COVID-19 within their respective programmatic and funding parameters. Examples include CHECC-approved program guidance for Child & Adolescent Health Centers (school-based health centers); school-based hearing and vision screening; home visiting (including MIECHV, state, and Medicaid funded models); teen pregnancy prevention programs; and school-based dental sealant programs. The Title V local MCH (LMCH) program provided guidance to local health departments that receive Title V funding which allowed them to redirect Title V funds to support COVID-19 response activities in their communities, if needed, in accordance with federal guidelines.

As part of the Emergency Preparedness and Response Division's Risk Communications Team efforts, the Whole Community Inclusion Plan for LHDs was created to expand their reach to at-risk populations within their jurisdiction, including CYSHCN. The goal is to bring at-risk groups to the table regarding emergency preparedness planning and develop an exercise to test the system's capabilities. CSHCS discussed emergency preparedness planning with the CSHCS Local Advisory Council and assisted LHDs with identified needs.

In addition to the information noted above, MCH program areas partnered with local and regional stakeholders during the COVID-19 pandemic to continue to provide critical MCH services, including but not limited to the following: linking families with pediatric audiologists; assuring accessibility for virtual clinical visits and home visits; addressing barriers related to utilizing WIC benefits; and helping families obtain concrete support and needed items (e.g., breast pumps and supplies, diapers, pack and plays, and groceries).

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

III.E.2.b.v.a. Public and Private Partnerships

Federal, State, and Non-Governmental Partnerships

The Title V Needs Assessment identified relationships between MDHHS and public and private organizations, service providers, and advocacy organizations as a strength that enables collaborative and coordinated work to meet MCH needs. Collectively, Michigan's Title V program provides health services across Title V population domains and works with internal and external partners to support a statewide system of services to deliver comprehensive, community-based care. MDHHS partners include the following:

- Behavioral Health
- Child Welfare
- Childhood Lead Poisoning Prevention
- Children and Youth with Epilepsy
- Children's Trust Fund
- Chronic Disease and Injury Control
- Equity and Minority Health
- Environmental Health Surveillance
- Genomics and Newborn Screening
- HIV and STI Programs
- Immunizations
- Local Health Services
- MCH Epidemiology
- Medicaid
- MIECHV
- Newborn Screening
- State System Development Initiative
- Substance Use Prevention and Treatment
- Support for Pregnant and Parenting Teens
- Title X Family Planning
- Vital Records
- WIC

Many of these partnerships are described in this application. Title V also administers the Local Maternal Child Health (LMCH) program which provides funding to all 45 local health departments (LHDs). Funding addresses national and state priorities as well as locally identified needs. The focus of LMCH is to provide increased access to and provision of gap-filling services; enabling services such as case management; and public health services and systems.

MCH partners with other state departments, including the Michigan Department of Education (MDE) and the Department of Licensing and Regulatory Affairs. MDE is a partner in programs supporting maternal and infant health, child health, school health programs, and CSHCS. MDE and MDHHS have a history of integrated funding for early childhood, school nursing, school mental health, Child and Adolescent Health Centers, Hearing and Vision screenings, and shared job positions.

Partnerships with organizations that support and complement MCH include health care systems partners, provider organizations, universities, community-based and faith-based organizations. These partnerships enable or enhance

health advocacy, program delivery and evaluation, pilot projects, and training. They are described in the 2020 Needs Assessment Summary.

Strengthening Integration of Health Care Delivery

Michigan's MCH programs continually seek strategies to strengthen and integrate services through new or enhanced partnerships. Several are highlighted here by population domain.

Maternal and Infant Health

- High Touch, High Tech (HT2) provides an electronic screening tool based on evidence-based Screening, Brief Intervention and Referral to Treatment (SBIRT) in prenatal care clinics. The tool is used for universal behavioral and mental health screening prior to obstetric intake appointments, with subsequent linkage to services and treatment. HT2 is supported by Regional Perinatal Quality Collaboratives, MDHHS Behavioral Health, Michigan State University, Michigan-based vendors for tele-behavioral/mental health services, and MDHHS Statewide Opioid Response funds.
- Two hospitals were identified to participate in a pilot project to explore policies and procedures to ensure families of NICU infants are practicing safe sleep behaviors after discharge. A model policy was developed, and hospitals will conduct crib audits to determine how safe sleep practices can be strengthened.
- The Michigan Alliance for Innovation on Maternal Health (MI AIM) is part of the national quality improvement initiative to prevent maternal morbidity and mortality through implementation of evidence-based patient safety bundles. Michigan birthing hospitals are working to implement the obstetric hemorrhage, severe hypertension in pregnancy, safe reduction of primary cesarean birth and sepsis safety bundles. Over half of Michigan birthing hospitals are engaged in the initiative.
- DMIH is partnering with the MDHHS Office of Recovery Oriented Systems of Care to provide funding to three health systems for implementation of 'rooming in' programs in the hospitals' birthing units. The family-centered model encourages parent-infant bonding and utilizes non-pharmacological care of infants born substance-exposed, ensuring they remain with their birthing parent or caregiver in a private hospital room that is less stimulating for the infant. Hospital staff provide support for breastfeeding, skin-to-skin contact, calming techniques, and referrals to services post-discharge.
- MDHHS partners with the Michigan Breastfeeding Network (MIBFN) to support Great Lakes Breastfeeding Webinars, a free monthly series grounded in racial equity and designed for peer counselors, maternity care nurses, and home visitors. In FY 2021 this partnership was expanded in response to input from Local Breastfeeding Supporters, who identified the exacerbation of racial inequities during the COVID-19 pandemic on Black and Indigenous families within birth and breastfeeding systems. Supported by Title V, MIBFN will offer six racial equity mini grants to breastfeeding supporters or organizations that are led by and serve families of color.
- DMIH received funding from the Michigan Health Endowment Fund for Maternal & Infant Vitality in Wayne, Oakland, and Macomb counties. The partnership with the Southeast Michigan Perinatal Quality Collaborative, four health departments, Birth Detroit and Focus: Hope will use an asset-based approach to identify the strengths of the region and ways to further enhance those strengths.

Child and Adolescent Health

- MIECHV and state funded home visiting programs are expanding to address enhanced partnership with the child welfare system. This partnership ensures families whose children are at risk of entering foster care are provided voluntary referrals to home visiting. Plans to build a more connected system for families who are

experiencing substance use or who have an infant born substance exposed are also underway to ensure that health care systems are aware of home visiting. Service navigator positions will be embedded in birthing hospitals to work with families to connect them to home visiting programs.

- A partnership between law enforcement, schools, and local mental health is leveraged through the Handle with Care Initiative which provides trauma-informed support within schools to students who have had an experience in which law enforcement was involved.
- The Expanding, Enhancing Emotional Health (E3) model provides mental health services for children and youth through the Child & Adolescent Health Center Program. Currently, 93 E3 sites serve 43 counties. An RFP process in FY 2022 will allow for expansion of E3 sites. Sites are open year-round and provide telehealth when school is not in session. Services are designed for children and adolescents 5-21 years of age when access to behavioral health resources are limited or inaccessible in the community. Services include assessments, brief intervention, ongoing therapy, referrals, and follow-up.

CSHCN

- In partnership with Michigan Medicine's Partners for Children program and the Michigan Health Endowment Fund, CSHCS is exploring a Children with Medical Complexity Medicaid health home initiative to improve health outcomes and decrease costs associated with care.
- CSHCS partnered with MDHHS Public Health Genomics and the Sickle Cell Disease Association of America (SCDAA-MI) to investigate health inequities related to Sickle Cell Disease (SCD). As a result, a proposal was submitted to the Governor's Office to support a CSHCS adult benefit expansion, long-term services provided by SCDAA-MI, and expanded clinical services. The collaboration will create a list of providers who treat SCD; catalog state activities to ensure collaboration and efficiency; and address inequities related to provision of transition services for adolescents with SCD.
- In FY 2021, CSHCS and the Family Center launched a bullying prevention initiative aimed at decreasing bullying in the CYSHCN population. The effort is a collaboration between CSHCS, the Family Center, Adolescent and School Health, MDE, and the CSHCS Advisory Committee. Activities included a focus group with parents of CYSHCN, a small grants program for schools, and participation in a HRSA Region IV/V collaborative.
- The Family Center's parent-to-parent program is Michigan's statewide Parent to Parent Support Network. The Family Center is also an alliance member of Parent-to-Parent USA. This partnership allows Michigan to connect with other states and have a broader reach when seeking mentor matches for parents in Michigan. The Family Center's network consists of parents who have been trained as Parent Mentors to support parents with a child with the same or similar diagnosis as their own child's. These Parent-to-Parent connections provide emotional and informational support to Michigan parents.

III.E.2.b.v.b. Title V MCH – Title XIX Medicaid Inter-Agency Agreement (IAA)

MCH programs and the Behavioral and Physical Health and Aging Services Administration (BPHASA), which administers the Michigan Medicaid Program (Medicaid), have a longstanding collaborative relationship of assuring the provision of quality care and services for 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. MCH collaborations with Medicaid, Medicaid Health Plans (MHPs), local health departments (LHDs), and community providers include maternal and infant care and services; child and adolescent health; perinatal and postpartum care; Children's Special Health Care Services (CSHCS); dental care; and home visiting programs. Key partnerships are discussed in this section.

The Title V/Medicaid agreement is contained within the Medicaid State Plan (Sections E and F). Discussions between Title V leadership and MDHHS legal counsel determined that the existing document broadly outlines the relationship between the two entities which are both housed in MDHHS.

One of the largest partnerships is between Medicaid and CSHCS. Since FY 2013, most individuals with both CSHCS and Medicaid coverage are enrolled in an MHP. In March 2022, program numbers indicate that 27,819 (67.85%) of CSHCS beneficiaries are enrolled in an MHP. In relation to Section E of the Medicaid State Plan, CSHCS determines programmatic eligibility for CSHCS; provides case management in coordination with LHDs and Children's Multidisciplinary Specialty (CMDS) clinics; authorizes providers; and utilizes the same payment mechanism as Medicaid (CHAMPS). MSA determines eligibility for Medicaid; pays CSHCS providers; and provides IT support. MHPs are responsible for the medical care and treatment of CSHCS members. Assistance with community-based services beyond medical care and treatment is provided by the LHD CSHCS office. MHPs are responsible for coordinating and collaborating with LHDs and CMDS clinics to provide a range of essential health care and support services 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. CSHCS has been integrated as a component of the MHP onsite compliance review process. In 2021, CSHCS participated in MHP site visits with Managed Care Plan division staff. CSHCS focused on the case management and care coordination provided by MHPs to CSHCS enrollees.

In relation to Section F, several programs and initiatives support maternal and infant care, dental health, and the health of children and youth through cooperative program planning and monitoring; referrals; program standards and guidelines; and certification processes between MCH and Medicaid. The Managed Care Plan Division (MCPD) in BPHASA requires all MHPs to ensure home visiting for pregnant and new moms in managed care. The Maternal Infant Health Program (MIHP), Michigan's largest evidence-based home visiting program, is available to all Medicaid-eligible pregnant women and infants up to age one. In FY 2021, MIHP provided services to 11,564 adults and 14,991 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 Program Policy Division (MPPD). DMIH develops MIHP procedures, certifies and monitors providers, and provides technical assistance to providers. MPPD promulgates Medicaid policies. MCPD helps providers implement Medicaid policies, monitors MHP contracts and makes 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.

The Healthy Kids Dental (HKD) program is available for children enrolled in Medicaid and CHIP. HKD provides dental coverage to approximately 1 million qualifying individuals including infants, children, and pregnant women under the age of 21. Eligible beneficiaries are offered two HKD dental health plans. Since 2018, non-Healthy Michigan Plan Medicaid eligible pregnant women receive dental care through managed dental plans due to a Comprehensive Health Care Program 1915(b) waiver amendment. This benefit provides greater access to dental

services and comprehensive prenatal care. MCH and BPHASA coordinate oral health outreach and engagement via multiple avenues including MIHP and other home visiting networks. Infants and children receive preventive services through the Varnish Michigan and SEAL! Michigan programs targeted to the Medicaid population. Healthy Michigan Plan beneficiaries receive dental benefits through MHP managed dental networks.

MCH programs and Medicaid also collaborate on quality improvement initiatives for women, pregnant women, infants, children, and CSHCN such as:

- *Medicaid Eligibility:* MDHHS is committed to extending Medicaid eligibility for postpartum women to 12 months and covering doula services to address maternal and infant health disparities. These two projects are active and will be completed during this calendar year. In 2022, MDHHS plans to submit a State Plan Amendment to extend eligibility for postpartum women. The Medicaid program also plans to begin covering doula services in 2022.
- *CSHCS and Behavioral Health and Intellectual and Developmental Disabilities Collaborative:* In 2019, CSHCS convened an interagency group to identify challenges that populations served by the CSHCS system and the mental/behavioral health system face in accessing services. The collaboration continues to develop tools for families, provide education, and create system navigation resources for LHDs and community mental health staff. In 2021, the collaborative began the process of developing a series of webinars to assist families in understanding both systems of care.
- *EPSDT or Well Child Services:* Medicaid Managed Care is an important payor for preventive health care services for children and youth. The Division of Child and Adolescent Health works to improve well care rates for adolescents with Medicaid through school-based Child & Adolescent Health Centers. The work will be especially important as states focus on preventive care and immunizations that have declined during the COVID-19 pandemic.
- *Lead Poisoning Prevention Projects:* Medicaid and CLPPP partner on data quality/control projects to decrease inconsistencies between data sets; improve reporting, testing, and interventions; and improve data availability for LHDs, Medicaid Health Plans, and foster care health liaison officers. They also partner on education to health care providers and MHPs about elevated blood lead outreach, testing recommendations and requirements, and implementation of point-of-care testing.
- *Caring for Students:* In 2021, Michigan continued to roll out its new expanded coverage for nursing and mental health services for general education students through a CMS approved Medicaid waiver that expanded the existing school-based services program. This expanded coverage, called Caring 4 Students or C4S, allows schools that provide mental health and nursing services to general education students to receive Medicaid reimbursement. All 56 Intermediate School Districts participate in C4S. In 2021, over 385,000 students were served through the initiative. The program is expected to continue to grow over time.
- *MI Kids Now:* The MI Kids Now Initiative is a statewide effort to improve behavioral health services for children and youth with Medicaid coverage and/or in the foster care system. The mission is to ensure every child and youth in Michigan has access to behavioral health services and support when needed. Partners include the Behavioral Health and Developmental Disabilities Administration, State Hospital Administration, Medical Services Administration, and Children's Service Agency. CSHCS will provide a voice for children with special health care needs and their families while serving on the internal workgroup. The CSHCS Advisory Committee will receive regular updates and opportunities to provide feedback.

In addition to the partnerships and programs discussed above, Title V and MCH leadership and program staff routinely meet with BPHASA regarding collaboration on these and other initiatives. For example, MIH leadership meets with BPHASA regarding postpartum Medicaid expansion, exploration of doula coverage, addressing maternal and infant health disparities, and the Healthy Moms Healthy Babies initiative.

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

State Action Plan Introduction

The following state action plans provide comprehensive information including objectives, strategies, and performance metrics regarding 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 one measure within the optional cross-cutting/systems building domain. The NPM/SPM/priority needs linkages table, included in the Supporting Documents, provides a snapshot of Michigan's performance measures and priority areas across the population domains. The state action plans for FY 2023 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 (Pregnancy Intention)
- SPM 6 (Developmental/Behavioral/Mental Health)

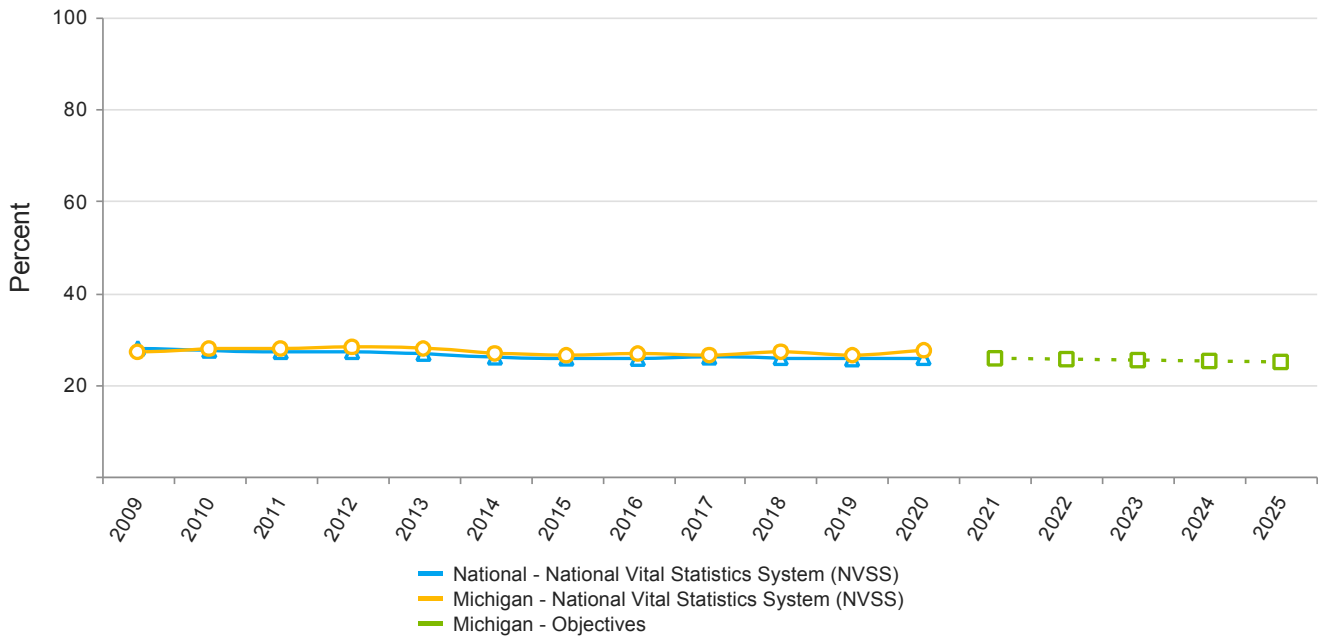
These NPMs and SPMs were chosen based on Michigan's five-year needs assessment completed in 2020 for the FY 2021-2025 cycle. This is also the first year of reporting for the current five-year cycle; therefore, FY 2021 annual reports are provided for the NPMs and SPMs listed above. The NPM/SPM annual reports include a discussion of activities and outcomes; family and community engagement strategies; and how the COVID-19 pandemic impacted service delivery and program strategies.

Each domain includes a brief introduction that provides an overview of key MDHHS activities and leadership in the domain; population health data related to the domain; and information on how local health departments (LHDs) utilized Title V funding in FY 2021 to address national and state performance measures in the domain. In addition to Michigan's identified NPMs and SPMs, 19 LHDs selected a Local Performance Measure (LPM) which collectively accounted for 31.6% of total local MCH expenditures. Additionally, in FY 2021 many LHDs continued to divert or postpone some planned activities to respond to the COVID-19 pandemic and/or operated under reduced capacity. Eighteen LHDs diverted funding in the amount of nearly \$900,000 from planned LMCH activities to COVID-19 mitigation in FY 2021.

Women/Maternal Health

National Performance Measures

**NPM 2 - Percent of cesarean deliveries among low-risk first births
Indicators and Annual Objectives**



Federally Available Data

Data Source: National Vital Statistics System (NVSS)

	2019	2020	2021
Annual Objective			25.8
Annual Indicator	27.3	26.5	27.4
Numerator	9,510	9,054	9,173
Denominator	34,845	34,117	33,452
Data Source	NVSS	NVSS	NVSS
Data Source Year	2018	2019	2020

Annual Objectives

	2022	2023	2024	2025
Annual Objective	25.6	25.4	25.2	25.0

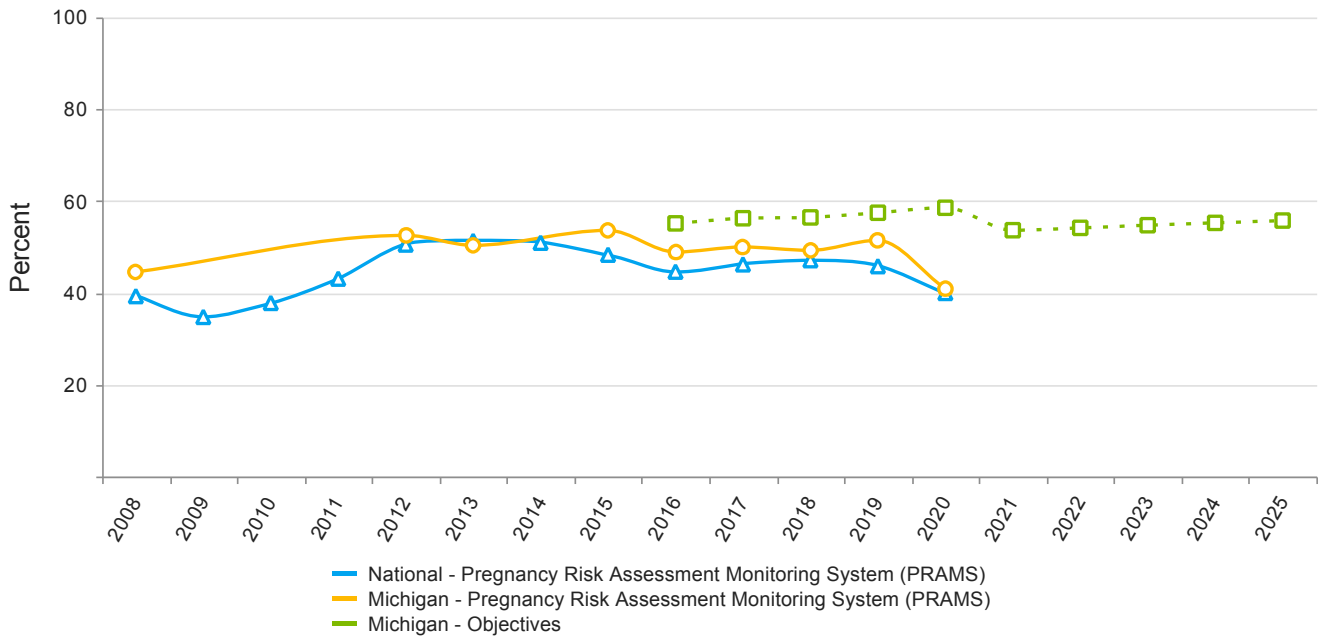
Evidence-Based or –Informed Strategy Measures

ESM 2.1 - Number of birthing hospitals participating in Michigan AIM

Measure Status:		Active		
State Provided Data				
	2019	2020	2021	
Annual Objective			72	
Annual Indicator		50	62	
Numerator				
Denominator				
Data Source		Michigan AIM/Michigan Hospital Association	Michigan AIM/Michigan Hospital Association	
Data Source Year		2019	2020	
Provisional or Final ?		Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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)

	2017	2018	2019	2020	2021
Annual Objective	56.2	56.4	57.4	58.5	53.6
Annual Indicator	53.6	49.8	49.2	51.3	40.8
Numerator	57,883	53,356	51,874	53,228	40,909
Denominator	108,083	107,079	105,470	103,825	100,195
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2017	2018	2019	2020

Annual Objectives

	2022	2023	2024	2025
Annual Objective	54.1	54.7	55.2	55.7

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	2020	2021
Annual Objective			390	410	430
Annual Indicator	636	648	401	423	439
Numerator					
Denominator					
Data Source	FY2017 MDHHS Tracking Database	FY2018 MDHHS Tracking Database	FY2019 MDHHS Tracking Database	FY2020 MDHHS Tracking Database	FY2021 MDHHS Tracking Database
Data Source Year	FY2017	FY2018	FY2019	FY2020	FY2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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		
State Provided Data				
	2019	2020	2021	
Annual Objective			40	
Annual Indicator			21.2	
Numerator			8,466	
Denominator			39,940	
Data Source			Medicaid Data 2020	
Data Source Year			FY2020	
Provisional or Final ?			Provisional	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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	2020	2021	
Annual Objective			59.8	
Annual Indicator	57.2	59.8	59.8	
Numerator	59,915	61,665	59,813	
Denominator	104,673	103,197	100,096	
Data Source	PRAMS	PRAMS	PRAMS	
Data Source Year	2018	2019	2020	
Provisional or Final ?	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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 health system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, age 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 all Michigan low-risk births to 27%
- B) By 2025, reduce the percentage of low-risk cesarean births in African American, American Indian and Asian/Pacific Islander pregnant people to 28%, 29.3% and 28.4% respectively

Strategies

- A1) Educate the Regional Perinatal Quality Collaboratives (RPQCs) regarding low-risk Cesarean data A2) Regional representatives will 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 partnering with 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 MI-AIM
- B1) Include bias and equity training as part of the MI-AIM hospital designation criteria B2) Encourage and support ongoing bias and equity training of MI-AIM Steering and Operations Committee members B3) Support efforts of the Maternal Infant Health (MIH) Health Equity Action Committee B4) Provide ongoing education and training regarding bias and equity for the Michigan Maternal Mortality Surveillance Review 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 people and infants to equitable oral health care services
- B) Increase the number of socioeconomically disadvantaged pregnant people receiving oral health care services

Strategies

- A1) Offer and evaluate training for medical and dental professionals that includes health equity components
- A2) Create and disseminate updated Perinatal Oral Health promotional and educational materials that feature health equity
- B1) Develop a plan from Medicaid utilization data and PRAMS racial and ethnic healthcare data to address oral health and health equity issues
- B2) Provide education to pregnant people 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
- 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) - Women/Maternal Health - Entry 3

Priority Need

Develop a proactive and responsive health system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, age 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) By 2025, increase by 10% percent the number of Family Planning clients who rate their experience of care with a score of 4 or 5

Strategies

A1) Support the provision of contraception to low-income, uninsured, and underinsured people, who can get pregnant in the Family Planning Program A2) Facilitate Long-Acting Reversible Contraceptive (LARC) training opportunities for Family Planning and other health care providers A3) Support the continued integration of telehealth as a service delivery tool across Family Planning's network A4) Facilitate regional learning sessions with people of reproductive age, who can get pregnant.

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) Obtain youth input on Family Planning's website content

C1) Include the Person-Centered Contraceptive Counseling (PCCC) measure on Family Planning's annual statewide consumer survey C2) Convene at least one training for 50 health care professionals on systemic racism and reproductive health C3) Apply a reproductive justice framework within Family Planning and related maternal and infant health projects

Women/Maternal Health - Annual Report

Women/Maternal Health Overview

The health of women and mothers is a key focus of the Division of Maternal and Infant Health, which includes the Reproductive Health Unit and Michigan's Title X program. Title V funds directly support programs and services designed to improve women's pre- and interconception health, particularly family planning. Title V funds are also used to understand and address women's health issues more broadly 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 Pregnancy Risk Assessment Monitoring System (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 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, in FY 2021 Title V funds were expended on NPM 13 (oral health), SPM 3 (intended pregnancy), SPM 6 (behavioral health), Local Performance Measures (LPMs) and COVID-19 mitigation efforts. Four LHDs worked on engaging women regarding oral health through education, outreach in the community, and staff participation at oral health virtual coalition meetings. One LHD worked on an information system of dental utilization in women of childbearing age. Three LHDs supported intended pregnancy through discussion and referral of clients in Early On and WIC, and through media campaigns with preconception and reproductive life plan topics. Some planned activities and outreach could not be completed due to the pandemic. Four LHDs expended funds on mental health initiatives including gap-filling depression screening and treatment for women, and staff development. LPM activities included a peer mentor initiative for pregnant women, gap-filling Healthy Family America support, gap-filling direct reproductive services for women, media campaigns for postpartum visits and tobacco cessation services. LMCH funds were diverted for COVID-19 mitigation strategies in this domain including call center, communication material distribution, testing, and COVID-19 vaccinations 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 2020, all Michigan mothers experienced an 8.7% relative increase in severe maternal mortality; however, Black mothers in Michigan continued to experience twice the risk of severe maternal morbidity (346.7 per 10,000 delivery hospitalizations) as White mothers (170.9 per 10,000) (MDHHS, 2019). While the overall 5-year pregnancy-related mortality declined 4% in 2018 from 2017 (10.8 per 100,000 live births, MDHHS, 2018) the risk among Black women (24.1 per 100,000 live births) increased by 11% over the period and remains much higher than among white women (8.5 per 100,000 live births), who saw a 4.5% relative decrease. The disparity in the rate that Black and white Michigan mothers undergo low-risk cesarean births has moved from parity in 2013 to nearly 15% higher in Black mothers in 2020 (NVSS, 2020). Black mothers were also twice as likely as white mother to report their most recent pregnancy was mistimed or unwanted (PRAMS, 2019). These disparities have led Michigan to place greater focus on understanding and addressing the root cause(s) that place non-Hispanic Black women at greater risk for adverse health outcomes, including disease and death before and after childbirth.

Although surveillance data tend 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 8.2% of US infants (NVSS) and 9.0% of Michigan infants born in 2020 were born with a low birth weight, 15.1% of babies born to Black mothers in Michigan had a low birth weight, compared to 7.3% of babies born to white mothers (MDHHS, 2020). Similarly, while 10.1% of US infants (NVSS, 2020) were born preterm, the percentage was much higher among Michigan's infants born to Black mothers (14.8%), compared to 9.6% of infants born to white mothers (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 8.5 per 1,000 in 2015 and has since declined to 7.2 per 1,000 in 2018 (MDHHS). Despite this overall decline, rates remain high among infants born to American Indian mothers (46.9 per 1,000 in 2018).

Low-risk Cesarean Delivery (FY 2021 Annual Report)

Efforts to reduce low-risk cesarean deliveries among all Michigan births, as well as in the African American, American Indian and Asian/Pacific Islander populations, require continued partnerships and collaborations with key internal and external partners. Such partnerships include: the Michigan Perinatal Quality Collaborative (MI PQC)/Regional Perinatal Quality Collaboratives (RPQCs); Michigan Alliance for Innovation on Maternal Health (MI AIM); Obstetric Initiative (OBI); Michigan families; Michigan Department of Health and Human Services (MDHHS) Maternal and Child Health (MCH) Epidemiology; Michigan Maternal Mortality Surveillance program; birthing hospitals; and Michigan Public Health Institute (MPHI).

The COVID-19 pandemic continued to impact maternal and child health activities in FY 2021. Hospitals continued to have high patient census, often reaching critically high levels, and faced daily staffing challenges due to turnover or illness. This impacted the time staff had to focus on quality improvement efforts and the bandwidth facilities had to take on additional tasks, meetings and/or trainings. The pandemic also affected the ability for trainings and meetings to be held in-person. Staff have not had a reprieve from the pandemic, but still recognized the importance of quality improvement work in the realm of maternal and infant health. Despite the challenges of FY 2021, many achievements can be celebrated. Two Regional Perinatal Quality Collaboratives encouraged MI AIM participation of additional birthing hospitals in their respective regions; Maternal Infant Health Action Committees were launched; and the Michigan Maternal Mortality Review Committee was re-structured to be more diverse and inclusive in its membership.

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

As Michigan strives to drive down the overall percentage of low-risk cesarean deliveries, collaborations between the Regional Perinatal Quality Collaboratives, Michigan AIM and the Obstetrics Initiative are imperative. Updated state data show that low-risk cesarean deliveries decreased from 28.7% in 2018 to 28.2% in 2019. Regional Perinatal Quality Collaboratives are encouraged to create better alignment with Michigan AIM to strengthen relationships between community and clinical efforts to address maternal, infant, and family health. Beginning in FY 2021, this specifically included increasing awareness and education on low-risk cesarean births. RPQCs receive financial support from MDHHS, a portion of which is Title V federal funding, as well as staff support in the form of a direct consultant and an overall Michigan PQC Coordinator.

RPQCs are expected to authentically engage families and community members from their respective regions in their ongoing efforts. Hosting townhalls is one example of how RPQCs have engaged community members. Unfortunately, the COVID-19 pandemic caused these annual townhall meetings to be paused, but in past years, community members and families would come together to provide feedback and give direction to efforts of the RPQC and MDHHS. In previous years, individuals shared birthing experiences in which they were forced to have a cesarean delivery out of convenience for the provider or by provider decision being influenced to perform higher-cost birthing interventions. Michigan will continue to garner the voices of individuals with lived experience to enrich the understanding and stimulate discussion within each RPQC on efforts that can be implemented to reduce low-risk cesarean deliveries. In addition, beginning FY 2022, data on low-risk cesarean deliveries, both overall and by race

and ethnicity, will be incorporated into the annual RPQC data meetings. Sharing the stories of birthing individuals, in addition to the data, is expected to make greater impact on RPQC members; therefore, creating a driving force to demand and create change.

As part of the 2021 annual data meetings, the RPQCs received region-specific maternal morbidity and mortality data. The data was not specifically attributed to cesarean deliveries; however, we know that low-risk cesarean deliveries can lead to outcomes such as hemorrhage, infection, uterine rupture, cardiac arrest, and anesthesia complications – all of which are included in the morbidity and mortality data. Additionally, as the Michigan Maternal Mortality Review Committee (MMRC) reviews maternal mortality cases, policy recommendations aimed to prevent future deaths are drafted and shared through various avenues, one of which is the Regional Perinatal Quality Collaboratives. Recent MMRC recommendations include implementation of the Safe Reduction of Primary Cesarean Birth Safety Bundle. This bundle is currently being implemented in Michigan birthing hospitals through the Obstetrics Initiative, but the identification of it as an MMRC priority recommendation speaks to the fact that efforts need to continue.

Each prosperity region, which is represented by an RPQC, has a least one MI AIM representative. As part of the ongoing alignment between the RPQCs and MI AIM, the MI AIM regional representatives are asked to provide MI AIM and OBI updates to RPQC membership, at least twice a year. In FY 2021, most RPQCs had at least two updates from their respective MI AIM representative. These updates included the status of birthing hospitals in their region in regard to implementation of the hemorrhage and hypertension safety bundles, as well as in relation to the OBI project. General Michigan AIM updates were also provided. In addition, to encourage birthing hospital participation with the RPQCs, attendance at RPQC meetings was included as part of the MI AIM designation criteria. In other words, a hospital would receive a certain number of points toward their overall MI AIM designation, if a member of their MI AIM team attends at least 2 of their respective RPQC meetings.

The ESM for this NPM, which aligns with this objective, is the number of birthing hospitals participating in the Michigan Alliance for Innovation on Maternal Health (MI AIM). Ongoing support for the Michigan chapter of this national data-driven safety and quality improvement initiative is a key component in decreasing percentage of low-risk cesarean deliveries in Michigan. MI AIM is working to decrease maternal mortality and morbidity in Michigan through the implementation of the Obstetric Hemorrhage and Severe Hypertension in Pregnancy safety bundles, as well as supporting the Safe Reduction of Primary Cesarean Birth through the Obstetric Initiative. MDHHS provides support to MI AIM through participation by the Director of the Division of Maternal and Infant Health/Director of Title V in the MI AIM Steering Team and the Michigan Perinatal Quality Collaborative Coordinator serving as a liaison between the RPQCs and MI AIM, as well as participating on the MI AIM Operations Team.

Two Michigan RPQCs also diligently worked with birthing hospitals in their respective regions to engage them with MI AIM. In FY 2021, Region 10 (southeast Michigan), through a tremendous amount of hard work, logistical arrangements, and coordination, was able to get all 23 birthing hospitals committed to participate in MI AIM. Previously, only 12 birthing hospitals were actively participating. Additionally, in Region 1 (Upper Peninsula) four additional hospitals committed to participate in MI AIM, whereas previously only one hospital was engaged. The most recent data available for this ESM is from 2020. In 2020, 62 out of 80 birthing hospitals actively participated in MI AIM.

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 28%, 29.3% and 28.4% respectively.

Supporting MI AIM members, birthing hospital staff and providers, and the Michigan Maternal Mortality Review Committee members in ongoing bias and equity training is one approach Michigan is taking to reduce the racial

disparity in low-risk cesarean deliveries. Michigan has made progress on this objective. From 2018 to 2019, percentages of low-risk cesarean births have decreased in African American pregnant people (from 31.1% to 29.8%), American Indian pregnant people (from 32.6% to 30.3%), and Asian/Pacific Islander pregnant (from 31.5% to 30.9%)¹.

Every year Michigan birthing hospitals are assessed for their level of participation and commitment to implementing AIM safety bundles. The safety bundles are standardized approaches for delivering evidence-based practices in a consistent manner, resulting in improved patient outcomes. To complete the individual assessments, MI AIM uses a set of 'designation criteria' in which points are assigned to various criteria yielding a final tally and corresponding score. Bias and equity trainings were included as a priority area of focus in the designation criteria for 2021.

During FY 2021, MDHHS partnered with the Michigan Public Health Institute (MPHI) to provide training to at least 100 clinicians and providers in Michigan. Throughout the fiscal year, multiple trainings were offered by staff from the Center for Equity at MPHI. A workshop series entitled, "From Concept to Action: An Equity Approach to Improving Maternal & Infant Health", featuring Dr. Uche Blackstock was offered virtually in five different series from February 2021 through August 2021. The workshop was geared toward health care providers in Michigan and was originally intended to be an in-person format; however, with COVID-19 precautions in place, the entire workshop series was done virtually. Over the entire series, 81 health care providers participated in the workshop. MPHI also created a two-part, on-demand training, entitled "Unconscious Bias: One Part of a Bigger Problem", which is housed on the MDHHS Division of Maternal and Infant Health (DMIH) webpage. The two-part series discusses unconscious bias and its relationship to health equity and has been used by different organizations (e.g., MI AIM, MMRC, etc.) to educate their members.

Additionally, in FY 2021 MPHI developed a "Building a Culture of Health" training for Maternal Infant Health Program (MIHP) home visiting staff. Eight MDHHS MIHP staff worked through three sessions in which they developed a value-based mission; developed an understanding of complexities and history of race, racism, and gender-based exploitation and discrimination; and explored root causes and social determinants of health. As a final effort of the training, MPHI and MIHP staff updated a resource document "Health Disparities and Social Justice Definitions", which is available to all 78 MIHP agencies. All MIHP agencies and their staff are also required to complete two on-demand webinars on health equity and systemic racism.

As mentioned above, bias and equity trainings are a priority area for MI AIM. The MI AIM Steering and Operations Committee members are comprised of practicing obstetric and gynecologic providers across Michigan who are leaders in the field and committed to improving maternal outcomes. Ensuring that these leaders are knowledgeable in health equity and systemic racism is important as they are expected to be change agents within their health care organizations. Twenty-eight members between the MI AIM Steering and Operations Committees participated in at least one bias and equity training during FY 2021; 16 completed 2 or more trainings.

In FY 2021, MDHHS launched five Mother Infant Health Action Committees that are aligned with the priority areas of the Mother Infant Health & Equity Improvement Plan. The Action Committees are led by two co-chairs and are comprised of up to 20 members, representative of families and community organizations. Family representatives are paid a stipend for time spent participating in meetings. The stipends were supported with funds from Title V. The Health Equity Action Committee is one such Action Committee. Over the course of the fiscal year, the Health Equity Action Committee drafted three recommendations: 1) extend Medicaid postpartum coverage and expand eligibility; 2) assure culturally responsive practices in data and evaluation; and 3) create accountability/ombudsman process and infrastructure. These recommendations, and the recommendations drafted by the other Action Committees, will be shared with the community at large, MDHHS leadership and policy makers and advocates with the expectation that they will stimulate change within individual organizations, as well as statewide policy.

FY 2021 also brought changes related to the structure of the Michigan Maternal Mortality Review Committee (MMRC). Leaders of the MMRC recognized the need to better address the inequities in Michigan's maternal deaths and felt that having a more diverse membership would better position the committee to identify the inequities, map contributing factors identified during the case reviews, and identify social and upstream factors that impact health and birth outcomes. There are currently 37 MMRC members, including a parent advocate, a tribal representative, MDHHS staff representing various disciplines, community health workers, nurses, certified nurse midwives and physicians from different regions of the state. In addition, the MMRC now requires its members to complete an annual MDHHS bias and equity training. In 2021, MMRC members were required to complete the two-part, on-demand training mentioned above, "Unconscious Bias: One Part of a Bigger Problem." Members also had to respond to questions related to the training as proof of completing the virtual training course.

Oral Health – Women (FY 2021 Annual Report)

In FY 2021, The Michigan Oral Health Program (OHP) worked diligently amongst many challenges to improve oral health awareness and to create an oral health delivery system that provides access through multiple avenues. Like many other programs, the COVID-19 epidemic continues to be a barrier for programmatic activities, as well as the population and projects the perinatal oral health initiative serves. Clinics continue to be inundated with COVID-19 concerns, which in some cases has caused oral health to be a lower priority. The risk of transmission has also caused many services to be delayed and has continued to negatively impact educational activities. Despite these challenges, the OHP has worked to provide comprehensive programming and technical assistance to its partners across the state and has maintained its successful perinatal oral health initiative.

NPM 13 plays a vital role in multiple state and national partnerships, specifically the Michigan Initiative for Maternal and Infant Oral Health (MIMIOH), the Partnership for Integrating Oral Health into Primary Care (PIOHCPC), and the Network for Oral Health Integration (NOHI). The OHP works with these programs to improve oral health for pregnant women, as well as children through technical support and assistance. The OHP maintains working relationships with WIC, Head Start, advisory committees, local coalitions, and refugee organizations to further promote and advise on issues within perinatal oral health. In partnership with stakeholders and program such as these, the OHP continued to see success in FY 2021 in educating professionals (with over 400 trained), sustainable data development, refugee health technical assistance, educational modules for clients (with over 22,500 new lessons completed), and new projects, which helped to serve the most vulnerable within Michigan's FQHC population.

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.

During FY 2021, the Perinatal Oral Health Action Plan continued to be implemented to support a better health status for women and girls. A main strategy continues to be the training and education of Michigan health professionals, particularly those who practice in and serve communities and women adversely impacted by inequities. The number of medical and dental professionals, who receive perinatal oral health education through MDHHS, is the ESM for this NPM. Despite continued significant COVID-19 related challenges in FY 2021, particularly in the logistics of providing training, the Perinatal Oral Health Program trained 439 health professionals in the medical and dental fields through lectures, webinars, conference calls and other training events. By continuing to shift to virtual education, the OHP was able to continue meeting objectives. This number does not include the hundreds of additional professionals trained by partners, coalitions, and other Michigan entities. Events combined a mix of traditional and virtual trainings, with new notable partners including WIC organizations, public health students and refugee organizations.

The second strategy was to update and disseminate Perinatal Oral Health Guidelines and educational materials that feature health equity. Guidelines were updated as needed and disseminated through virtual and printed means. A

partnership to teach a lecture on perinatal oral health to Nurse Midwifery and Nurse Practitioner students continued in FY 2021 with the University of Michigan School of Nursing, with lectures occurring each semester as part of the curriculum featuring an educational health equity component entitled “Why is Grace in the Emergency Room.” The interactive exercise focuses on socioeconomic barriers and helps students integrate a health equity lens into their learning. Lectures returned to an in-person format in the fiscal year with evaluations remaining at 99% satisfaction. To date, over 400 advanced practice nurses have been trained on perinatal and infant oral health and oral health equity issues and state guidelines.

In FY 2021, one-time Title V funding became available to develop a small project within selected Federally Qualified Health Centers (FQHCs) surrounding educational materials and basic oral health supplies. Selected FQHCs were the remaining participants in the MIMIOH project who had chosen, despite staffing shortages caused in part by COVID-19, to continue to keep a hygienist embedded within their OBGYN clinics to serve the most vulnerable and disadvantaged. The \$10,000 in funding provided multilingual educational materials, toothbrushes, finger brushes, toothpaste, brochures, and varnish that served over 700 pregnant or young child FQHC patients seen by the hygienist in the fiscal year. Upon learning they would be receiving these much-needed materials, one clinic staff said “It is so nice to have everything I need at my fingertips. You don't know how much this means to me. Thank you, thank you, thank you. I love the finger brushes and the toddler brushes for the babies, perfect! We needed them so much, have been out forever.”

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

The first strategy was to develop a plan from the PRAMS racial and ethnic healthcare data to address oral health and health equity issues. In FY2021, the OHP focused on building an interactive data dashboard for health professionals, which demonstrated inequities in perinatal oral health utilization in Michigan. The dashboard will go public in FY 2022. This will permit Medicaid utilization data by race, as well as region, in Michigan to be tracked. Once this data becomes available, the Perinatal Oral Health Program will collaborate with regional groups to share specific trends for populations and promote quality improvement efforts.

In FY 2021, the MDHHS Oral Health Program continued to provide education to women via the Perinatal Oral Health WIC Module with over 22,579 individual lessons completed in the reporting period. This module, Give You and Your Baby A Lifetime of Healthy Teeth, found at wichealth.org, has served as a training mechanism to mothers across Michigan and beyond. [Wichealth.org](http://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 targets a diverse range of women who may experience health disparities. This strategy continues to be evaluated through the number of women who complete the perinatal oral health module. Since its inception, over 69,591 lessons have been completed nationally. Developing the modules in other languages or being able to provide the interpretative services continues to help with addressing language barriers of other populations.

A third strategy to achieve this objective was to collaborate with diverse partners to facilitate alternative models of care for integrating oral health into pregnancy. In FY 2021, the PIOHCPC project administered by Georgetown and funded by HRSA ended its three-year period. Michigan participated with one site (Ingham County) focusing primarily on pediatrics but also on pregnant women. The project utilized the same hygienist, who was already integrated within the OBGYN clinic, to place them into the pediatric clinic at the local participating health center. They provided education and referrals, serving entire family units. Although COVID-19 suspended services for much of 2020, a

community health worker was hired in April 2021 to provide follow-up on referrals and case management services. This helped ensure that oral health referrals resulted in oral health visits (i.e., closing the loop). By the end of the project period, between 84 to 124 pregnant women were being seen and provided with education or referrals each month. This further demonstrated the feasibility and value of an onsite dental professional in safety net settings.

In FY 2021, the MIMIOH project also continued, with COVID-19 related setbacks. Many FQHCs have had severe dental staffing shortages and multiple sites were forced to suspend service resulting in only five sites remain involved in the project. This was unfortunate since the results of an extensive evaluation by the University of Michigan demonstrated that pregnant people who received perinatal care at a participating site had nearly double the rate in dental services as those receiving prenatal care at another (non-FQHC) site. In addition, participating sites nearly quadrupled the rate of care as compared to those with no prenatal care in dental services during their pregnancy. Despite the challenges faced, this project continues to be a model for other states looking to replicate and serves as a template for other possible medical-dental integration activities.

Intended Pregnancy (FY 2021 Annual Report)

In 2021, MDHHS focused on strategies to maintain access to reproductive health services, including long-acting reversible contraceptives (LARC); family planning services across the state; enhanced providers' skills to recognize and address bias and provide high-quality, client-centered care; gathered Michiganders' input on reproductive and sexual health (RSH) service needs; and improved the quality of pregnancy intention counseling. Title V funding helped to support access to reproductive health and contraception through local agencies with a focus on serving minors and young adults. Michigan's Family Planning network continued to use telehealth and curbside services to ensure access to contraception while limiting exposure to COVID-19 for staff and clients. While innovation has been utilized to maintain access, COVID-19 has adversely impacted Michigan's Family Planning Program. MDHHS relies heavily on its local public health system to deliver affordable reproductive health care services, which was integral to the COVID-19 vaccine rollout across the state and ongoing mitigation strategies, thus affecting service delivery capacity (e.g., staffing shortages, appointment scheduling/spacing) for other programs including family planning. Local agencies continue to report client hesitancy with in-person visits due to safety concerns, which has resulted in delayed routine care or no care at all. Similarly, MDHHS was unable to host its annual LARC clinical practicum due to COVID-19 health and safety guidelines.

While MDHHS was able to gather some input from Michiganders on their reproductive and sexual health (RSH) needs, COVID-19 impacted MDHHS's ability to develop meaningful relationships with strained community-based agencies. MDHHS was able to develop a youth-informed media campaign, which highlights affordable and confidential RSH services offered by Family Planning providers. The Family Planning Program also engages consumers by soliciting 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. 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).

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.

The first strategy to achieve this objective is to support the provision of contraception to low-income, uninsured, and underinsured women in the Family Planning Program. Having access to a broad range of effective contraceptive methods allows each person who can get pregnant the opportunity to choose the method that is right for them to successfully delay or prevent pregnancy. In 2021, 74.8% of female (i.e., assigned at birth) 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 16.9% choosing LARC. The integration of approximately half of Family Planning and Sexually Transmitted Infection (STI) clinics has resulted in more comprehensive services for clients, while concurrently increasing the number of females (i.e., assigned at birth) aged 15 to 44 who report external condoms as their primary method of contraception. In FY 2021, MDHHS worked to maintain access to a broad range of contraception, while balancing individuals' contraceptive needs and preferences. Preserving access to a broad range of contraception, particularly for low-income and un/underinsured individuals who often face multiple barriers (e.g., financial, transportation, paid leave, etc.) to contraceptive care (which was exacerbated by COVID-19) is critical to making informed decisions about reproductive health. In FY 2021, MDHHS's Family Planning Program served 19,028 female (i.e., assigned at birth) clients, along with 60% low-income ($\leq 100\%$ federal poverty level (FPL)) clients and 31% uninsured clients.

A second planned strategy was to host a clinical practicum on the insertion and removal of long-acting reversible contraceptives (LARC) for Title X and other health care providers. To increase Title X provider professional development, MDHHS's Family Planning Program typically offers at least one clinical practicum on LARC in conjunction with its annual conference, the Family Planning Update. In accordance with MDHHS Executive Order regarding indoor gathering limits (i.e., 50% capacity for indoor events), MDHHS's Family Planning Program's Conference Planning Committee elected to move its annual conference from an in-person to a virtual event in September 2021. Therefore, the Planning Committee was not able to offer an in-person LARC clinical practicum (either stand-alone or in conjunction with the virtual conference) and instead promoted virtual LARC training opportunities provided by the National Clinical Training Center for Family Planning and LARC manufacturers. While virtual LARC training opportunities were promoted among Title X providers, there was low uptake due to the absence of the traditional hands-on component, which is most helpful for boosting provider confidence with LARC insertion and removal. MDHHS anticipates being able to offer a stand-alone regional LARC clinical practicum in spring of 2022 and one in conjunction with its in-person 2022 Family Planning Update conference in the fall.

Piloting telehealth services across Family Planning's provider network was a third strategy to support the objective. Providing telehealth services can help ensure access to birth control while limiting exposure to COVID-19. Telehealth visits are delivered directly to clients by telephone, video, or messaging technologies. In 2020, approximately 8% of all family planning encounters were virtual. Telephone has been the predominant mode because it can be implemented immediately, which is vital during a public health emergency. Telephone also supported client access to reproductive health care by removing the need to have high-speed internet access and a smartphone. To support telehealth service delivery across Family Planning's provider network, MDHHS staff presented on telehealth as a key strategy for service delivery at MDHHS's 2021 Maternal & Infant Health Summit and Family Planning Update conference; provided technical assistance, as needed, to local agencies; and promoted the National Family Planning & Reproductive Health Association's suite of telehealth resources. Additionally, Family Planning providers interested in enhancing their telehealth capabilities were able to use Title X supplemental funds (i.e., \$19,000) to support these efforts, and most recently MDHHS submitted a grant proposal with eight local agencies for Title X telehealth enhancement and expansion funds to make telehealth visits accessible and high-quality for all clients by building upon lessons learned from the pandemic.

In 2021, MDHHS had planned to facilitate regional learning sessions with people of reproductive age across the state to learn more about their reproductive and sexual health needs. While MDHHS was able to pilot a learning session with a Family Planning provider, developing meaningful relationships with community-based agencies outside of traditional partnerships proved to be challenging given the COVID-19 pandemic. MDHHS worked to recruit community-based organizations for listening sessions with state/local partners and large collaborative listservs and garnered few responses. Building authentic relationships takes time and given local agencies were juggling staffing shortages, program adaptations, and retaining participants for routine service delivery, the timing

was not right. Additionally, conducting virtual listening sessions was a barrier for some community-based agencies and their participants. MDHHS will utilize the consumer input gathered from its pilot for service delivery improvements and will decide in 2022 whether future listening sessions will be pursued.

A fifth strategy was to hold an implicit bias training for health care professionals. 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. To support high-quality, client-centered service delivery MDHHS utilized its 2021 virtual Family Planning Update conference, which was attended by 160 providers. Three keynote sessions focused on highlighting and reducing provider bias within the clinical encounter were offered. The first keynote, Using Reproductive Justice and Justice-Centered Approaches in Family Power Building Services was delivered by Dr. Joia Crear-Perry. The second keynote, Best Practices for LGBTQ+ Inclusive and Affirming Care in Title X Settings was delivered by Dr. Elizabeth Schroeder. The last keynote, What We Learned from COVID: The Good, the Bad, and the Ugly, was delivered by Dr. Brent Davidson. Over 92% of conference evaluation respondents indicated all three keynote presenters were knowledgeable and their teaching methods were effective.

The final strategy was to implement a statewide outreach campaign designed to reach low-income and uninsured individuals of reproductive age. To promote Michigan's Title X network, MDHHS partnered with the Michigan Organization on Adolescent Sexual Health (MOASH) to develop an outreach and awareness campaign informed by individuals aged 15 to 21 years old. MOASH facilitated three focus groups to solicit consumer input (n=22) on campaign creative, images, and messaging to ensure inclusive language that resonates with young people, African American and Latinx, and LGBTQ populations. Of the young people who participated in the focus groups, 41% identified as Black, Indigenous, and People of Color (BIPOC) with 82% identifying as LGBTQ+. Brogan marketing firm used the results to develop creative and conduct the media buys using multiple modalities such as audio streaming (e.g., Spotify), Digital (e.g., mobile web/Hispanic mobile), and Google Adwords. This statewide media outreach campaign was implemented from February 2021 thru October 2021. Based on Google Analytics, MDHHS's Family Planning website traffic increased significantly during the campaign period with 47,027 pageviews. The click-thru-rate for the Google Adwords search exceeded industry standards (5.65% vs. 3.0%) and drove 14,362 web sessions.

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.

The first strategy to achieve this objective was to support minors' and young adults' (i.e., 18 to 21 years old) access to publicly funded contraception. In Michigan, sexually active adolescents encounter multiple barriers to accessing affordable contraception. An estimated 171,780 sexually active women <20 years old need publicly supported contraception (Guttmacher Institute, 2014). In 2019, 65% 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 14% reported not using any methods to prevent pregnancy at last intercourse (Michigan YRBS, 2019). To support progress toward this objective, 34% or 7,206 of Family Planning clients were teens (i.e., <15 to 19 years old) in 2021, with 77% of female clients aged 15 to 19 years old choosing a most or moderately effective method and 18.2% choosing LARC. The best contraceptive option is one that will be used consistently and correctly. Approximately 20% of female clients aged 15 to 19 years old chose an external condom as their primary method, the only method that provides dual protection against pregnancy and STIs.

A second strategy was to facilitate regional learning sessions with minors and young adults. To inform Family Planning service delivery, in 2021 MDHHS partnered with MOASH to conduct three virtual listening sessions with

young people who participate in MOASH facilitated youth advisory councils. Youth participants lived across the state and were as diverse as Michigan's population. A key theme for participants was shame and stigma when seeking birth control and STI testing services and distrust with the health care system, due to past and present coercive and discriminatory practices with transgender/non-binary participants and youth with a disability noting specific examples. Several access barriers to reproductive health care services were also noted by participants. Physical barriers indicated were transportation (i.e., limited options, minor especially) and clinic hours (i.e., not ideal for adolescent schedules). Emotional and psychological barriers included confidentiality concerns and provider mistrust, including provider bias and dismissiveness of youth concerns. Financial barriers included confusion on cost and insurance. Language barriers included limited availability of interpretation services and native language speaking staff. Youth participants indicated their ideal clinic experience would be better preparation before their appointment (e.g., services to be provided, confidentiality, cost, etc.), online scheduling, easily accessible clinic app or website, public transportation options or resources to make a transportation plan, insurance explained prior to the visit, positive interactions with staff, and integration with other health services. The Family Planning Program will use the findings from these listening sessions to make service delivery improvements in 2022-2023.

The third strategy to support this objective was to convene a continuing education opportunity for 100 adolescent and health care professionals. To support high-quality, client-centered reproductive health care service delivery to adolescents, a Family Planning staff member participates on MDHHS's Child, Adolescent and School Health (CASH) Conference Planning Committee. During 2021, the CASH Conference offered a spring webinar series on child and adolescent health topics. Cherisse Scott, Founder and CEO of SisterReach, delivered the virtual webinar Reproductive Justice & Health Equity for Young People on March 31, 2021, to 93 adolescent and health care professionals. The webinar provided attendees an opportunity to learn about reproductive justice; the intersections of reproductive and sexual health delivery, health equity, and racial bias and the impact of curating an environment of safety, inclusion, and youth-centered advocacy; and best practices and recommendations to achieve health and equity by applying a reproductive justice lens to their work. Webinar evaluations indicated 90% of respondents (n=56) felt they had better tools to address health equity among young people and 98% reported they had a better understanding of reproductive justice because of attending the webinar. Additionally, the Family Planning Program sponsored the closing keynote, Calling in the Calling Out Culture, delivered by Loretta Ross at the 2021 virtual CASH Conference (October 18-20) where 150 to 200 adolescent and health care professionals were in attendance. The keynote presentation was recorded and shared widely among maternal and infant health networks.

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. According to the 2019 Michigan BRFSS, 59.9% 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. To support progress toward Objective C, MDHHS's Family Planning Program discussed reproductive life planning with 19,028 females (i.e., assigned at birth), falling short of its service delivery estimate of 47,000.

A second strategy to achieve this objective was to support the implementation of client-centered reproductive life planning across MDHHS-funded Home Visiting Programs. The Family Planning Program promoted resources on assessing pregnancy intention and client-centered contraceptive counseling using Parenthood/Pregnancy Attitude, Timing, and How important is pregnancy prevention approach (PATH). 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. Technical assistance was provided to MDHHS staff and local Maternal & Infant Health Program (MIHP) providers. The Family Planning Program is slated to present at MIHP's September 2022 Community of Practice series for home visitors.

The third strategy was to engage fathers and males to support individual and familial management of reproductive and preventive health needs. 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 which in turn has the potential to foster healthier relationships. MDHHS staff across the Division of Maternal & Infant Health and the Division of Child & Adolescent Health met monthly during 2021 to discuss internal and external systemic barriers, best practice strategies for father and male engagement, and program updates. With the uncertainty of the COVID-19 pandemic, MDHHS staff and local agencies were reluctant to pilot new initiatives given that routine program operations were adapted or halted and program engagement was focused on maintaining established clients or participants. Outreach and engagement are priorities for MDHHS and local agencies in 2022, and as such opportunities for collaboration may be revisited once programs have stabilized.

Women/Maternal Health - Application Year

Low-risk Cesarean Delivery (FY 2023 Application)

Percent of cesarean deliveries among low-risk births (NPM 2) was selected as a measure for the Women/Maternal Health domain to address the state priority need of developing a proactive and responsive health system that equitably meets the needs of all populations and eliminating barriers.

For some medical indications, cesarean births can be a life-saving measure. However, for some 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 2014-2018, 14.8% of pregnancy-related deaths were due to hemorrhage and 13.1% were due to infection or sepsis. Overall, 62.3% of pregnancy-related deaths in Michigan from 2014-2018 were deemed preventable¹. In 2020, 28.7% of all live births^[1] in Michigan were low-risk cesarean deliveries. The 2020 percentage of low-risk cesarean deliveries (28.7%) is above both the Healthy People 2030 goal of 23.6% and the 2020 average for the United States (US) which was 25.9%^[2].

As with other birth outcomes, racial disparities are evident in low-risk cesarean births. In 2020, of all live births, 30.9% of black pregnant people had low-risk cesarean deliveries, as did 32.1% of American Indian pregnant people and 31.3% Asian/Pacific Islander women, compared to 28.0% of white pregnant people^{1,[3]}. In addition to the data portraying disparities in low-risk cesarean deliveries, anecdotal qualitative data suggest that black and brown pregnant people may feel coerced into delivering via cesarean section. Research has 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, postpartum depression, and anxiety. The Michigan Maternal Mortality Surveillance Review 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; and integrating a health equity framework to address systemic inequities. The ESM and additional strategies for this NPM will continue to focus on reducing 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 efforts, authentic engagement with families and community members, convening regular meetings with diverse, cross-sector stakeholders, conducting systems change work and implementing 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. Title V funding has directly supported the RPQCs and/or corresponding MCH initiatives.

The COVID-19 pandemic has impacted hospitals across Michigan, including birthing hospitals. Increasing alignment between the RPQCs and the Michigan chapter of the Alliance for Innovation on Maternal Health (AIM) not only encourages birthing hospital participation and accountability with the AIM safety bundles, but also addresses the disparate outcomes in low-risk cesarean births by bringing awareness of the issue to Collaborative members, as well as offering a platform for garnering feedback, lived experiences and other anecdotal qualitative data.

Objective A: By 2025, reduce the number of cesarean deliveries among all Michigan low-risk births to 27%.

Michigan Vital Records data will be used to track the number of low-risk cesarean deliveries and three strategies will be used to address this objective. The first strategy is to provide information and data related to this NPM with the RPQCs. Increasing the knowledge of the RPQCs related to rates of low-risk cesarean delivery and associated poor outcomes 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, including nonpharmacological, that can be implemented to address the growing trend of utilizing cesarean delivery for low-risk births.

The second strategy includes continual updates to RPQC membership by regional representatives related to the Obstetrics Initiative (OBI) and the Alliance for Innovation on 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 an asset in providing education, related to data and implementation, and technical assistance. In addition to assistance with implementation, RPQCs can provide bias training opportunities for providers that are tailored to their region. Michigan's disparities in low-risk cesarean delivery rates can be attributed to biases and systemic racism. The intent is that as more providers are routinely trained in bias topics, they will become more aware of their personal biases and work toward preventing biases from affecting clinical judgement, especially when faced with decisions related to low-risk cesarean deliveries. Thus, it is expected that this strategy will help drive down the disparity observed with this measure.

Continued partnership with 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 (MDHHS) are working directly with MI AIM, including the Michigan Title V Director who actively participates on the MI AIM Executive and Steering Teams. Currently, 62 birthing hospitals in Michigan have received a designation status award (i.e., bronze, silver, etc.), which corresponds to a certain level of participation in MI AIM. MDHHS will continue to work with AIM members to support and encourage all 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, American Indian, and Asian/Pacific Islander pregnant people to 28%, 29.3% and 28.4% respectively.

As discussed above, Michigan has disparities in the number of low-risk cesarean delivery by race. To achieve parity while reducing low-risk cesarean births across all racial/ethnic groups, Michigan's goal is to achieve by 2025 a 10% relative decline in low-risk cesarean rates for African American, American Indian and Asian/Pacific Islander pregnant people, which equates to 28%, 29.3% and 28.4%, respectively. Four strategies will be used 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. While each hospital is responsible for providing the training to their respective staff, the MDHHS Division of Maternal & Infant Health webpage houses numerous resources and trainings that hospitals can utilize. 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 pregnant people of all races and ethnicities.

Encouraging and supporting ongoing bias and equity training of MI AIM Steering and Operational committee members is the second 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 is to ensure these leaders are engaged and knowledgeable in the arena of health equity, including the root causes of

disparate outcomes, to encourage growth of knowledge and policy and culture change within their respective health care organizations, as well as broadly throughout hospitals participating in MI AIM.

The third strategy is to support the efforts of the Mother Infant Health (MIH) Health Equity Action Committee, which is focused on developing action plans, deliverable outcomes and improvements in the priority areas highlighted in the Mother Infant Health and Equity Improvement Plan (MIHEIP). The Health Equity Action Committee is an opportunity for families and community members to participate in actively creating change. Current policy recommendations drafted by this Action Committee include: 1) extend Medicaid postpartum coverage and expand eligibility; 2) adopt and ensure culturally responsive practices in data and evaluation; and 3) create external accountability/ombudsman process and infrastructure. These recommendations have been shared with MDHHS leadership and the other Action Committees. The Health Equity Action Committee is expected to periodically meet throughout FY 2023 to revisit these recommendations, discuss any new concerns and draft any additional recommendations, as appropriate.

The fourth strategy focuses on providing ongoing education and training for Michigan Maternal Mortality Review Committee (MMRC) members. This committee is comprised of providers, epidemiologists, other content experts and most importantly family and community members, who review Michigan's annual maternal deaths. The MMRC was recently restructured to assure diverse membership and equitable, regional member distribution. 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. The MMRC also releases 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. Recommendations are reviewed quarterly, with revisions and additions based on findings of each quarter's case reviews. To ensure unconscious bias and health equity remain at the forefront of this committee when reviewing cases and creating recommendations, committee members are required to complete annual bias training for continued participation.

Oral Health – Women (FY 2023 Application)

The Title V needs assessment identified need among Michigan's MCH population related to gaps in dental services for certain populations including young children and pregnant people. Focus group respondents identified 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 are housed in the Child and Adolescent Health Division 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 continues to partner with Medicaid in the new, enhanced dental benefit for pregnant people, which now includes coverage for services for one year postpartum.

In FY 2023, 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 Medicaid data indicate that disparities exist and were further exacerbated by the COVID-19 related dental shutdown in 2020. Currently, less than 1 in 5 pregnant people on Medicaid in Michigan received any dental care during their pregnancy. Less than 5% of pregnant people statewide

had any restorative care. In addition, significant racial inequalities persist. African American or Latino pregnant people continue to be less likely to have a dental visit than white pregnant people. Existing strategies that educate providers as well as new strategies that focus on alternative practice models and recent Medicaid enhancements will continue to be harnessed to address disparities. Recent mapping from the University of Michigan that shows racial and ethnic disparities by prosperity region will be shared with stakeholders in local communities and utilized for targeted interventions.

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

In FY 2023, the MDHHS Oral Health Program (OHP) 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. Due to COVID-19, some of these trainings may occur virtually, but the program has adapted to this modality and has systems in place to accommodate virtual trainings. 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. Current educational efforts are being evaluated at a 99% approval rating, with professional students indicating that this is the first time they have had comprehensive education surrounding perinatal oral health. In FY 2022, new educational efforts began at a new public health program (Central Michigan University) with a commitment to continue these perinatal oral health lectures into 2023. PRAMS and Medicaid data indicate that continued education efforts must also occur in the dental community surrounding pregnancy, as utilization rates remain low among pregnant women. FY 2023 will see a concerted effort with private practice dentists and Dental Associations to further target these providers. Data driven efforts will focus on health disparities and equity in specific Michigan regions.

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 health equity components including but not limited to disparities in access to care and cultural competency. A database of training records continues to be utilized, with the output defined as the number of medical and dental professionals trained by MDHHS. The Perinatal Oral Health Initiative will continue to encourage provider feedback and engagement regarding these trainings with the intention to shift to in-person trainings as allowable based on COVID-19.

Another strategy is dissemination of perinatal promotional and educational materials. 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 2023, the Perinatal Oral health Initiative will utilize resources in partnership with new perinatal materials such as a Michigan Initiative for Maternal and Infant Oral Health Tool Kit that is under development. This tool kit will be developed in partnership with the Michigan Primary Care Association and a state dental school and will serve as a guide for implementing interprofessional education initiatives within clinical settings. Other materials will focus on health equity, best practices, specific health disparities by region, and proposed recommendations to address health inequities and access to care issues with providers. MDHHS will continue to utilize nationally recognized American Academy of Pediatrics (AAP) materials that are co-branded with both agency logos.

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 as well as directly to pregnant people. 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. Material promotion has been a successful strategy and will continue in FY 2023. Due to COVID-19, efforts may focus on virtual methods of dissemination. Any new materials created will be reviewed with a health equity lens.

The final strategy will include the continuation of communication efforts for dental health providers surrounding changes in Medicaid benefits for pregnant people. MDHHS allotted funds to increase the adult dental Medicaid benefit for pregnant people 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 people with a dental visit. The number of pregnant people on Medicaid who have at least one dental encounter during the perinatal period is an ESM. Through a data use agreement and IRB with Child Health Evaluation and Research (CHEAR) Center at the University of Michigan) the oral health program will be able to obtain data as needed. CHEAR has access to the data warehouse and the technical ability to analyze the data. Medicaid utilization data that became available in FY 2022 will be crucial to measure the impact of the benefit and guide further educational efforts in FY 2023. This strategy aligns with other statewide efforts by focusing on data-driven solutions, addressing the need for comprehensive care, and reducing poor health outcomes.

Objective B: Increase the number of socioeconomically disadvantaged pregnant people receiving oral health care services.

In FY 2023, the OHP will continue to analyze PRAMS data and new Medicaid data to assess disparities in healthcare access by race and ethnicity. After being delayed by COVID-19, PRAMS data are now available. The data will be examined by geographic area which will help to determine targeted interventions and a new data dashboard will be continually updated to reflect perinatal oral health trends geographically. 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 and focus on engaging with specific communities across the state through local oral health coalitions. These coalitions are made of local professionals and community members, representing the populations that are being served. This strategy aligns with the statewide focus on data integration and population identification components.

In FY 2023, the Michigan Initiative for Maternal and Infant Oral Health (MIMIOH) will work to maintain participating sites and share results from its comprehensive evaluation. Its continued goal is to improve the oral health of mothers and children in underserved 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. This collaborative model of care also allows for feedback and engagement not only from providers but from the patients served. The feedback obtained from patients via conversations with the dental hygienist will continue to provide an important opportunity to create more culturally and linguistically appropriate educational materials and outreach strategies. FY 2023 will produce a comprehensive evaluation of the program that gives feedback and a community voice to program participants through participant surveys. Efforts will also be made to determine the feasibility of tracking the long-term impacts of the project by determining if dental care during pregnancy resulted in an increase in age 1 dental visits. Also included in the strategy to facilitate models of care to improve oral health service acquisition are new partnerships with refugee entities, with the OHP playing an active role in engaging not only refugee services agencies but also helping to plan alternative models of care for large numbers of Afghan nationals, including pregnant people, in 2023.

In FY 2023, the MDHHS Oral Health Program will continue to provide education to pregnant people 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](http://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 pregnant people completing lessons to receive their WIC benefits. Pregnant people 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 through comments and conversation upon module completion. By partnering with WIC, the Oral Health Program can target a diverse range of pregnant people who may experience health disparities. This strategy will continue to be evaluated through the number of pregnant people, who complete the perinatal oral health module. Since its inception, tens of thousands of 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 2023 Application)

The percent of people assigned female at birth, 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 Michiganders who can get pregnant deserve access to high-quality, client-centered care that is free from bias, racism, and coercion.

For most people, who can get pregnant, 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 individuals who can get pregnant 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 2023 objectives are concentrated on improving 1) contraceptive access and 2) quality of contraceptive care. 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 facilitating regional listening sessions, telehealth as a service delivery tool, supporting minors’ and young adults’ (i.e., 18 to 21 years old) access to publicly funded contraception, measuring the person-centeredness of contraceptive care, provider training on systemic racism and family planning, and applying a reproductive justice framework to program decision-making. 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 contraceptive 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 people who can get pregnant 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 person who can get pregnant is strongly associated with their risk of unintended pregnancy. Having access to a full range of effective contraceptive methods allows each person the opportunity to choose the method that is right for them to successfully delay or prevent pregnancy. In 2021, 75% of female (i.e., assigned at birth) 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 17% choosing LARC.

The first strategy—support the provision of contraception to low-income, uninsured, and underinsured people who can get pregnant in the Family Planning Program—will focus on providing client-centered counseling and a broad range of FDA-approved contraceptive methods to reproductive aged people who can get pregnant at no-cost or low-cost. A focus will be working to ensure that Michigan’s Family Planning network of 33 local agencies and 92 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 2023, MDHHS will monitor local agency provision of contraception through semi-annual Family Planning Annual Report (FPAR) submissions.

The second strategy— facilitate long-acting reversible contraceptive (LARC) training opportunities for Family Planning 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. 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 2023, MDHHS’s Family Planning Program will offer at least one clinical practicum, promoting it with local Family Planning providers and other safety-net providers (e.g., Medicaid Health Plan, Federally Qualified Health Centers). Additionally, MDHHS’s Family Planning Program can assist local providers by connecting them with pharmaceutical company representatives for individual clinic and/or regional trainings.

The third strategy— support the continued integration of telehealth as a service delivery tool across Family Planning’s network—will focus on continuing to scale up telehealth among Michigan’s Family Planning providers, while working to mitigate the unique challenges telehealth presents for ensuring equitable access to care. In FY 2023, MDHHS will focus on working with a cohort of eight local Family Planning agencies to build upon their lessons learned from providing telehealth services during the pandemic by expanding and enhancing telehealth infrastructure and removing significant technology barriers clients experience to accessing reproductive health services via telehealth. MDHHS will utilize its annual conference to disseminate project successes, innovative service delivery strategies, equity advancements, and lessons learned with its provider network.

The fourth strategy—facilitate regional learning sessions with people of reproductive age who can get pregnant—will focus on gathering the lived experiences of adults who can get pregnant navigating their sexual and reproductive health needs to inform health education, clinical, and case management services. Achieving equitable health outcomes begins with incorporating the knowledge and expertise of individuals who can become pregnant into the programs designed to serve them. In FY 2023, MDHHS will develop the listening session protocol, coordinate session logistics, and summarize session findings. MDHHS will disseminate key findings to state and local partners and stakeholders.

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 enhances future reproductive health. An estimated 171,780 sexually active females (i.e., assigned at birth) <20 years old need publicly supported contraception (Guttmacher Institute, 2014). In 2019, 65% 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 14% reported not using any methods to prevent pregnancy at last intercourse (Michigan YRBS, 2019). The teen birth rate for 15- to 19-year-old females (i.e., assigned at birth) was 15.1 per 1,000 in 2019, which is a historic low. However, premature birth and low-birthweight babies to 15- to 19-year-old birthing persons 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 2020, 34% or 7,206 of Family Planning clients were teens (i.e., <15 to 19 years old), with 77% of female (i.e., assigned at birth) clients aged 15 to 19 years old choosing a most or moderately effective method and 18% choosing LARC. The best contraceptive option is one that will be used consistently and correctly. Approximately 20% of female clients aged 15 to 19 years old chose an external condom as their primary method in 2020, the only method that provides dual protection against pregnancy and STIs.

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. In FY 2023, MDHHS will monitor local Family Planning providers' provision of contraception 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 2023, MDHHS will develop the 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—obtain youth input on Family Planning's website content—will focus on updating Family Planning's website to be more youth-friendly in content and visual appeal. Adolescents deserve to know their rights regarding accessing sexual and reproductive health services in Michigan, medically accurate information about contraceptive and barrier methods, and what to expect at a Family Planning clinic visit. In FY 2023, MDHHS will work with the Michigan Organization on Adolescent Sexual Health (MOASH) youth advisory councils to review current website content, suggest website enhancements for content and visual appeal, and review revised content and graphics.

Objective C: Assess client-centeredness of contraceptive counseling in the Family Planning Program.

Research in family planning has demonstrated that contraceptive counseling has an influence on a client's family planning outcomes. The clinical encounter provides an opportunity to equip Family Planning clients with quality contraceptive services and counseling for informed decision making. It also has the potential to improve the experiences of clients seeking Family Planning services, when historical and contextual barriers to care which

impact disparities are considered. Provision or access to contraception is only one aspect of quality. Given the historical and present-day context of reproductive coercion and oppression experienced by Black, Indigenous, and People of Color, low-income, and incarcerated persons in the United States, there is risk of incentivizing inappropriate pressure to provide certain methods to clients when the sole focus of contraceptive quality is on access to most or moderately effective contraceptive methods. Person-centered contraceptive counseling is an important mechanism for contraceptive access and evaluates the domains of interpersonal connection, adequate information, and decision support between the provider and client. Intentionally assessing clients' contraceptive counseling experience affords the Family Planning Program the opportunity to measure client-centeredness and implement quality improvement strategies to improve the client experience, as needed.

The first strategy—include the person-centered contraceptive counseling (PCCC) measure on Family Planning's annual statewide consumer survey—will focus on better understanding the quality of contraceptive care Family Planning clients receive from their provider such as interpersonal connection, adequate information, and decision support. Following a visit at which they received contraceptive counseling, clients will be asked to complete the survey before leaving the clinic. 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. In FY 2023, MDHHS will monitor local agency performance on the PCCC measure to observe patient experience, inform quality improvement efforts, and measure changes in patient experience over time.

The second strategy—convene at least one training for 50 health care professionals on systemic racism and reproductive health—will focus on how historical and present-day systemic racism has shaped access, provider interactions, and quality of reproductive health care for Black, Indigenous, and People of Color within the United States. To achieve equitable reproductive health outcomes, providers must understand the role systemic racism plays in creating and sustaining inequities in clinical settings and systems. In FY2023, MDHHS will coordinate training, event marketing, logistics, and evaluation.

The third strategy—apply a reproductive justice framework within Family Planning and related maternal and infant health projects—will focus on continuing to identify program and project opportunities where policies, practices, and performance metrics can be adapted to better align with the reproductive justice framework, which is rooted in maintaining bodily autonomy, the right to have or not to have children, and the right to parent a child or children in a safe and healthy environment. Applying a reproductive justice framework centers the voices and concerns of women of color, which have been historically ignored within the reproductive health and rights frameworks. In FY 2023, MDHHS will use listening session findings, guidance from leading experts in the field (e.g., Sonya Borrero), and lessons learned from other state health departments to identify internal opportunities. MDHHS will vet identified opportunities with leadership and community partners prior to implementation.

[¹] Michigan Resident Live Birth Files; MDHHS Division of Vital Records and Health Statistics. Maternal and Infant Health program staff use Michigan Vital Records data more regularly than NVSS data, as the Michigan data are accessible on a more immediate and regular basis.

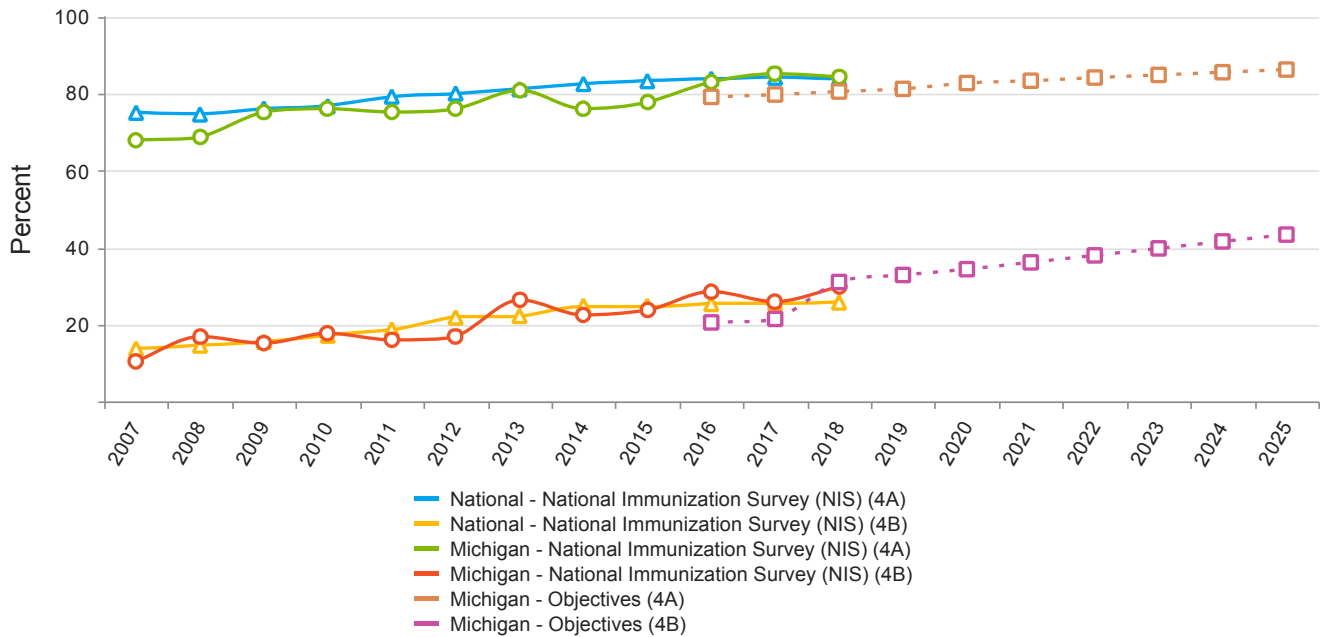
[²] National Vital Statistics Report, Volume 70, Number 17. Birth: Final Data for 2020.

[³] Michigan is increasingly adopting a health equity framework for MCH outcomes. Utilizing only 1-2 years of race-stratified data from NVSS reduced opportunities to regularly review how these rates were changing for Women of Color and White mothers in Michigan; therefore, Michigan Vital Records data were utilized.

Perinatal/Infant Health

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)					
	2017	2018	2019	2020	2021
Annual Objective	79.7	80.5	81.2	82.7	83.3
Annual Indicator	75.9	77.7	83.0	85.3	84.4
Numerator	86,976	88,168	86,380	88,053	90,193
Denominator	114,556	113,401	104,098	103,283	106,835
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2014	2015	2016	2017	2018

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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)					
	2017	2018	2019	2020	2021
Annual Objective	21.5	31.1	32.9	34.4	36.2
Annual Indicator	22.6	23.9	28.4	25.8	29.8
Numerator	25,415	25,921	28,764	25,629	30,994
Denominator	112,351	108,464	101,206	99,495	103,862
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2014	2015	2016	2017	2018

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	38.0	39.8	41.6	43.4

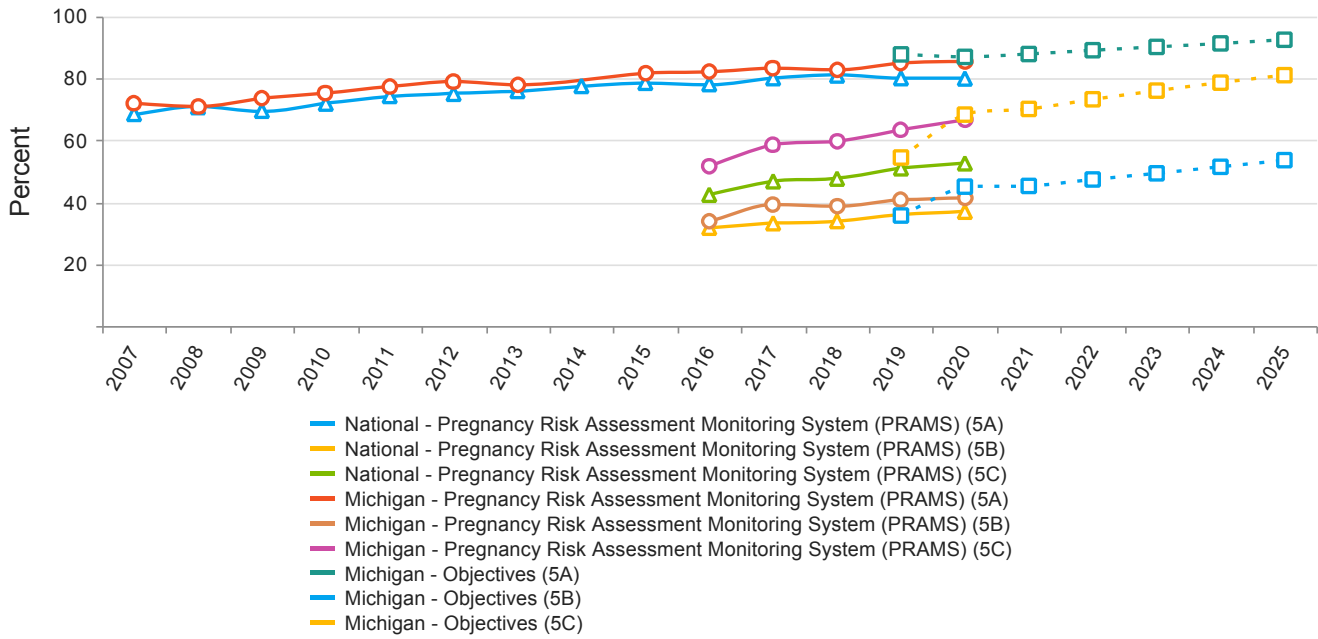
Evidence-Based or –Informed Strategy Measures

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

Measure Status:				Active	
State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective	17	20	23	26	29
Annual Indicator	14.5	19.5	18.8	18.8	16.3
Numerator	12	16	15	15	13
Denominator	83	82	80	80	80
Data Source	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	18.0	19.0	20.0	21.0

**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	2020	2021
Annual Objective			87.6	86.8	87.7
Annual Indicator	81.4	83.3	82.5	84.9	85.4
Numerator	86,585	87,247	85,511	85,912	83,784
Denominator	106,318	104,718	103,596	101,194	98,121
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2017	2018	2019	2020

State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective			87.6	86.8	87.7
Annual Indicator	81.9	83.5	82.5	84.9	
Numerator	87,760	87,247	85,511	85,912	
Denominator	107,091	104,517	103,596	101,194	
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	
Data Source Year	2016	2017	2018	2019	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	88.9	90.0	91.1	92.3

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	2020	2021
Annual Objective		35.7	45	45.2
Annual Indicator	39.2	38.9	40.6	41.5
Numerator	39,142	38,781	39,451	38,620
Denominator	99,861	99,669	97,218	92,994
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019	2020

State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective			35.7	45	45.2
Annual Indicator	74.7	34	39.2	38.9	
Numerator	77,520	34,751	39,142	38,781	
Denominator	103,790	102,182	99,861	99,669	
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	
Data Source Year	2015	2016	2017	2018	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	47.3	49.3	51.4	53.5

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	2020	2021
Annual Objective		54.4	68.2	70
Annual Indicator	58.3	59.8	63.1	66.7
Numerator	58,277	59,314	61,216	62,663
Denominator	99,994	99,167	96,949	93,957
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019	2020

State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective			54.4	68.2	70
Annual Indicator	74.6	51.8	58.3	59.8	
Numerator	78,063	52,803	58,277	59,314	
Denominator	104,629	101,994	99,994	99,167	
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	
Data Source Year	2015	2016	2017	2018	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	73.1	75.9	78.5	80.9

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	2020	2021
Annual Objective			85	84	83
Annual Indicator			83	83	78
Numerator					
Denominator					
Data Source			Maternal Infant Health Program (MIHP) staff	Maternal Infant Health Program (MIHP) staff	Maternal Infant Health Program (MIHP) staff
Data Source Year			2019	2020	2021
Provisional or Final ?			Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	83.0	83.0	83.0	83.0

ESM 5.2 - Increase the number of agencies that receive technical assistance and support with implementing or revising/updating a safe sleep policy/protocol

Measure Status:		Active		
State Provided Data				
	2019	2020	2021	
Annual Objective			10	
Annual Indicator			1	
Numerator				
Denominator				
Data Source			Infant Safe Sleep Program	
Data Source Year			2021	
Provisional or Final ?			Final	

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

ESM 5.3 - Increase the number of hospitals that receive technical assistance and support with implementing or revising/updating a safe sleep policy/protocol

Measure Status:		Active		
State Provided Data				
	2019	2020	2021	
Annual Objective			2	
Annual Indicator			2	
Numerator				
Denominator				
Data Source			Infant Safe Sleep Program	
Data Source Year			FY2021	
Provisional or Final ?			Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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) Require breastfeeding education of MDHHS Maternal Infant Health staff, which includes recognizing systemic racism as a root cause of breastfeeding inequities A2) Support and promote increased access to breastfeeding support professionals and peer counseling services in programs serving families A3) Increase the percent of Baby Friendly Hospitals in Michigan from 16% to 18%

B1) Increase training opportunities to improve the number, availability, opportunities for professional advancement, and racial and cultural diversity of breastfeeding professionals B2) Normalize and promote culturally congruent and responsive breastfeeding messages for MDHHS and breastfeeding supporter use B3) Promote resources, created by BIPOC-led community organizations, that address the most common breastfeeding barriers

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 - 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 from 84.9% in 2019 to 92.3% by 2025

B) Increase the percent of infants put to sleep on a separate approved sleep surface from 40.6% in 2019 to 53.5% by 2025

C) Increase the percent of infants placed to sleep without soft objects or loose bedding from 63.1% in 2019 to 80.9% 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) Develop and share tools with providers, staff, and families regarding client/patient centered conversations about safe sleep

A4, B4, C4, D4) Provide professionals and families with culturally congruent guidance on protective factors (i.e., smoking cessation, breastfeeding, immunizations) and evidence-based programs (i.e., community-based doula support, home visiting) to enhance the overall health and well-being of moms and babies

A5, B5, C5, D5) 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 receive technical assistance and support with implementing or revising/updating a safe sleep policy/protocol Active

ESM 5.3 - Increase the number of hospitals that receive technical assistance and support with implementing or revising/updating a safe sleep policy/protocol 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 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

Perinatal/Infant Health - Annual Report

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 Section and Perinatal and Infant Health Section within DMIH oversee many programs including the Regional Perinatal Quality Collaboratives, Maternal Infant Health Program (MIHP), Infant Safe Sleep, Breastfeeding, Fetal Infant Mortality Review, Safe Delivery of Newborns, 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 safe sleep, breastfeeding, prenatal care outreach, PRAMS, and infant and maternal mortality reduction. MCH program staff also support Regional Perinatal Quality Collaboratives (RPQCs) that use quality improvement methods to test strategies for improving maternal and infant health. Title V funding is also used as a gap-filling funding source for RPQCs. 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, LHDs expended Title V funds in two NPMs and Local Performance Measures (LPMs) in FY 2021. Breastfeeding (NPM 4) activities among 18 LHDs included breastfeeding support through groups, home visits and/or telehealth visits, lactation consultants and phone consultations; virtual staff development; and participation in virtual community breastfeeding coalition meetings. One LHD reported that it was difficult to build public interest in breastfeeding media campaigns and the pandemic dominated the media. Ten LHDs addressed infant safe sleep (NPM 5) through education in a variety of creative, socially distanced ways and distributed pack-n-plays to families with an assessed need. COVID-19 safety precautions continued to cause disruptions in agencies' ability to do in-person visits and in-person services at provider offices. LPM activities included FIMR team processes, car seat safety, and epidemiology surveillance work for birth outcomes/infant mortality reduction.

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 (MDHHS) in 2020. A similar trend has been documented nationwide. However, the risk more than doubles to 14.0 per 1,000 births among non-Hispanic Black babies and is substantially greater (10.9 per 1,000 births) for babies born to mothers who are under 20 years 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 remained constant at 13.5%, but the number jumped to 16.4% in 2018, then declined to 14.8% in 2019 (Michigan PRAMS).

Breastfeeding (FY 2021 Annual Report)

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, including significant benefits to the mental health of both mothers and babies. For infants, breastfeeding can reduce risk of asthma, obesity, SIDS, diabetes, ear infections and some respiratory diseases. For mothers, breastfeeding can reduce feelings of anxiety and postnatal depression, reduce post-partum hemorrhage, and may decrease the likelihood of

developing 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. The COVID-19 pandemic has highlighted the need to ensure that emergency preparedness plans support access to human milk especially in Black, Indigenous, and People of Color (BIPOC) communities that have been disproportionately impacted by COVID-19. MDHHS will work to expand collaboration with BIPOC led organizations and communities that lead in addressing this health equity work, especially in relation to dismantling barriers to breastfeeding.

According to the National Immunization Survey (NIS), in 2018 Michigan's initiation rate was 84.4% (CI 79.3-88.5). This meets the annual objective set of 80.5%. Michigan's breastfeeding exclusivity rate through six months was 29.8% and predicted to be 31.1%. Michigan's goal is to reach 45.4% by 2025.

PRAMS data 2019 tells a more complicated story with an initiation rate of 87.3%, which is above Healthy People 2020 goals and NIS projections. PRAMS has shown that Michigan's initiation rate has increased steadily from 2009 to 2019 gaining 14.1% across ten years from 73.2% to 87.3%. However, 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 a comparable or even faster rate than white women, from 2014 to 2017, initiation rates among black women remained unchanged (77.3% to 77.2%) compared to increases among white mothers (86.3% to 90.1%). Alarming, we have seen our first multi-year period of decrease in a breastfeeding measure, with initiation rates among black women falling between 2017 (77.2%) and 2019 (72.0%). Initiation rates among black mothers are now about 18% lower than white mothers. This 18% gap in initiation has grown from what used to be a gap of 10% in 2014-2016 [86.3% NHW - 73.8% NHB]. Data from MDHHS Office of Vital Statistics also show slightly lower initiation rates among Hispanic and Native American women when compared to white women. MDHHS will continue to intentionally gather data as it relates to Native American breastfeeding rates.

Based on the above disparity data, the Title V 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 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 parent and community input on breastfeeding related issues through several means including the Statewide Breastfeeding Workgroup; discussions at the Town Hall meetings held in relation to the *Mother Infant Health and Equity Improvement Plan*; PRAMS, and participation in local breastfeeding coalition meetings when possible.

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

The *Michigan Breastfeeding Plan* was released to the public in February 2021. The Plan sets a common agenda necessary for a collaborative approach to support breastfeeding in Michigan. It is guided by the vision of removing

barriers, advancing equity, and promoting breastfeeding, as essential for infant nutrition, social emotional health and chronic disease prevention, by ensuring that all families have the opportunity to breastfeed for as long as they chose. The Plan was developed based on community feedback from a statewide survey with over 160 responses and over 40 public comment responses. MDHHS staff promoted the *Michigan Breastfeeding Plan* through presentations, listservs, and newsletters. In May 2021, a Breastfeeding Plan Advisory group was formed with local breastfeeding supporters, health departments, clinical staff, and community members.

MDHHS worked to improve the knowledge of breastfeeding support among staff working in maternal and infant health programs including home visitors. In August 2021, staff presented on Breastfeeding for the 2021 Michigan Home Visiting Conference, Individual Model Day Sessions. Topics included the *Michigan Breastfeeding Plan* and how home visitors could support the plan; a presentation from the Michigan Women Infant and Children (WIC) Division on breastfeeding support; a presentation on community-based breastfeeding activities and advocacy from the Michigan Breastfeeding Network and updates to breastfeeding related plans of care.

A key activity to train home visitors and other maternal and infant health staff are the Great Lakes Breastfeeding Webinar Series, a project of the Michigan Breastfeeding Network, which provides breastfeeding specific information every month at no cost to participants. Participation in the webinars varies but many webinars have over 1,000 attendees nationally and over 140 attendees from Michigan. Statistics show that of people participating from Michigan roughly 10-11% are home visitors and 8-10% are maternity care nurses.

Evidence shows that access to professional and peer support can increase breastfeeding duration. MDHHS directly supported this activity through mini-grants, awarded in partnership with the Michigan Breastfeeding Network, to Black and Indigenous-led breastfeeding organizations that provide breastfeeding support to families. Projects focused on the provision of breastfeeding support services during the COVID-19 pandemic (six mini-grants), improving breastfeeding in childcare settings (two mini-grants), and working with young parents on breastfeeding and safe sleep (seven mini-grants). The goal was to give local organizations the flexibility to use the funds to respond to the unique needs of their communities. The mini grants were directly supported with Title V funds. As part of the project, a directory was created which includes information on the services offered by 12 organizations that can be used by families and professionals to locate community-based breastfeeding and birthing services. Access to local breastfeeding and peer support is located on the MDHHS website and distributed to local partners and families. The WIC Division also leads efforts in access to breastfeeding support through peer counselors and a warmline.

MDHHS continues to work with Michigan Birthing hospitals to encourage, support and acknowledge hospitals achieving Baby-Friendly status. This is Michigan's ESM for this NPM. MDHHS staff promote the implementation of breastfeeding friendly maternity care practices through trainings and encouraging hospitals to review and complete the CDC Maternity Practices in Infant Nutrition and Care (mPINC) survey. The Great Lakes Breastfeeding Webinar series is promoted with hospital staff and an estimated 5-10% of participants identify maternity care nurse as their primary job function. Unfortunately, the number of Baby-Friendly Hospitals in Michigan has declined from 18.8% to 16%. Responding to the COVID-19 pandemic has placed incredible strain on Michigan's hospitals for the past two years and has inhibited their ability to meet and/or maintain the Baby Friendly USA standards.

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

According to PRAMS data, breastfeeding initiation among Michigan's non-Hispanic Black women was 72.0% in 2019, the lowest percent for this group since 2013. Non-Hispanic white women breastfeeding initiation rates were relatively consistent since 2017 with a 2019 rate of 90.2%. When asked about 10 different possible barriers to initiating breastfeeding, more non-Hispanic Black women report that they had multiple reasons for not initiating

breastfeeding (51.3% vs. 39.2%) compared to non-Hispanic white mothers. This reflects persistent challenges in reducing the disparity in breastfeeding. While PRAMS data often illustrate individual reasons for not breastfeeding, systems level reasons—including historical and present-day racism—must be examined. Still, about half of non-Hispanic Black mothers, who did not initiate, stated that there was just one barrier to initiate breastfeeding. As we investigate systems-level barriers and other complex problems, we will seek to support those whose single stated barriers may be more readily addressed.

To reduce the gap in disparities, Michigan's first strategy was to provide and promote training opportunities to improve the number, availability, and racial and cultural diversity of trained breastfeeding professionals. MDHHS partners with and provides support to the Great Lakes Breastfeeding webinar series, 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 focus on health equity and supporting community-driven work in Black Indigenous People of Color (BIPOC) communities. The webinars continue to be popular with WIC, hospitals, health departments and home visitors. As many as 40 states attend the webinars monthly and are viewed by the following job functions: peer counselors, maternity care nurses, home visitors, other breastfeeding services, nutrition, childbirth support, social work, and coalition leadership. In FY 2020, MDHHS worked with the Michigan Breastfeeding Network to obtain funding from maternal and child health partners in Region V to support the webinars and to move toward regional collaboration.

To recognize Black Breastfeeding Week and Indigenous Breastfeeding Week, MDHHS hosted a virtual panel discussion in FY 2021 with statewide BIPOC-led community breastfeeding groups to raise awareness about the commemorations, disparities in breastfeeding rates, and how systemic racism affects those disparities. The panel discussed the importance of community and diversity in breastfeeding leadership, and shared actionable steps registrants could take to better support parents and babies. The event was moderated by Priority Health. Over 95 individuals registered for the event, and it was widely promoted on MDHHS social media and among breastfeeding partners and listservs.

In FY 2021, MDHHS prioritized creating and posting breastfeeding promotional messages on the department's social media accounts. Breastfeeding related content posts were created monthly and submitted to MDHHS Communications for distribution. The MDHHS Facebook page has over 144,000 followers and over 34,000 Twitter followers. As part of August Breastfeeding awareness month commemorations, MDHHS created and posted quotes from local breastfeeding supporters, advocates, and families about the importance of breastfeeding. Eight posts were featured throughout the month on MDHHS social media pages and shared with partners. A MDHHS media campaign was developed and issued in late FY 2021 and early FY 2022 focusing on breastfeeding and infant safe sleep messaging. Input on the campaign was received from young adults in partnership with the Michigan Organization on Adolescent Sexual Health. This campaign was directly supported by Title V funds. Additional details on the campaign can be found in the Safe Sleep (NPM 5) annual report.

Rather than facilitating community efforts in one community to impact low breastfeeding rates among women of color, a more complete approach was used by funding 10 BIPOC-led breastfeeding organizations as described above. The mini-grants were awarded to support the provision of breastfeeding support primarily to families of color. Organizations were based throughout the state in Detroit, Grand Rapids, Saginaw, Benton Harbor, Battle Creek, Pontiac, the Upper Peninsula, and Flint. Virtual options have expanded the ability to provide support services statewide. In addition to providing direct breastfeeding support to families, organizations were able to provide breastfeeding education and trainings, build community connections, establish and/or maintain breastfeeding support groups, purchase supplies, purchase safe sleep spaces, and strengthen referral resources for families.

Organizations also worked together and with the Michigan Breastfeeding Network on sustainability skills such as organizational budgeting, fund development, web pages and reports. MDHHS continues to work with the Genesee County Health Department, located in the City of Flint, to increase breastfeeding rates in that community. Activities have been impacted by COVID-19 and competing demands, but progress has resumed.

Safe Sleep (FY 2021 Annual Report)

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 FY 2021, Title V federal funding was used for activities that support Michigan's safe sleep work, including PRAMS, infant mortality communication, Fetal Infant Mortality Reviews, breastfeeding support, and funding to local health departments to support community-based safe sleep prevention efforts.

When comparing birth year 2018 to birth year 2019, there were improvements in the weighted percentage of mothers placing infant to sleep on back, placing infant to sleep in separate approved sleep surface, and placing infant to sleep with no soft objects or loose bedding. However, none of the measures reached a statistically significant improvement. In 2018, 82.5% of Michigan mothers placed their infants to sleep on their back, compared to 84.9% in 2019. The proportion of infants sleeping with **no** soft objects (i.e., pillows, bumpers, blankets, toys) has increased from 59.8% in 2018 to 63.1 in 2019. For the fourth year in a row, Michigan mothers continued to lead all other states for this measure. In 2018, 38.9% of infants were placed to sleep on a separate approved sleep surface, which has increased to 40.6 percent in 2019. 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 since 2016, has had an especially large impact on this measure.

While four distinct objectives for infant safe sleep were identified, the strategies to address them 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 that infants should sleep 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.

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.

In FY 2021, activities occurred within six strategies:

1. Support safe sleep activities of local health departments and the Inter-Tribal Council of Michigan.
2. Support providers to implement safe sleep policies/protocols/programming to ensure families receive infant safe sleep education and access to resources.

3. Explore legislative/regulatory change to increase the number of babies that are safely sleeping.
4. Develop and share tools with providers, families, and workers regarding having client/patient centered conversations regarding safe sleep.
5. 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.
6. 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.

The first strategy is to support the safe sleep activities of local health departments (LHDs) and the Inter-Tribal Council of Michigan (ITC) to increase the capacity of communities to implement infant safe sleep education, awareness, and outreach activities. In FY 2021, the Detroit Health Department received \$125,000 in funding, four other LHDs received \$70,000 in funding, and the ITC received \$45,000 in funding. These five LHDs account for 51% of the sleep-related infant deaths in the state and experience significant racial disparities among the deaths. The grants allowed communities to develop programming that targeted the highest-risk areas and was informed by the community. For example, activities ranged from providing safe sleep education sessions; purchasing billboards; providing group classes; conducting community awareness events; creating public service announcements; engaging families; and promoting protective factors such as breastfeeding and smoking cessation. A portion of the grant funds were used to purchase pack and plays and/or sleep sacks.

In FY 2021, the COVID-19 pandemic continues to have a significant impact on grantees; throughout the year, staff were pulled away to assist with pandemic-related activities. When necessary, activities were done virtually and distribution of pack and plays and other items was done with no or distanced contact. Several LHDs planned to implement the Society for Public Health Education (SOPHE) SCRIPT® (Smoking Cessation and Reduction in Pregnancy Treatment) Program but were unable to due to the pandemic. Despite challenges, grantees were able to provide infant safe sleep education to nearly 12,000 individuals (parents, caregivers, professionals, and community members) through virtual and some in-person classes and community events. LHDs continued to be creative in ways to reach families, hosting virtual house parties and gender reveal parties, as well as virtual bingo. Some LHDs were able to use COVID-19 vaccination events as an avenue to share safe sleep resources with attendees.

Social Determinants of Health (SDOH) are drivers in the disparity of sleep-related infant deaths. Grantees are required to have a local advisory council that includes partners that can address SDOH. This includes partners that can meet resource needs of families, as well as partners that work further upstream to address systemic policies and practices that drive disparities.

A new strategy was 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) was established to increase the number of agencies that have a safe sleep policy/protocol. Eight programs (i.e., substance use treatment, domestic violence services, services for homeless families and home visiting programs) volunteered to participate in this project. Individual meetings and assessments were done to assess staff knowledge on infant safe sleep. Customized trainings were done with six of the programs.

With the input and feedback of the participating programs, a recommendations document was developed for agencies implementing or updating a safe sleep protocol/policy. The final recommendations document was provided to the participating programs to use as a guide for developing a policy. Due to a variety of constraints including staff turnover, the pandemic, and etcetera, most of the programs were unable to implement a policy. However, the project did raise awareness of safe sleep and community resources to program staff. One participating program, the Kent County Health Department, developed a policy that will be piloted next fiscal year with seven of their health department programs (i.e., Maternal Infant Health Program, Nurse-Family Partnership, Strong Beginnings, Children's

Special Health Care Services, Lead, Refugee Services, and WIC). After the pilot, the policy may be expanded to include all health department programs.

As part of the third strategy, the MDHHS Infant Safe Sleep (ISS) program met with MDHHS Legislative Affairs to discuss how to increase awareness among the legislature about maternal child health and infant safe sleep. Work on this item was put on hold due to the pandemic. At the end FY 2021, plans were made for a presentation to the Senate Families, Seniors, and Veterans Committee and a Lunch and Learn for Legislative staff in October 2021. This strategy also included identifying possible legislative or regulatory changes that would increase the number of babies safely sleeping. A scan of regulations was completed, and a proposed policy/regulation change document was developed. This document was shared with the Maternal Infant Health (MIH) Policy and Legislation Action Committee and the committee will determine next steps in FY 2022.

A continued strategy was to develop and share tools with providers and family support workers on how to have client/patient centered conversations regarding safe sleep. This strategy included continuing to promote the *Helping Families Practice Infant Safe Sleep (Safe Sleep 201)* training and incorporating into other educational venues the core tenets of this training—how to have more effective conversations with families by starting where the family is at, educating on the safe sleep guidelines and helping the family evaluate their current risk and explore strategies for risk reduction. A continued ESM is to increase the number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep. In FY 2021, all 78 MIHP agencies have staff trained to use the concepts of motivational interviewing with safe sleep by requiring the *Safe Sleep 201* training for all staff.

To reach professionals, who work with pregnant and parenting families, the MDHHS ISS Program continued to build upon connections with existing partners, such as the Women, Infants and Children (WIC) Program, home visiting programs (Maternal, Infant, and Early Childhood Home Visiting and the MIHP), child welfare, the Regional Perinatal Quality Collaboratives, MDHHS Tobacco, and MDHHS Emergency Medical Services and Trauma (EMS). These continued collaborations led to training on the safe sleep basics, how to support families, and access to resources for a variety of professionals. In FY 2021, over 1,000 individuals attended a virtual safe sleep training and nearly half of those individuals received training on how to support families. In addition, over 7,900 individuals completed one of the three online infant safe sleep trainings, just over 230 hospital nurses and other staff took the online training *Infant Safe Sleep: The Basics and Beyond*, and over 250 participants attended one of three safe sleep webinars. Providers were also supported with access to free educational materials; over 250,000 educational items were distributed by MDHHS in FY 2021. By the end of FY 2021, over 3,200 professionals were subscribed to the infant safe sleep email listserv.

As an additional tool to integrate safe sleep education into prenatal visits, the High Touch, High Tech (HT2) e-screening tool, which delivers a brief motivational intervention and helps connect families to additional supports, was expanded to include screening for safe sleep knowledge and behaviors. The safe sleep education modules have been developed and will be rolled out in FY 2022.

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. As noted above, outreach to and coordination with other MDHHS programs continued. In conjunction with MDHHS Tobacco Section, the MDHHS ISS Program continued to host a quarterly call to support local health departments implementing SOPHE SCRIPT as well as other smoking cessation activities.

In addition, University of Michigan students completed a Capstone project on how MDHHS can better address the needs of younger parents—19 years old and younger as well as 20-24 years old—through more effective programming and messaging for these cohorts. The Capstone project helped launch several projects, supported by

Title V funds, directed at youth and young parents. These included a media campaign on breastfeeding and infant safe sleep, a grant to support young men, and mini-grants to BIPOC-led community breastfeeding organizations to work with young parents on breastfeeding and safe sleep. Additional details on the mini-grants is included in the Breastfeeding (NPM 4) annual report. The media campaign was developed by first having the Michigan Organization on Adolescent Sexual Health (MOASH) complete education sessions and focus groups on safe sleep and breastfeeding with a diverse group of youth ages 13-21. The themes that emerged in the focus groups were used to develop media (social media posts and audio streaming app ads) that ran in the first quarter of FY 2022. A grant went to Focus: Hope to support young men. Focus: HOPE conducted focus groups that addressed various topics, including fatherhood, safe sleep, and infant mortality.

MDHHS ISS Program continued to explore other ways to engage families directly in the work, including support of the MIH Infant Safe Sleep Action team which included two parent members.

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. Two hospitals volunteered to participate: St. Joseph Mercy Oakland in Pontiac and Beaumont Hospital in Troy. With the input and feedback of the participating hospitals, sample infant safe sleep protocols for hospitals to use as a guide in creating or updating safe sleep policies for the Mother Baby Units, Neonatal Intensive Care Units (NICU) and Special Care Nurseries, and Other Units (pediatrics, emergency, and etcetera) and sample crib audit forms were developed. The participating hospitals completed crib audits and found minor issues. Through regular meetings with the participating hospitals, as well as quarterly meetings with other birthing hospitals interested in safe sleep, the MDHHS ISS Program continued to explore how hospitals can educate and support families. Efforts to support birthing hospitals were impacted by the pandemic with staff having limited time to devote to safe sleep.

A new ESM was utilized to track the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol. St. Joseph Mercy Oakland in Pontiac plans to update their policy next fiscal year and Beaumont Hospital in Troy did not make any revisions to their policy.

Perinatal/Infant Health - Application Year

Breastfeeding (FY 2023 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 including significant benefits to the mental health of both mothers and babies. 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, reduce post-partum hemorrhage, and decrease the likelihood of developing breast, uterine and ovarian cancers. Human milk remains the optimal source of nutrition for the first months of life.

The Title V needs assessment revealed that breastfeeding is 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 medical 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. The COVID-19 pandemic has highlighted the need to ensure that emergency preparedness plans support access to human milk, especially in Black, Indigenous, and People of Color (BIPOC) communities that have been disproportionately impacted by COVID-19. MDHHS will continue to collaborate with BIPOC led organizations and communities that lead in addressing this health equity work, especially in relation to dismantling barriers to breastfeeding.

According to the National Immunization Survey (NIS), in 2018 Michigan's initiation rate was 84.4% (CI 79.3-88.5). This meets the annual objective set of 80.5%. Michigan's breastfeeding exclusivity rate through six months was 29.8% and predicted to be 31.1%. Michigan's goal is to reach 45.4% by 2025.

PRAMS data 2019 tells a more complicated story with an initiation rate of 87.3%, which is above Healthy People 2020 goals and NIS projections. PRAMS has shown that Michigan's initiation rate has increased steadily from 2009 to 2019 gaining 14.1% across ten years (73.2% to 87.3%). However, 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 a comparable or even faster rate as for 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%). Alarming, we have seen our first multi-year period of decrease in a breastfeeding measure, with initiation rates among black women falling slightly between 2017 (77.2%) and 2019 (72.0%). Initiation rates among black mothers are now about 18% lower than white mothers. This 18% gap in initiation has grown from what used to be a gap of 10% in 2014-2016 [86.3% NHW - 73.8% NHB]. Statistics from MDHHS Office of Vital Statistics also show slightly lower initiation rates among Hispanic and Native American women when compared to white women. MDHHS will continue to intentionally gather data as it relates to Native American breastfeeding rates.

Based on the above disparity data, the state action plan continues to focus on reducing disparities in breastfeeding rates among women of color. Action plan strategies will focus on increasing breastfeeding knowledge among MDHHS Maternal Infant Health staff, offering breastfeeding educational opportunities statewide through a webinar series, supporting and promoting access to breastfeeding support resources, normalizing breastfeeding in culturally responsive ways, and promote community-driven resources that address common breastfeeding barriers. 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.

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

The first strategy to provide MDHHS Maternal Infant Health (MIH) staff with an appropriate level of breastfeeding education, which includes systemic racism as a root cause of breastfeeding inequities, will focus on increasing MIH staff knowledge on the health benefits of breastfeeding to parents and infants, common barriers to breastfeeding, root causes of breastfeeding disparities among racial and ethnic groups, and resources available to support Michigan families and promote breastfeeding. Training will also include how to have honest and non-judgmental conversations about risk reduction strategies for safe sleep. This strategy, in tandem with the next two strategies, will help to achieve the state priority need by enhancing support systems that empower families, promote care for self and child, and connect families to resources in their communities. It also promotes the strategy of promoting breastfeeding across programs within MDHHS.

Evidence demonstrates access to professional and peer support can increase breastfeeding duration. For its second strategy, MDHHS will continue to promote increased access to breastfeeding support professionals and peer counseling services in programs serving families. MDHHS will promote sources of breastfeeding support and disseminate the information to maternal and infant health programs and other partners through multiple communication modalities (e.g., newsletters, listservs, social media).

The third strategy, increase the percent of Baby-Friendly Hospitals in Michigan from 16% to 18%, is Michigan's ESM for this NPM. Activities will focus on continuing to work with birthing hospitals statewide by encouraging the benefits of Baby-Friendly designation and maintaining Baby-Friendly standards beyond designation through routine data collection, monitoring of practices, and quality improvement activities, which can support breastfeeding duration. Breastfeeding content will be included at the 2023 Maternal Infant Health Summit which is broadly attended by MIH professionals, including hospital and clinic staff. Additionally, MDHHS will recognize hospitals that adopt breastfeeding-supportive maternity care and infant feeding as best practices. Not surprisingly, hospital's ability to attain Baby Friendly status has been limited during the COVID pandemic.

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

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.

The second strategy is to promote breastfeeding promotion campaigns to normalize breastfeeding in culturally responsive ways. At a minimum, social media messages will be identified and used on MDHHS social media channels and shared with local agencies for optional use in FY 2023. MDHHS will also work with partners to recognize observances such as but not limited to Breastfeeding Awareness Month, Native Breastfeeding Week, Black Breastfeeding Week, and Global Latch On.

The final strategy will be to promote breastfeeding educational resources that focus on common breastfeeding barriers at the dyad. Resources were developed through a partnership with local BIPOC-led breastfeeding support

organizations and supported by Title V funds. Resource topics are being determined by community organizations and the families they serve to better address the needs of families. Resources will be promoted widely with Maternal and Infant Health partners for statewide use.

Safe Sleep (FY 2023 Application)

Infant deaths from sleep-related causes continue to be a persistent concern. The Title V NPM for safe sleep is linked to Michigan's 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 MDHHS Infant Safe Sleep Program (ISS Program) is housed in the Division of Maternal and Infant Health and provides training, technical assistance, and resources to professionals and families in Michigan. It also oversees ISS grants to local agencies. Title V funding helps to support the Infant Safe Sleep Action Committee and other activities related to ISS.

In Michigan, sleep-related infant deaths are a leading type of death for infants 1-12 months old (2018-2020 Michigan Resident Infant Death File, Division for Vital Records & Health Statistics, MDHHS), with suffocation being the most common cause. Statewide 1.3 sleep-related infant deaths occur per 1,000 live births [Centers for Disease Control and Prevention (CDC) Sudden Unexpected Infant Death (SUID) Case Registry – 2010-2019, Michigan Public Health Institute (MPHI), 2021] and there is no clear trend showing either an increase or a decrease in the state rate. Rates across the state vary widely, with some jurisdictions experiencing rates as high as 3.2 and some as low as 0.6 (CDC SUID Case Registry – 2010 to 2019, MPHI, 2021).

Significant racial disparities exist among sleep-related infant deaths. In Michigan, non-Hispanic Black (NHB) infants are 3.8 times more likely to die of sleep-related causes than non-Hispanic White (NHW) infants. Compared to NHW infants, infants whose race was categorized as being part of an Additional Group (including American Indian, Asian, Pacific Islander, and multi-racial infants) are nearly 3.5 times more likely to die of sleep-related causes (CDC SUID Case Registry – 2010 to 2019, MPHI, 2021).

Additionally, data show infants born pre-term and low birth weight are also at increased risk for sleep-related infant deaths. Pre-term infants experience a sleep-related infant death rate 2.5 times higher than infants born at 37 weeks or greater gestation. Moreover, infants born with low birth weight have a 2.9 times greater risk of dying due to sleep-related causes as compared to infants with a birth weight of 2,500 grams or higher (CDC SUID Case Registry – 2010 to 2019, MPHI, 2021).

Most sleep-related infant deaths are preventable with safe sleep practices. Data from the Michigan Pregnancy Risk Assessment Monitoring Survey (PRAMS) often take several years to reach statistically significant change. Significant progress for placed to sleep on back has been slow, but infants placed to sleep with no soft objects or loose bedding and infants placed to sleep on a separate approved sleep surface has had more sizeable improvements. In birth year 2020, PRAMS data show 85.4% of Michigan mothers placed their infants to sleep on their backs, 41.5% of infants were placed to sleep on a separate approved sleep surface, and 66.7% of infants were reported as sleeping with no soft objects (pillows, bumpers, blankets, toys). These are all improvements from birth year 2019, although these improvements did not reach statistical significance. When looking at data between 2016 and 2020, there have been state level significant improvements in infants reported as sleeping with no soft objects and significant improvement in separate approved sleep surface.

Data show that the behaviors described above do impact deaths. One example is when looking at sleep location. According to the CDC 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 22% of infants who died of sleep-related causes were placed to sleep in a crib, bassinet, or portable crib. 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) (CDC SUID Case Registry – 2010 to 2019, MPHI, 2021).

The disparity gap in back sleeping was relatively constant through 2014. Starting in 2014, a seven-year period was observed in which back sleeping remained statistically unchanged among Black mothers. In combination with modest improvements among White mothers, this has resulted in a widening disparity gap for back sleep. According to 2020 PRAMS data, there is a disparity gap of 23.3% for the behavior of infants usually being placed to sleep on their backs between NHW and NHB, 91.0% and 67.7%, respectively. There is also a growing disparity in some safe-sleep performance measures that has only just become clear upon examination of the most recent 2020 PRAMS data. In 2016, the proportions of NHW and NHB mothers sleeping their infants on separate approved surfaces and in spaces without loose objects or bedding were equivalent. A single digit disparity gap opened in 2017-2018 and grew to double digits for each measure by 2020. There is now a 20.8% disparity gap of infants being put to sleep without soft objects or loose bedding (73.0% for NHW as compared to 52.2% for NHB). NHW mothers also reported a higher proportion of infants sleeping on a separate approved sleep surface (45.7% for NHW compared to 31.5% for NHB; disparity gap 14.2%). These disparities all reached statistical significance.

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

Objective A: Increase the percent of infants put to sleep on their backs from 84.9% in 2019 to 92.3% by 2025.

Objective B: Increase the percent of infants put to sleep on a separate approved sleep surface from 40.6% in 2019 to 53.5% by 2025.

Objective C: Increase the percent of infants placed to sleep without soft objects or loose bedding from 63.1% in 2019 to 80.9% 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.

The strategies to address Michigan's safe sleep objectives are combined and will promote key messages to parents, caregivers, and providers: infant sleeps on the back, alone and without objects in a crib, bassinet or pack and play. Activities will be designed to increase the behaviors by all families, while focusing specifically on decreasing the disparity for NHB families and other historically disadvantaged groups including American Indians.

The first strategy is to support safe sleep activities of Local Health departments (LHDs) and the Inter-Tribal Council of Michigan (ITC) by offering grants to increase the capacity of those communities to implement infant safe sleep education, awareness, and outreach activities, with a focus on populations within their jurisdiction that experience high rates of sleep-related infant death and disparity. In FY 2023, five LHDs and ITC will be offered grants. The jurisdictions served by the five LHDs account for 51% of the sleep-related infant deaths in Michigan and all experience significant racial disparities among the deaths. Racial disparities in infant deaths also exist for American Indian babies in Michigan. Grantees, as experts in their own communities, are given the latitude to design, direct and conduct their work.

As SDOH are known to contribute to infant outcomes, the grantees will be aided in exploring how to address SDOH

impacting families they serve and to consider how to address upstream causes of disparity. The Infant Safe Sleep (ISS) Program will do this, in part, by providing monthly support calls, individually and as a grantee group, and other technical assistance and support. In FY 2023, a continued focus will be how grantees can involve partners that can address social determinates of health. In addition, support will be provided on how grantees can obtain authentic input and feedback from families at highest risk for sleep-related infant death.

During the last two years, COVID-19 has significantly impacted the ability of LHDs and ITC to conduct safe sleep activities due to staff being pulled away from regular duties and partners not being available. LHDs and ITC have been creative in overcoming these challenges by transitioning to virtual and distanced options for events. It is unknown how much COVID-19 will impact grantees in FY 2023, but they will be encouraged to continue to be creative in their efforts to meet program objectives.

The second strategy is to continue to support agencies in implementing and/or updating existing safe sleep policies or protocols to ensure that families interacting with those agencies receive up-to-date infant safe sleep education; have access to tangible resources for safe sleep; and are given referrals to supportive programs such as home visiting, WIC and lactation support. The support to agencies will be provided by ISS Program staff and will continue to be customized to fit their needs. In FY 2021, recommendations were developed that outlined how agencies serving families can support infant safe sleep. The ISS Program will continue to recruit agencies, including non-traditional partners such as substance use treatment centers, domestic violence service providers and agencies serving the homeless population as well as other historically marginalized and underserved populations. Additionally, in FY 2023, the ISS Program will support the Maternal, Infant, and Early Childhood Home Visiting program (MIECHV) as it will be implementing a new requirement that MIECHV programs have a safe sleep policy. Continued support will be provided by ISS Program staff to other federal and state programs, including the Maternal Infant Health Program (MIHP) and WIC, to support and enhance infant safe sleep education and awareness with staff and clients. The ESM tied to this strategy will be modified starting in FY 2023 to count the number of agencies supported.

COVID-19 may continue to impact work on this strategy. Success at connecting with agencies in the last two years has been challenging as they were pulled away due to COVID-19 or staff shortages.

The third strategy is to provide education and share tools with providers on how to have client/patient centered conversations regarding safe sleep. This includes trainings (i.e., virtual, online and, when possible, in-person) for providers who work with pregnant and parenting families in programs such as home visiting, WIC, childcare, child welfare, CPS, emergency medical services and prenatal care. In FY 2023, motivational interviewing concepts and risk reduction techniques will continue to be included in all trainings conducted with professionals who work with families. The trainings may help professionals better understand the challenges a family may face in following the guidelines by having honest and open conversations. Professionals will be more equipped to help the family evaluate their current risk and explore strategies for risk reduction and identify needed supports. A related ESM to require all new MIHP staff to take the online *Helping Families Practice Infant Safe Sleep* training will continue in FY 2023. In FY 2021, MIHP agencies served approximately 12,000 pregnant moms and 15,000 infants on Medicaid annually (a decline due to COVID-19). Targeting MIHP providers allows the most high-risk mothers and families to be reached.

In FY 2022, MDHHS ISS team members applied to and joined the [Child Safety Learning Collaborative](#). Michigan's team will establish a partnership with MDHHS Bureau of EMS, Trauma, and Preparedness to implement an Infant Safe Sleep Certification Program for EMS Agencies and Fire Departments. As part of this effort, an online training will be rolled out in FY 2022. The number of fire/police/Emergency Medical Services personnel completing the training will be collected. Another exciting project which was developed in FY 2021 and rolled out in FY 2022 is the High Touch, High Tech (HT2) e-screening tool. This tool is used by some prenatal clinics and was expanded to include screening for safe sleep knowledge and behaviors. The HT2 tool delivers a brief motivational intervention,

notifies the healthcare provider, and helps connect families to additional supports. Opportunities to expand and enhance this project will continue to be explored.

Support for professionals will also be continued through the email listserv and webinars. Resources for infant safe sleep and infant care will continue to be available through the Infant Safe Sleep website and the MDHHS Clearinghouse. Images used in educational materials reflects the diversity of families in Michigan and most materials are offered in Spanish and Arabic as well as English. The basic safe sleep brochure is also available in Burmese.

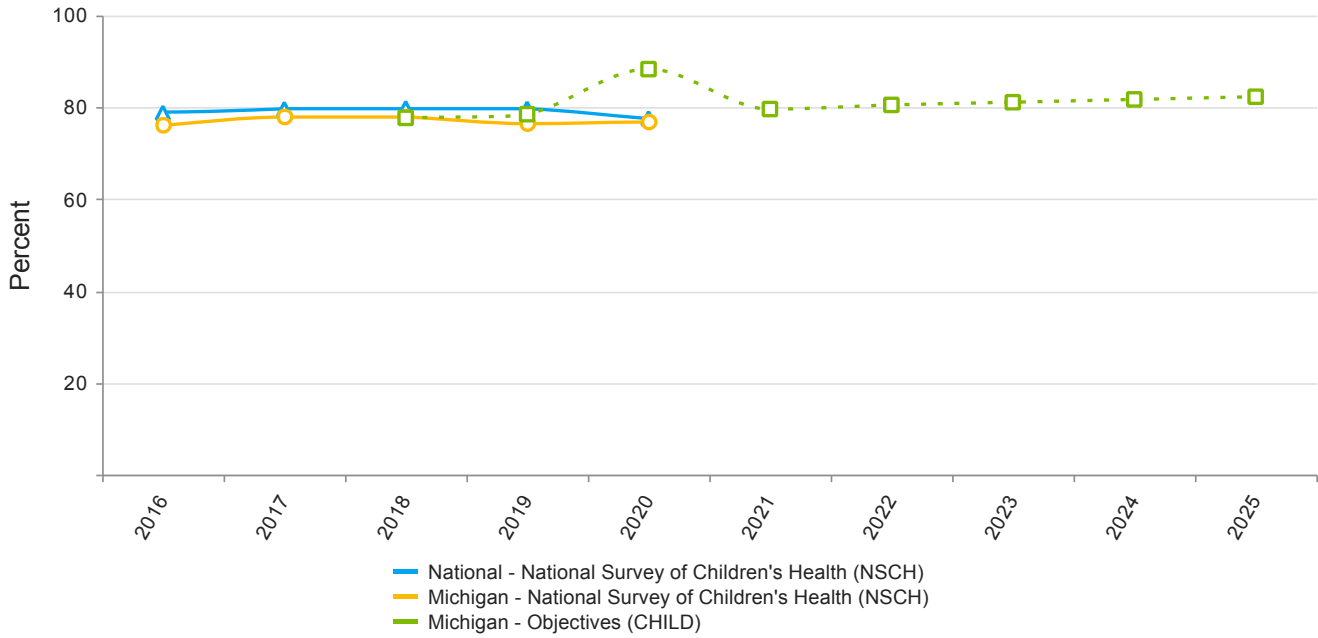
Another strategy is to provide professionals and families with guidance on protective factors (i.e., smoking cessation, breastfeeding, immunizations) and evidence-based programs (i.e., community-based doula support, home visiting) to enhance the overall health and well-being of moms and babies. Information on protective factors is incorporated into safe sleep messaging and educational materials when possible. In FY 2023, the Infant Safe Sleep and Breastfeeding Programs plan to integrate their work more closely. Quarterly calls with MDHHS programs such as Immunizations, WIC, Tobacco, and Home Visiting will maintain collaborations that work to infuse infant safe sleep into all aspects of work with families.

The final strategy is to continue to recruit hospitals to work with the Infant Safe Sleep Program to explore ways each hospital can educate and support families of NICU infants to ensure they are practicing safe sleep behaviors after discharge. The model NICU policy and audit form created in FY 2021 with input from nurses statewide will continue to be utilized in this work. The support provided to each hospital will be customized to fit the needs of the hospital. The ESM tied to this strategy will be modified starting in FY 2023 to track the number of hospitals that have been supported.

Child Health

National Performance Measures

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



NPM 13.2 - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2017	2018	2019	2020	2021
Annual Objective		77.6	78.4	88.2	79.5
Annual Indicator	76.1	77.9	77.7	76.5	76.6
Numerator	1,584,320	1,629,730	1,618,664	1,574,401	1,556,280
Denominator	2,082,991	2,092,116	2,083,849	2,058,613	2,032,403
Data Source	NSCH	NSCH	NSCH	NSCH	NSCH
Data Source Year	2016	2016_2017	2017_2018	2018_2019	2019_2020

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	80.4	81.0	81.6	82.2

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						
	2017	2018	2019	2020	2021	
Annual Objective	5,927	6,127	6,327	6,527	6,727	
Annual Indicator	6,677	6,964	6,897	6,168	3,639	
Numerator						
Denominator						
Data Source	SEAL MI 2017 All Grantees Data Report	SEAL MI 2018 All Grantees Data Report	SEAL MI 2019 All Grantees Data	SEAL MI 2020 All Grantees Data Report	SEAL MI 2021 All Grantees Data Report	
Data Source Year	2017	2018	2019	2020	2021	
Provisional or Final ?	Final	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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					
	2017	2018	2019	2020	2021
Annual Objective	22.1	24.6	27.1	29.6	50
Annual Indicator	25	43.4	45.8	48.1	45.3
Numerator	1,048	1,308	1,671	994	718
Denominator	4,190	3,017	3,646	2,068	1,586
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2017	2018	2019	2020	FY2021
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	52.5	55.0	57.5	60.0

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					
	2017	2018	2019	2020	2021
Annual Objective	76	77	75	76	77
Annual Indicator	75	74.1	74.1	70.7	69.4
Numerator	125,853	123,596	121,707	119,786	113,259
Denominator	167,842	166,746	164,167	169,474	163,218
Data Source	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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 Community District (DPSCD)

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) Organize parent and student focus groups
B2) Maintain reporting requirements from all DPSCD oral health providers
B3) Record webinars for DPSCD school nurses focused on oral health education
B4) Provide recorded oral health webinars for DPSCD school nurses at their new employee orientation

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

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) - 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) Improve notification to health care providers of patients' blood lead levels and need for blood lead testing 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 and audience-specific 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 children at the recommended times

C1) Provide local health departments with quarterly data reports C2) Conduct family engagement to obtain information to improve nursing case management outcomes and process C3) 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 department immunization staff with targeting outreach to under-served populations in their jurisdiction

Strategies

A1) Use Michigan Care Improvement Registry (MCIR) data to identify all children 24 months of age who are overdue for a vaccine A2) Generate and disseminate annual recall letters using the MCIR to parents of children 24 months of age who are overdue for a vaccine A3) Use MCIR data to conduct a root cause analysis and identify high social vulnerability index (SVI) areas within the state and conduct targeted vaccine outreach in those areas A4) Work with MDHHS Office of Communications to promote vaccine confidence among parents of this age group through resources, media, and presentations

B1) Produce and share a quarterly report card for each county showing vaccination rates and rankings compared to other counties across the state for multiple pediatric and adolescent age groups, including children 19-36 months of age B2) Produce county coverage levels by race for children 19-36 months of age and make the information available to local health departments to identify and address disparities B3) Partner with the City of Detroit Health Department to target high SVI areas and assist with increasing the overall vaccination rates in Detroit

Child Health - Annual Report

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, Adolescent and School Health Section, and Oral Health Unit. Oversight of local MCH (LMCH) funding to local health departments is also located within DCAH. 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 and Early Childhood 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 (FASD), 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 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 performance measures in FY 2021. Four LHDs supported oral health for children (NPM 13) by providing oral health education and gap-filling dental services when schools/clinics were open during the pandemic. One local health department worked on an information system of dental utilization in children in poverty. Twelve LHDs worked on SPM 1 (childhood lead poisoning prevention) by providing gap-filling lead screening and case management, venous confirmation follow-up, and community education. The pandemic caused challenges related to lead screening as services were reduced or not available at clinics, staff were pulled to COVID-19 mitigation and, and there was a recall of LeadCare® II test kits. Fourteen LHDs selected SPM 2 (childhood immunizations). Agencies facilitated gap-filling immunization services, recall notifications, and waiver education when clinics were open in FY 2021. LHDs reported that it was a challenge to get children to come to clinics for vaccinations during the pandemic.

Local Performance Measures (LPMs) included gap-filling hearing/vision screening. One agency was able to screen children at local schools even during the pandemic; the other agency could not screen due to school closures. Agencies were allowed to divert LMCH funds to COVID-19 activities. Four health departments diverted funds for COVID-19 testing for children and to work with local school districts to develop COVID-19 safety plans.

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 2020 (3.3%) in Michigan, as it has in the nation overall. However, Native American children (11.3%, ACS 2018) are significantly less likely to have health insurance than any other group of Michigan children. While 90.6% of children are in excellent or very

good health as reported by their parents, only 86.2% of non-Hispanic Black children and 83.1% of children living at or below the federal poverty limit are reported to be in excellent or very good health (NSCH, 2019-2020). 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 69.9% in 2021 (MDHHS). However, the COVID-19 pandemic has negatively impact vaccination status. Oral health is also a concern in Michigan where 11.2% of children, including 4.0% of children under five years of age, have decayed teeth or cavities (NSCH, 2019-2020). Tooth decay is especially likely among children receiving Medicaid (20.1%), suggesting a lack of access to dental providers who accept this type of insurance, and among children living below the federal poverty line (17.4%). Hispanic (16.7%) and non-Hispanic Black children (13.7%) experience higher prevalence of tooth decay than non-Hispanic white children (10.7%, NSCH 2019-2020). 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 2021 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 increased awareness of the impact of oral health on overall health, the OHP has amplified collaborations with community partners to improve oral health through prevention activities and direct access programs. The activities of NPM 13 in FY 2021, as discussed below, illustrate these strengthened partnerships. Title V funding was used to support the activities of the SEAL! Michigan program through local school-based dental sealant programs.

As a response to the COVID-19 pandemic, students were reached through a variety of ways. The SEAL! Michigan programs worked in alternative settings because many schools were operating virtually for most of the year or in a hybrid model which kept many students at home for multiple days per week. When schools were open, parents could still opt to keep their student home to learn virtually, and in many cases school administrators followed the CDC Guidance for Schools and declined outside/travel services. Collectively, these ongoing COVID-19 related challenges made school-based dentistry difficult.

To help local programs see children for a dental screening, the following changes were made: SEAL! Michigan programs were allowed to see all grades in all schools; allowed to seal primary molars in addition to permanent molars; encouraged to go into a variety of school-linked locations and community-based locations (e.g., daycare centers, after school programs, YMCA programs); encouraged to have children come to a physical location for services (e.g., health department clinic, FQHC clinic); and one program utilized Title V funding to create an outside drive-thru dental screening project.

Many times, once a school was able to be scheduled, the programs experienced ill staff members or other challenges, forcing the event to be rescheduled or cancelled. Securing enough personal protective equipment (PPE) was also an ongoing challenge in terms of both obtaining an adequate supply and being able to afford the rising costs. Several SEAL! Michigan programs are operated through Local Health Departments and on many occasions the SEAL! Michigan staff members had their time redirected to respond to community wide COVID-19 related activities (i.e., testing, immunization clinics, call centers, case investigation and contract tracing).

When the SEAL! Michigan programs could not go into schools, many used the time to update and/or maintain dental equipment and supplies, establish new parental consent forms, or create flyers marketing their programs. The MDHHS School Oral Health Consultant encouraged program staff to engage in trainings and virtual webinars focusing on diversity, equity, and inclusion during times when they could not be in schools. These valuable activities could not always be prioritized in the past when active in schools and seeing patients. The MDHHS School Oral Health Consultant also organized virtual quarterly support meetings for the funded SEAL! Michigan programs to

network and share experiences during the pandemic. This networking time was appreciated by the program staff as it allowed them time to engage with their peers about challenges and solutions. The 2021 annual SEAL! Michigan Workshop also took place in August. SEAL! Michigan program staff completed the *True Colors* training and learned about maintaining their suction units to aid in controlling aerosols while seeing patients. The day concluded with sharing program updates, including their successes and barriers during the school year. Although the 'down time' from COVID-19 resulted in fewer students receiving a dental screen, the program overall was able to maintain existing staff and maximize their time in a quality manner.

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

The first strategy to achieve this objective was to utilize the SEAL! Michigan database to track the number of students annually receiving a preventive dental screening. The number of students receiving a preventive dental screening through SEAL! Michigan is also the ESM for this NPM. The SEAL! Michigan data forms continued to be utilized in FY 2021 and worked well for the individual programs and the MDHHS epidemiologists who scan and clean the data and write final reports. The data forms were modified to account for changes made in the program surrounding the COVID-19 pandemic. To ensure the data forms continue to work well for both MDHHS staff and the SEAL! Michigan partners, a workgroup with MDHHS staff and SEAL! Michigan staff was established to identify changes needed on the data forms. The forms were then reviewed by other SEAL! Michigan staff to collect additional feedback and tested by MDHHS Epidemiologists prior to finalizing them. The data forms were modified to include a variety of locations (community sites, daycare centers, shelters, etc.) and to include data collection of primary teeth sealed. These additions were made to ensure all activities could be seamlessly documented.

The second strategy was to promote dental sealant programs through school health professionals. The MDHHS School Health Consultant worked with the MDHHS Detroit Public School Community District (DPSCD) Oral Health Coordinator and the DPSCD School Nurse Consultant to provide a series of six webinars on oral health to DPSCD school nurses. The webinars took place in Spring 2021 and were held every other week. Each session was approximately 1.0 to 1.5 hours long, including question and answer time. The trainings were recorded to ensure DPSCD school nurses have ongoing access to them and are available for new DPSCD school nurse staff. The webinars covered a variety of oral health issues and topics specific to both children and adults such as access to care; current data extracted from the latest Basic Screening Survey specific to children in Detroit; dental first aid; how poor oral health affects overall health; dental decay; periodontal disease; nutrition; and how school oral health programs and SEAL! Michigan help prevent disease. Feedback from the webinars was positive with school nurses reporting learning related to their own oral health as well as issues to watch for in students.

The annual SEAL! Michigan all grantee reports continued to be used to monitor the number of students receiving a preventive dental screening. The data forms were collected at the end of the fiscal year; data was cleaned; and the grantee reports were developed and submitted for publication. Due to the pandemic and how it affected schools and our dental programs, there was a significant decline in services in FY 2021. In total, there were nine SEAL! Michigan programs in total. Four of the nine were unable to complete work in schools due to local school closures. Across all SEAL! Michigan programs 3,639 students were screened. The majority of students screened were in kindergarten and 2nd grade. The average age of students was 8.0 years old, with the range of students screened between 4 and 23 years of age. The older students screened were in alternative education locations, such as youth centers and special education locations, and were eligible for the program due to the exceptions put in place to accommodate the pandemic.

The racial and ethnic backgrounds of students served included Arab American, Hispanic, and Black. Over 70% of the students were white, 5.3% were black, and 11.8% were multiracial. These rates are in proportion to where

programs were able to work during the pandemic. Rural areas in the state, such as the Upper Peninsula, have a higher population of white families and were more likely to have schools open for operation, whereas more urban areas (Detroit, Oakland County, Ingham County, etc.) which are comprised of a more diverse population, were in virtual learning the majority of—if not the entire—school year.

Almost one in three students had special health care needs which included those needing more medical care and those receiving special therapy, counseling, or treatment. Over half of the students seen were enrolled in the Healthy Kids Dental Insurance program, 22.5% had private insurance, and 18.9% had no dental insurance.

A fourth strategy was to 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. Due to the COVID-19 pandemic—which resulted in dental offices closing and more parents being unemployed and/or losing dental insurance—the burden of disease was anticipated to occur at higher rates than years past. As students stayed home to learn, they may have had access to more sugar and snacking than while in school, and many may have lost access to nutritionally balanced meals. SEAL! Michigan programs recognized this immediate risk and responded in a variety of ways. For example, SEAL! Michigan programs sent home oral care packages and toothbrushes to students and families via school meal programs. One program included a voucher for a free Spin Brush if the parent/guardian came to the health department clinic for dental services, including sealants. Another SEAL! Michigan program used Title V funding to create a drive thru “Dental Tent Project.” The outdoor clinics were offered from January 2021 to August 2021. Over the eight-month period, the SEAL! Michigan program partnered with six organizations in five counties to host a total of 26 outdoor clinic days and 130 hours of service. Oral health education was provided to over 1,000 clients; oral health assessments were provided to over 500 clients; fluoride varnish treatments were applied to over 400 clients; sealants were placed on 126 teeth; and over 120 clients were referred for further treatment for emergent or urgent oral health needs. It is important to note that unless the patient received dental sealants, they were not included in the data reported above.

The outdoor clinics were perceived favorably by families and staff members. Families appreciated the convenience of a drive-up dental service and indicated that they would attend an outdoor oral health clinic if held again in the future. Staff members liked the adaptation of service delivery and felt comfortable providing care for patients while they remained in the car. Although working outdoors on many days was enjoyable, other days presented challenges, due to the weather. There is strong interest in continuing this project, if funding permits. Many parents reported they would like this option for service delivery even when not in a pandemic because it can be stressful to take one child to the dentist and not have childcare for other children or trying to take all children into the office.

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

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 and only 28.3% of children had at least one dental sealant, which is the lowest percentage by region in Michigan. Given these disparities in oral health outcomes, establishing stronger oral health programs and follow-up care coordination in the Detroit Public School Community District (DPSCD) was identified as a key strategy to achieve health equity and positive oral health outcomes for Michigan’s children. The DPSCD 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, most children (approximately 82%) attending DPSCD are African American.

The first strategy to achieve this objective was to hire an Oral Health Coordinator to oversee oral health related work

in DPSCD. The 0.5 FTE Oral Health Coordinator (OHC) was fully onboarded and engaged by October 1, 2020. Therefore, FY 2021 was the first full year this employee was engaged in DPSCD. The employee is a stakeholder within the community, a self-starter, and understands children's rapid oral health disease. The OHC position is a unique partnership between MDHHS and DPSCD. The employee is a Michigan Public Health Institute affiliate employee, is managed by the MDHHS Oral Health Director, and is housed in Detroit with other DPSCD school health employees. The OHC oversees all DPSCD dental services partners and completes site visits to oversee school dental clinics, infection control, and safety. She also works to ensure all students with a signed parental consent form receive preventive and restorative services; interacts with over 100 school nurses on a regular basis; reports to the DPSCD pediatrician; and has workplan goals surrounding family engagement and student focus groups. The OHC orders oral health supplies for students; tracks the distribution of those supplies; and works with the OHP staff to order education supplies for all school nurses. The OHC also engages with the MDHHS OHP manager and team members and completes employee trainings required by all three institutions. A current challenge of the position is that only 0.5 FTE is available in funding. Due to COVID-19, although DPSCD schools were open in the fall of 2020, many schools had less students attending during the fiscal year. This allowed the OHC to get established within DPSCD and to work closely with school nurses and dental partners and to focus on establishing the foundation of this new position.

A second planned strategy was to organize parent and student focus groups in DPSCD. Due to COVID-19, many students were learning from home in FY 2021. Given other ongoing challenges of COVID-19, including parents' challenges managing remote learning, there were not opportunities to organize parent and student focus groups. However, during the summer of 2021, the OHC started the vision and planning of how parents can learn about oral health in this new and remote environment. A logic model was created, and community partners committed to the project. The project will allow parents of DPSCD to extend their knowledge of what good oral health looks like and how to create a healthy breakfast that supports good oral health. This will hopefully establish the foundation of a parent group for future years.

The third strategy was to enhance reporting requirements from all DPSCD oral health providers. Comprehensive reporting requirements were not previously in place for dental services at DPSCD, so the MDHHS OHP worked with the MDHHS Epidemiologist to modify the existing SEAL! Michigan data forms. The data forms needed to include additional treatments specific to DPSCD preventative and comprehensive services. The data forms were piloted and distributed to the DPSCD dental providers. Going forward, the data will be collected quarterly so the OHC can review services that have been completed and address any compliance issues. Full annual reports will be completed at the end of each fiscal year and data will be included in Title V reporting.

The Memorandum of Understanding (MOU) between DPSCD, State of Michigan, and the dental providers was also reviewed and updated. The MOU included what service was expected, reporting requirements, and the number of consent forms needed before starting service with DPSCD. By the time school started in the fall of 2021, the dental providers' MOUs were revised and signed, and all 107 schools had a dental provider assignment.

During the in-person school pause due to the COVID-19 pandemic, the OHC used the time to train dental providers on data forms and new data tracking requirements. Each dental provider received individual training. This training allowed providers to incorporate the reporting into their daily operations. The OHC was made aware of what changes were needed on the data forms and talked through concerns with providers. The dental providers began providing services in the fall of 2021.

Childhood Lead Poisoning Prevention (FY 2021 Annual Report)

The Michigan Childhood Lead Poisoning Prevention Program (CLPPP) has carried out mandated blood lead

surveillance and lead poisoning prevention activities since 1998. 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 focus areas of CLPPP include surveillance, outreach, and health services. Surveillance activities allow for CLPPP to better target areas of needed outreach and health services. CLPPP outreach activities and health services are supported by Title V funding.

Childhood lead poisoning has steadily declined in Michigan, but elimination has not yet been attained. In Michigan, a blood lead level of 4.5 micrograms per deciliter or higher is considered an elevated blood lead level (EBLL). When a child has an EBLL, several activities—including lead education, nursing case management, environmental investigation, and additional medical monitoring—should be initiated to lower the blood lead level.

This report describes CLPPP activities undertaken in FY 2021 to improve screening for risk factors and increase blood lead testing, specifically confirmatory venous testing. In 1998 (the first complete year of required reporting) among children under the age of six tested for lead, 44.0% of children had EBLLs (29,165 of 66,204 children tested). In 2021, among children younger than six years of age that had a blood lead test, 2.0% (1,905 of 96,381) had elevated blood lead levels. This was a slight decrease from 2.4% (2,310 of 96,925) in 2020. The rate of confirmatory venous testing of EBLL capillary test results in 2021 was 45.3% (718 of 1,586 EBLL capillary tests), which was a decrease from 48.1% (994 of 2,068 EBLL capillary tests) in 2020.

While there was a slight increase in testing in 2021 from 2020, blood lead testing remains low in Michigan. Since the start of the COVID-19 pandemic, deferred care and increased use of telemedicine has negatively impacted blood lead testing. The pandemic also resulted in children spending more time at home, which increases the risk of exposure for children living in homes with lead contamination. MDHHS continued to follow a response plan to address the decrease in testing rates, with strategies around education, outreach, and data surveillance. A mass media campaign was developed to launch in FY 2022 to remind parents and caretakers that lead is an invisible threat and to encourage them to talk to their health care providers about blood lead testing for their children.

Additionally, in Michigan, approximately 40% of reported blood lead tests are conducted on LeadCare machines, which are point-of-care blood lead testing machines. The manufacturer of LeadCare, Magellan, and the FDA issued a recall of LeadCare test kits distributed between October 2020 to August 2021, due to significant risk of falsely low results. Due to the kit's potential to underestimate blood lead tests, the use of the machines was stopped. Additionally, MDHHS mailed letters to those who were potentially tested with the recalled test kits to encourage retesting.

In FY 2021, 13 local health departments were awarded grants to focus on provider education, parent education, and outreach to at-risk populations, with the goal of increasing testing rates and addressing the three objectives outlined below. Due to the COVID-19 pandemic, grantees had to adjust how they approached these activities. Activities funded by the grants included:

- Developing and implementing a protocol to increase confirmatory testing rates by outreach and education to families of children with capillary elevated blood lead levels. This includes coordination with the child's primary care provider, Medicaid Health Plan, and family to ensure that barriers to getting the confirmatory test are addressed.
- Distributing materials, providing education, and presenting at community events, many of which remained virtual due to the COVID-19 pandemic.
- Developing messages to distribute to their community via social media, media campaigns, local radio/TV

shows, and mailings.

- Supporting lead testing at WIC clinics and local health departments. This was a particular challenge given the barriers of closed WIC clinics and recalled LeadCare testing kits. Local health departments adjusted by switching to other testing methods like microtainers and filter paper.
- Convening lead poisoning prevention partners to coordinate efforts and messaging.
- Education to health care providers about lead testing recommendations for children and pregnant women.
- Education to students in health care programs.
- Nursing Case Management services for home visits not covered under Medicaid.

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

The first strategy to achieve this objective was to flag children in the Michigan Care Improvement Registry (MCIR), that need to be screened for blood lead risk factors. MCIR displays blood lead test results for children when providers access their patient's immunization records. This allows providers to see if a child needs to be tested. When a child has an EBL, MCIR flags the results and provides the recommended follow up for medical management. Provider offices can use this information in their visits with patients and order necessary testing.

A second strategy was to provide education activities to encourage providers to screen all children less than 72 months of age for lead exposure risk factors. Provider education was ramped up in FY 2021 through the hiring of a physician public health detailer and a physician consultant. The physician education team presented to 19 health care provider offices/clinics throughout Michigan. Approximately 140 clinicians received education. Additionally, an important partnership with the Michigan Chapter of the American Academy of Pediatrics (MIAAP) was enhanced. CLPPP partnered with MIAAP to establish an ECHO project and develop a provider health care provider education packet, to be finalized and distributed in FY 2022.

Additionally, an online module for health care providers went live in August 2020. Since then, 209 health care providers, including pediatricians, social workers, nurses, and students have completed the course. The module goes over the sources of lead exposure, recommendations for screening and testing for children, and medical management of children identified as having an elevated blood lead level.

To achieve equitable health outcomes, a third strategy was to partner with agencies to provide culturally appropriate lead education to at-risk populations. In FY 2021, CLPPP continued a contract with a community advocate to provide education and outreach to the Arab American community in Southeast Michigan, specifically newly resettled refugee families. According to the CDC refugee toolkit, newly resettled refugee children have a higher prevalence of EBLs compared to US born children. Through this project, the consultant provides trainings to health care providers and resettlement agencies in Wayne, Macomb, and Oakland counties about the CDC recommendation for lead testing amount all refugee and immigrant children within 90 days of arriving to the USA, and within 3 to 6 months of finding a permanent residence. The consultant also partners with faith-based and community-based partners to provide educational materials like handouts, calendars, and posters in both English and Arabic.

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

In an effort to bring all Medicaid Health Plans in line with the Medicaid goal of 100% of continuously enrolled children tested by age 3, CLPPP made reports available to local health departments and foster care workers with information about blood lead testing status for Medicaid children. The ad hoc reports can be pulled at any time through a Medicaid care coordination portal called CareConnect360. This report also includes information about which

Medicaid Health Plan the child is enrolled in. CLPPP provided a presentation to LHDs on how to access and use the reports to do outreach to encourage blood lead testing. These reports replace previous data summary reports of testing status of Medicaid-enrolled children that included data by Medicaid Health Plans that was sent monthly to local health departments. This change will allow for health departments and foster care workers to access blood lead testing status for Medicaid children as needed.

A second strategy was to conduct a range of provider education activities to encourage providers to provide blood lead tests to Medicaid-enrolled children at the recommended times. Activities discussed above under Objective A also encouraged providers to provide blood lead tests to Medicaid-enrolled children at the recommended times.

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.

In FY 2021, the local health department quarterly report bundle was finalized and posted to the CLPPP data sharing application for the health departments to retrieve. The reports include both annual and monthly data at the state, local health department, county, target city, and zip code levels. Presentations and training were also provided to local health departments, so they understood how to access and use the reports.

Also, as discussed above, local health departments continued to use their weekly blood lead testing reports to conduct outreach via phone, mail, and e-mail to families and providers to encourage confirmatory blood lead testing for elevated capillary tests. Many local health departments have protocols in place to do this follow up. Activities discussed under Objective A also encouraged providers to provide order a venous test after an elevated capillary test.

Immunizations – Children (FY 2021 Annual Report)

The MDHHS Division of Immunization is focused on improving the uptake of all Advisory Committee on Immunization Practices (ACIP) recommended vaccines among Michigan children 19 through 35 months of age. Specifically, the Immunization Program closely monitors the pediatric series vaccination rate which includes 4 doses of DTaP, 3 polio, 1 MMR, 3 Hib, 3 Hepatitis B, 1 varicella, and 4 pneumococcal conjugate (4313314 series) for Michigan children 19-35 months of age. The COVID-19 pandemic has presented numerous challenges to both healthcare and public health. The Immunization Program has been closely monitoring the impact of the COVID-19 pandemic on immunization administration and reporting patterns to the Michigan Care Improvement Registry (MCIR) and the resulting effect on immunization coverage estimates. Michigan immunization rates for the pediatric series declined from 70.7% in FY 2020 to 69.4% in FY 2021. Michigan has not seen a pediatric series completion rate under 70% among this population in many years.

The pandemic brought many challenges for pediatric providers, and vaccine hesitancy among parents has also been in the spotlight. A recent national study suggested that only 63% of parents are following the CDC recommended ACIP schedule. With increased media attention on vaccines—specifically the COVID-19 vaccine—vaccine hesitancy became even stronger. Further, the overall clinical flow at pediatric offices was greatly impacted by the pandemic. Providers struggled with staffing shortages, staff burnout, excess sick visits and concerned parents. To combat the decline of pediatric vaccination rates, the Immunization Program is working diligently with providers, health care associations, and local public health to catch children back up on vaccines they may have missed due to the COVID-19 pandemic. In FY 2021, Title V funding continued to support childhood vaccination efforts.

Michigan continues to see a decline in the immunization waiver rates for school-aged children and for preschool children due to the Michigan requirement that parents must receive immunization education at the local health department on the value and safety of vaccination before receiving a non-medical waiver of immunizations for their

child.

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

In FY 2021, largely due to the COVID-19 pandemic, Michigan continued to experience a decrease in the percentage of children 19-36 months of age who received ACIP-recommended vaccines. According to data from MCIR, in Quarter 3 of FY 2020, the vaccination coverage rate for the pediatric series (4 doses of DTaP, 3 polio, 1 MMR, 3 Hib, 3 Hepatitis B, 1 varicella, and 4 pneumococcal conjugate) was 70.3%; in Quarter 4 of FY 2021 that coverage rate decreased to 69.4%. While this is not as large of a decrease in comparison to FY 2019 to FY 2020, this trend downwards is still concerning. The Immunization Program continues to use MCIR to monitor children 6-24 months of age who are overdue for vaccines, which is a key strategy to support progress on this objective. Using the data, the Immunization Program works to highlight the importance of pediatric vaccines through educating providers and the public and continues its partnership with public and private stakeholders to combat vaccine hesitancy and in turn promote vaccine confidence.

A second strategy was to generate letters to parents of children who were overdue for a vaccine. Due to competing priorities, including the COVID-19 pandemic and staffing shortages among the Immunization Program's epidemiologists and MCIR team, pediatric recall letters were not generated for children 6-18 months of age who are overdue for a vaccine. The Immunization Program aims to generate recall letters for this population in FY 2022.

A third strategy was to identify and address racial disparities in vaccination rates. The Immunization Program applied for and was awarded a grant to improve vaccine coverage in an under-vaccinated population. The target population of this work included six local health jurisdictions: the city of Detroit and Genesee, Lapeer, Sanilac, St. Clair, and Tuscola counties. Of these, four counties have race/ethnicity population estimates available with the percentage that is White and African American as follows: Genesee (74.5% and 19.8%), Lapeer (95.4% and 1.4%), St. Clair (93.6% and 2.3%), and Wayne (Detroit is located within Wayne County) (53.1% and 38.8%). Disparities in childhood vaccination coverage exist across sociodemographic factors. National Immunization Survey (NIS) estimates from 2017 indicated that 31.9% of Michigan children aged 19-35 months lived below the poverty level and only 54.7% (± 16.3) of those children were up to date with the combined childhood 7-vaccine series compared to 75.4% (± 7.2) of children living at or above the poverty level. This disparity is also seen among Michigan children participating in the Women, Infants, and Children program (WIC) (62.1%, ± 11.5) compared to children not participating in WIC (78.4%, ± 8.0). Using data from the Michigan Care Improvement Registry (MCIR), the state's immunization information system, disparities in immunization coverage by race have also been identified: 79% of White children aged 19-35 months completed the childhood 7-vaccine series in 2017 compared to 62% of African American children.

Although the COVID-19 pandemic delayed some of planned activities within the City of Detroit, the Immunization Program is working with the City of Detroit Health Department and the school district to hold School Located Vaccine clinics to assist in increasing vaccination rates in Detroit. The Immunization Program worked to provide flu vaccine at these clinics and encouraged immunizing providers to access and offer all ACIP-recommended vaccines. The Immunization Program plans to further this work in FY 2022, especially with COVID-19 vaccine for this age group.

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

The first strategy to support this objective was to 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. 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 the rankings by county. 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.

Although the COVID-19 pandemic did temporarily affect the continuation of these quarterly report cards, the Immunization Program has been updating them on a consistent basis since the third quarter of 2021. The county report cards highlight vaccination coverage rates for pediatric, adolescent, and adult residents within each county and highlight their overall rank among all counties in Michigan. In addition, the report cards highlight both school and childcare waiver rights for each county and indicate their rank on this measure as well. The Immunization Program uses this rate and rank system to foster awareness among local health departments with the end goal of improving vaccination uptake across the state.

Objective C: Implement the I Vaccinate Campaign.

Vaccine hesitancy was a notable concern in FY 2021. The Michigan Immunization Program continues to support the statewide media campaign, I Vaccinate, which began in March of 2017. To engage parents, MDHHS also continued to conduct focus groups with mothers of young children 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 continues with funding to run through 2022 to provide vaccine information to parents. The campaign promotes vaccination of children in Michigan using multiple 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](#).

The I Vaccinate Campaign has worked closely with MDHHS to promote COVID-19 vaccination among all Michigan residents, including eligible Michigan children. I Vaccinate created several commercials referred to as "My Why" videos emphasizing why people are choosing to get vaccinated with COVID-19 vaccine. An example is available on the MDHHS social media page [here](#). The Immunization Program continues to provide subject matter expertise and feedback to the I Vaccinate Campaign to craft information and messages.

Child Health - Application Year

Oral Health – Children (FY 2023 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—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, 59 of the state’s 83 counties have a full, partial or facility Health Provider Shortage Area (HPSA) designation, with 12 counties having less than five dentists. In 2020, only 38.7% 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. Healthy Kids Dental began as a demonstration project through a contract with Delta Dental Plan of Michigan in 22 counties in 2000. By 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 birth-21, to receive dental care.

The Healthy People 2030 target is to have 42.5% of children ages 3 to 19 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 2018, SEAL! Michigan was funded through Title V, CDC Cooperative Agreements, HRSA grants (as available), and annual gifts from the Delta Dental Foundation of Michigan. Beginning in t 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, a School Oral Health Consultant to manage SEAL! Michigan at the state level, and a 0.5 FTE Oral Health Coordinator at Detroit Public Schools Community District (DPSCD). 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 added significant sustainability to the program overall.

As a response to the COVID-19 pandemic, the SEAL! Michigan program implemented changes for the FY 2022 grant year. Prior to the pandemic, the program was entirely school-based and/or school-linked, focusing only on permanent molars; additionally, students served were in the first, second, sixth, or seventh grade for the Lower Peninsula, with the exception of Wayne County. All students (K-12) were served in Wayne County and the Upper Peninsula. During the pandemic, the SEAL! Michigan programs were school-based and school-linked when

possible, and when not possible, they were allowed to provide services in alternative locations (i.e., daycare centers, WIC, Head Start centers, YMCA, churches, Boys & Girls Club, sporting arenas, youth homes, group foster homes, community centers, township halls, city halls, food pantries) and were encouraged to set up external service areas in retail and health center parking lots. Students served in all locations were between the ages of 1-21, and it was allowable to seal both primary and permanent teeth. These changes were in response to so many students in Michigan not having access to preventive dentistry in a dental home and who then also lacked services in a school-based setting. Programs were given the flexibility to think 'outside the box' on how, where, and when to provide dental screenings, sealants, and other preventive treatments.

In FY 2023, the SEAL! Michigan program plans to revert to the original program guidelines (i.e., being primarily school-based and/or school-linked, focusing only on permanent molars on students in the first, second, sixth, or seventh grade for lower Michigan, except Wayne County). All students (K-12) will continue to be served in Wayne County and the Upper Peninsula. Sealing primary teeth will no longer be a funded service under SEAL! Michigan to ensure all funding is allocated to teeth intended to be retained life-long. The program guidelines will remain flexible and will have the ability to modify ways to reach students in the event COVID-19 again impacts the ability for students to attend school.

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 13.2: 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 childhood chronic 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 experienced consistent growth by adding more programs and within each individual program expanding into more schools annually. Currently the program has nine grantees across the state, plus four programs operating in DPSCD. Although the SEAL! Michigan program provided service to 193 schools in FY 2020 (before the state shutdown in mid-March 2020), 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 improvements to its data collection efforts. Data are collected annually and entered through Teleform software where the data are then cleaned and analyzed by the oral health epidemiologist. Annual reports are written and released for

each local program as well as aggregated into a statewide report. Data can illustrate program success through annual increases in the number of schools and students served and through the number of sealants placed. 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 updated by each individual program and can be used as marketing material. The infographic highlights data from each individual program for the fiscal year and can be used to share accomplishments with stakeholders, school administrators, and additional funders. The infographic was also created for the OHP to highlight the cumulative outcome of SEAL! Michigan. The initial plan was to update this infographic annually; however, due to the pandemic, the infographics were not updated in FY 2021 or FY 2022 but will be updated in FY 2023 after the sealant program returns to its original guidelines.

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 initially developed by professional health literacy specialists and was written at a third grade reading level to accommodate varying literacy levels. The brochure was updated in 2020 by the MDHHS Communications Office and will continue to be used in FY 2023. 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 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 Community District (DPSCD).

Detroit Public Schools Community District (DPSCD) 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 DPSCD system is the largest school district in the state and provides educational services to approximately 48,000 students. According to a report by the Michigan Department of Education, approximately 82% 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 percentage by 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 more 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 DPSCD 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 DPSCD school buildings. However, in 2018 the school system halted oral health work as a result of having too many providers of oral health services coming into the schools which led to coordination challenges. Administrators took the opportunity to pause and create an oral health plan that provides more clarity on which providers are serving the schools. The new plan involved contracting with four providers (two restorative and two preventive) and assignment of two to each school (one restorative and one preventive). However, in FY 2022, it was determined more providers were needed, thus the plan was modified to include three additional restorative providers and one preventative. This improvement enables DPSCD to have more control over which programs are coming in and out of each school building and to ensure there are enough providers to effectively see all children seeking oral health services in school. Until 2020, DPSCD did not have a designated position to oversee oral health activities and ensure that students receive preventive and restorative care as well as urgent follow up care. Thus, the MDHHS OHP worked with DPSCD to create and fund the half-time Oral Health Coordinator (OHC) position to oversee work relating to oral health in all DPSCD buildings. This OHC was hired in August 2020 and will continue to be funded through Title V in FY 2023 to provide oversight of the dental programs and to help students in DPSCD receive both preventive and restorative care.

The OHC collaborated with Team Smile, the national charitable organization to promote children's oral health, to plan a one-day event to take place at a school in Detroit. Team Smile will partner with oral health professionals in Michigan, as well as professional sport teams (Detroit Lions, Detroit Pistons, etc.) to provide oral health services and at the same time to get kids excited about the importance of their oral health. This event is currently planned to occur for three years (2022-2024).

The first strategy is for the OHC to organize parent and student focus groups to assist with family engagement and with developing a successful oral health program in DPSCD. 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 support 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 DPSCD so all programs can benefit from the outcomes of the focus groups.

The second strategy is to maintain reporting requirements for all DPSCD oral health providers. All contracted oral health programs in DPSCD will be required to complete data forms for 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 data are collected and examined, it will provide guidance as to where program improvement should be implemented.

The third strategy will be to collaborate with the newly hired DPSCD School Nurses to ensure they have access to the recorded oral health webinars. There is a consistent turnover of DPSCD school nurses, so it is important to provide the oral health webinars at their orientation. A document will be created providing information about children's oral health and will include instructions on how school nurses can access the trainings. The DPSCD OHC will also follow up with new school nurses to support ongoing oral health education.

Childhood Lead Poisoning Prevention (FY 2023 Application)

Lead poisoning prevention and intervention continues to be a critical need in Michigan. Michigan has made significant progress over time in reducing the percentage of children who have elevated blood lead levels. 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 COVID-19 pandemic has negatively impacted blood lead testing rates due to deferred care and increased use of telemedicine. Children are also spending more time at home, which increases the risk of exposure for those living in homes with lead contamination. In addition, blood lead testing rates decreased even more in 2021 due to a recall of LeadCare II capillary test kits. LeadCare II capillary testing was the method used for majority of capillary testing in Michigan. With that testing method unavailable, testing rates decreased throughout the state.

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). Recently, CLPPP joined the Healthy Homes Section to better strengthen the health/housing partnership at the state and local levels. Title V funding 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 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 ($\mu\text{g}/\text{dL}$). Children with an EBLL should have interventions such as 1) in-home nursing case management, 2) environmental investigations to mitigate health effects of lead exposure and identify and remove sources of lead in their environments, and 3) referrals to health and human services and appropriate resources.

In October 2021, CDC announced that they will use a new blood lead reference value (BLRV), going from 5 $\mu\text{g}/\text{dL}$ to 3.5 $\mu\text{g}/\text{dL}$. As of May 2022, Michigan's new blood lead reference value will also be 3.5 $\mu\text{g}/\text{dL}$. With a lowered BLRV, there is expected to be additional children identified as having an EBLL, both through capillary and venous testing. Title V funding and support for MDHHS and state local health departments is critical to ensure that resources are available for outreach and services to those families that will be identified as having children with EBLLs. Additionally, outreach is needed to health care providers, laboratories, and partners to share the information on the new BLRV and that capillary results at a level of 3.5 $\mu\text{g}/\text{dL}$ should be followed up as an EBLL and a venous test is needed.

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 completion of the risk assessment, which creates a barrier to accurately determining the number of providers conducting the risk assessment with patients.

A strategy to increase blood lead screening is to improve notification to health care providers of patients' blood lead levels and need for blood lead testing. Activities include 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 2022, CLPPP worked 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. Expanding on this in FY 2023, CLPPP has also partnered with the Altarum Institute to research how to improve provider notification of elevated blood lead results and improve

their ability to determine if a child is due for a blood lead test. Potential solutions include direct interfacing between EHR systems and the CLPPP data to populate blood lead levels and build in alerts when testing or follow-up is necessary. 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 in Michigan. Health care providers play a vital role increasing screening, testing, and confirmatory testing rates. CLPPP will undertake several efforts to educate and connect with health care providers, including:

- Expanded outreach to health care providers in Michigan to ensure awareness of the new BLRV and that levels of 3.5 µg/dL are considered elevated.
- Continued connection between the MDHHS physician consultant and public health detailer with 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.
- Partner with the Michigan Chapter of the American Academy of Pediatricians (MI-AAP) to present to pediatricians at annual conferences and during a webinar series. Additionally working with MI-AAP to launch an ECHO (extension for Community Healthcare Outcomes) project around blood lead testing.
- Follow up with health care providers who received a mailing of a resource packet in February 2022.
- Continued dissemination 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 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. Training content focuses on understanding how children are exposed to lead, the health impacts of lead, blood lead testing requirements and the risk assessment questions, the importance of working with local health departments and other resources.
- Provide 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 is important that these partnerships are developed ahead of time and both parties recognize the other's services and resources.

The third strategy is partnering with agencies to provide culturally appropriate and audience-specific lead education to at-risk populations. Activities include:

- CLPPP will continue to provide information and follow up on the October 2022 mailing of education materials to daycare providers throughout the state.
- A project by the Genesee Health Coalition Community Health Access Program to partner with area health care providers, specifically OBGYNs, to recommend testing for pregnant women identified as being at risk for lead exposure and refer them to health and human services and resources.
- 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 plans to continue to have lead poisoning prevention materials available in commonly used languages including Spanish, Arabic, and Bengali. CLPPP will work with the Culturally Appropriate Services for All (CASA) group in the Division of Environmental Health (DEH). 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. In FY 2023, CLPPP will work to have additional languages available, both electronically and for mailing.

- CLPPP Public Health Consultant will be trained by EPA, in partnership with the National Tribal Toxics Council and National-EPA Tribal Science Council on the tribal lead curriculum. This curriculum gives educational tools that provide tribes and other communities with practical, on-the-ground, community-based resources to reduce childhood lead exposure.

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 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 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 in FY 2023 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. Additionally, a child who has an elevated blood lead level confirmed with a venous test qualifies for services like nursing case management, the Lead Safe Home Program, and Early On. This objective will use MDHHS data warehouse data to track progress through 2025.

The first strategy for Objective C is to continue 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. 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.

A second strategy CLPPP plans to implement in FY23 is working with the families of those that have received nursing case management, to get feedback and ideas for improving the case management process. Once nursing case management is completed, the child's BLL has declined, and the family is connected with resources, CLPPP is planning to work with the family to understand how and if nursing case management is helping, whether the service met families' expectations, and whether the desired outcomes are being achieved.

The third 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, specific to encouraging that all elevated blood lead test results from a capillary test are followed up with a venous confirmation test.

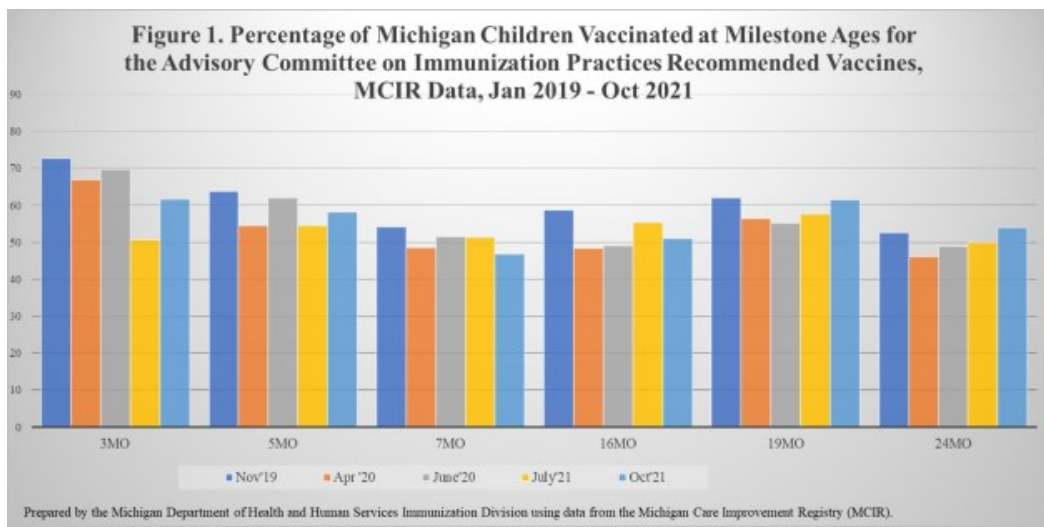
Immunizations – Children (FY 2023 Application)

Based on the Title V needs assessment, the state performance measure (SPM) created in 2015 was retained in 2020, 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).” The 4:3:1:3:3:1:4 series represents 4 doses of DTaP, 3 doses of Polio, 1 dose of MMR, 3 doses of Hib, 3 doses of HepB, 1 dose of Varicella, and 4 doses of PCV vaccines. In the 2020 needs assessment Provider Survey, 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 also identified an increasing focus on individual choice (including vaccine refusal) versus community benefits as a factor that impacts population health. Notably, those needs assessment findings were obtained prior to the COVID-19 pandemic.

Michigan continues to experience 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, the impact of the COVID-19 pandemic has created new, unique challenges. Image 1 indicates falling vaccination rates at several milestone ages over time.

Image 1. Percentage of Michigan Children Vaccinated at Milestone Ages



Michigan has experienced declining immunizations rates and has not met the Healthy People 2030 goal of 80% for child immunizations. As of February 2022, according to the MCIR, 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 69.3%. In comparison, in February 2021 the vaccination rate for this same pediatric series was 70.4% according to MCIR and in February 2020, the vaccination rate was 74.3% statewide. The COVID-19 pandemic and vaccine hesitancy have contributed to falling vaccination rates.

Parent vaccine hesitancy has 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 as a standard of care and the importance of talking with parents about any questions or concerns they may have. Michigan has also partnered with a non-profit organization called the Franny Strong Foundation to provide information for parents through the [Vaccinate campaign](#) to learn facts about immunizations and the risks of not vaccinating. MDHHS continues to work with the Franny Strong Foundation and the MDHHS Office of Communications 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:

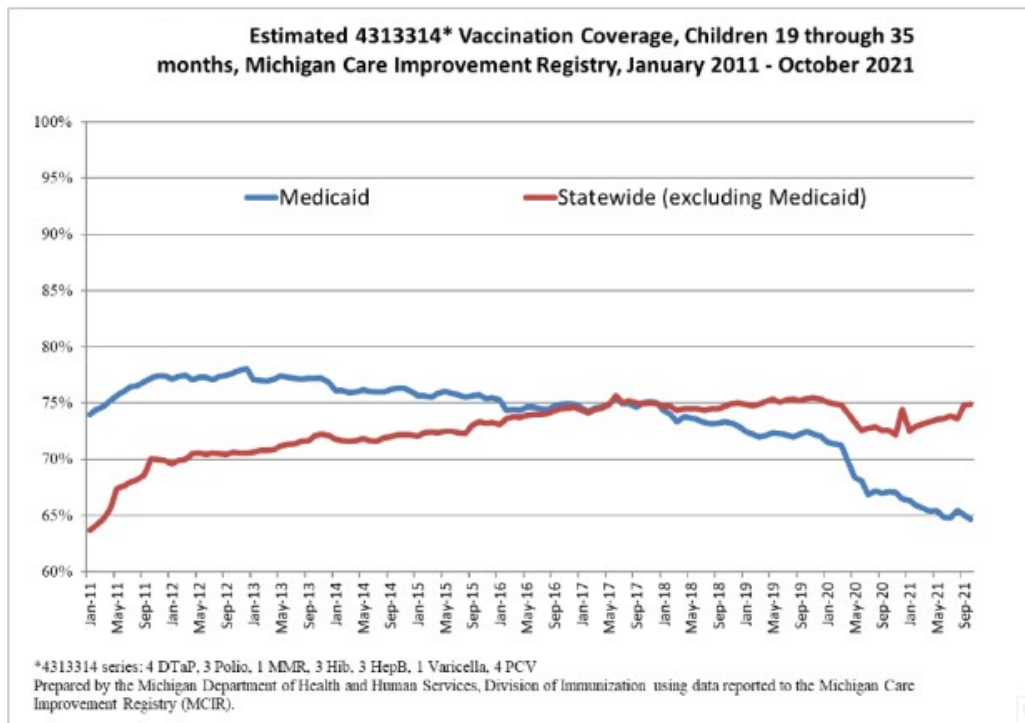
- Promote high immunization levels for children and adults
- Provide vaccines through a network of public and private health care providers
- Facilitate the development, use and maintenance of immunization information systems
- Support disease surveillance and outbreak control activities
- Provide educational 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 Michigan Division of Immunization operates the Michigan Care Improvement Registry (MCIR). The MCIR is a statewide immunization registry that contains over 149 million shot records administered to 12 million individuals residing in Michigan. MDHHS continues to work with subcontracts with six MCIR regions to enroll and support every immunization provider in the state. 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 69.3% of children who reside in Michigan have received the routinely recommended 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 as illustrated in Image 2. The overall statewide vaccination level of 69.3% falls short of the Healthy People 2020 goal of 80%.

Image 2. Estimated Pediatric Vaccine Series Coverage, Children 19 through 35 months, Medicaid and Statewide



The Immunization Program intends to use Title V funds to support program work in addressing declining immunization rates and increasing vaccine confidence among providers and parents. The funds will be used to target areas with low vaccination rates, while working collaboratively with local health department partners to increase vaccination rates through communication campaigns, targeted outreach, and sending vaccine recall letters using the MCIR for those overdue for any vaccine.

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, as previously illustrated in Image 1. 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. 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.

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 population level to determine any children who need vaccines. To increase vaccination rates, the Division of Immunization will notify parents of all children 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 in life. 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 at 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. The Division aims to use MCIR data to conduct a root cause analysis and identify high social vulnerability index (SVI) areas within the state and conduct targeted vaccine outreach in those areas. It is of the utmost importance that vaccine access is equitable to all Michigan children. Identifying high SVI areas within the state and conducting targeted vaccine outreach in those areas will assist in addressing the disparities in vaccination coverage.

Furthermore, the COVID-19 pandemic has contributed to an increase in vaccine hesitancy for all vaccines. In FY 2023, the Division of Immunization will work with national partners, including Centers for Disease Control and Prevention, and the MDHHS Office of Communications/I Vaccinate Organization to promote vaccine confidence among parents of this age group through resources, various media and presentations. While most parents choose to vaccinate their children according to the recommended schedule, some parents may still have questions about vaccines and getting answers they can trust may be hard. It is vital that the Division works with these partners to address any questions or concerns Michigan parents may have with childhood vaccinations and promote vaccine confidence among this group.

Objective B: Assist local health department immunization staff with targeting outreach to under-served populations in their jurisdiction.

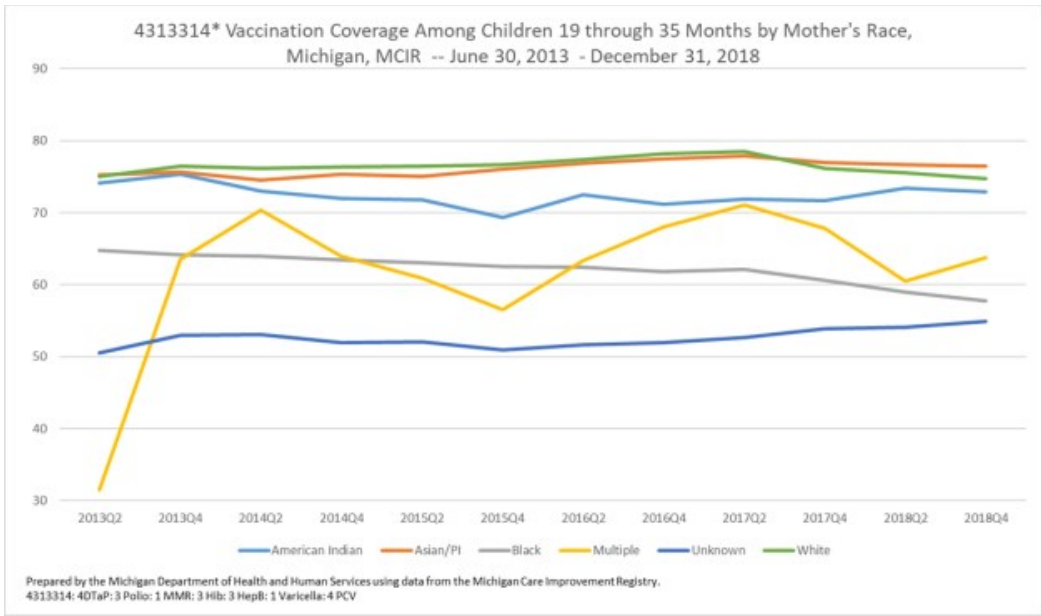
The Michigan Immunization Program will continue to distribute population-based county “report cards” for local health departments to better understand immunization barriers and opportunities for improvement in their communities. The MCIR epidemiologist will generate county report cards on a quarterly basis, which will be posted on the MDHHS Immunization website (www.michigan.gov/immunize). The immunization 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 COVID-19 Impact Report. This report shows how COVID-19 has impacted childhood and adolescent immunization rates, while encouraging providers to catch Michigan children up on recommended vaccines. The Michigan 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. Due to the COVID-19 pandemic, there have been decreases in the coverage levels of childhood vaccines, and much work needs to be done to keep children on schedule.

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, as of 2018. 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



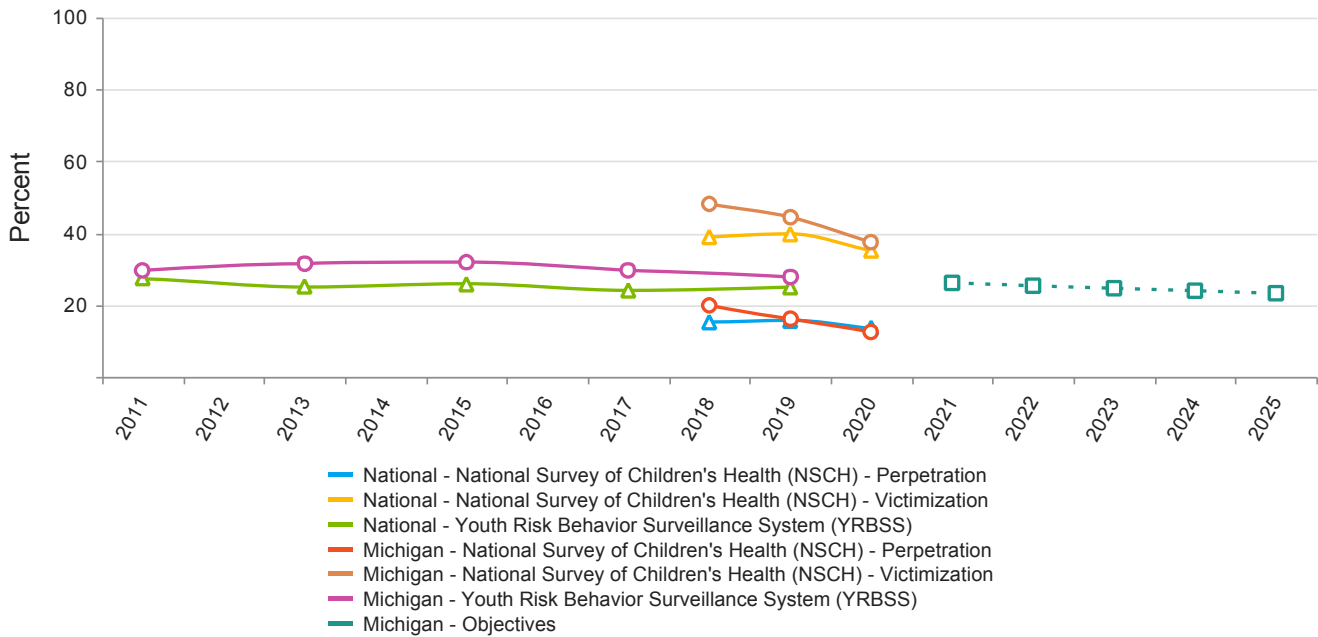
The Michigan Immunization Program will create reports showing immunization rates by race for each local health jurisdiction. These data are being made available to local health departments to bring more focus to issues of health equity and health disparities as a key strategy to achieving equitable health outcomes related to vaccine coverage. A result of the COVID-19 pandemic, the MCIR now contains the race of each person. The immunization rates for race had previously been created using the mother's race information.

Finally, the Immunization Program will partner with the City of Detroit Health Department to target high SVI areas and assist with increasing the overall vaccination rates in Detroit. As discussed above, it is crucial that vaccine access is equitable to all Michigan children. Partnering with local public health in the City of Detroit to identify high SVI areas within the city and conducting targeted vaccine outreach in those areas will assist in addressing the disparities in vaccination coverage.

Adolescent Health

National Performance Measures

NPM 9 - Percent of adolescents, ages 12 through 17, who are bullied or who bully others
Indicators and Annual Objectives



Federally Available Data			
Data Source: Youth Risk Behavior Surveillance System (YRBSS)			
	2019	2020	2021
Annual Objective			26.2
Annual Indicator	29.8	28.0	28.0
Numerator	127,314	117,383	117,383
Denominator	426,596	418,810	418,810
Data Source	YRBSS	YRBSS	YRBSS
Data Source Year	2017	2019	2019

Federally Available Data

Data Source: National Survey of Children's Health (NSCH) - Perpetration

	2019	2020	2021
Annual Objective			26.2
Annual Indicator	20.0	16.1	12.6
Numerator	145,381	116,534	92,956
Denominator	727,587	723,002	735,046
Data Source	NSCHP	NSCHP	NSCHP
Data Source Year	2018	2018_2019	2019_2020

Federally Available Data

Data Source: National Survey of Children's Health (NSCH) - Victimization

	2019	2020	2021
Annual Objective			26.2
Annual Indicator	48.0	44.5	37.4
Numerator	349,295	321,323	274,732
Denominator	727,587	721,708	733,815
Data Source	NSCHV	NSCHV	NSCHV
Data Source Year	2018	2018_2019	2019_2020

Annual Objectives

	2022	2023	2024	2025
Annual Objective	25.4	24.7	24.0	23.3

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		
State Provided Data				
	2019	2020	2021	
Annual Objective			5	
Annual Indicator			5	
Numerator				
Denominator				
Data Source			Classroom Implementation Logs	
Data Source Year			2020-2021	
Provisional or Final ?			Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	11.0	17.0	23.0	29.0

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	2020	2021
Annual Objective			44	54	56
Annual Indicator	39.3	41.9	52.4	44.1	42.8
Numerator	295,138	313,144	334,188	331,995	326,193
Denominator	750,281	746,563	637,751	752,019	762,977
Data Source	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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

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 bullying prevention campaigns for CSHCS and determine goals for bullying prevention 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) Provide intensive training and technical assistance to six secondary schools per year on creating safe schools for LGBTQ+ students

B1) Facilitate professional development for schools and school health coordinators on PA 241 and State Board of Ed Model Anti-Bullying policy B2) Provide technical assistance to school health coordinators working directly with schools B3) Support and promote professional development for schools on the creation and sustainability of Gender and Sexuality Alliances (GSAs)

C1) Repeat the focus group with the Family Center's Family Leadership Network C2) Implement the CSHCS Bullying Prevention small grants program C3) Serve on the HRSA Region IV/V workgroup C4) Create a Peer Leadership Network with CYSHCN youth

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) Emphasize routine assessment of all recommended vaccines for adolescents to increase influenza and meningococcal vaccine rates by 3%, by 2025, among this age group

Strategies

A1) Update current HPV materials to reflect up-to-date vaccine changes and effective communication strategies to promote vaccination and make materials available for providers A2) Provide updated translations of HPV materials to ensure a more equitable approach in addressing HPV vaccine hesitancy A3) Offer quality improvement visits to providers, emphasizing on-time HPV vaccination, and provide a comprehensive assessment of immunization rates and recommendations for practice improvements

B1) Work with internal and external stakeholders on a statewide influenza campaign to improve influenza vaccination coverage among all ages, including adolescents B2) Generate and distribute a letter to Michigan healthcare providers highlighting the importance of catching children and adolescents back up on routine vaccines that they may have missed due to the COVID-19 pandemic B3) Offer quality improvement visits (virtual or in-person) to provide a comprehensive assessment of immunization rates and offer strategies for practice improvements B4) Work with external stakeholders to conduct targeted outreach to improve Meningitis B vaccination rates for adolescents 16 through 18 years of age

Adolescent Health - Annual Report

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' physical health needs in school settings through 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 immunization, pregnancy prevention and reproductive health services, and bullying prevention—as well as services for adolescents who have special health care needs. Other federal MCH funds that impact adolescents include the State Abstinence Education Program (Administration for Children and Families funding), the State Personal Responsibility Education Program (Administration for Children and Families funding), 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, the Michigan Council for Maternal and Child Health, and the School-Community Health Alliance of Michigan.

At the local level, LHDs expended Title V funds in two SPMs and Local Performance Measures (LPMs) in this domain. LHDs completed activities related to SPM 3, adolescent immunization, at 12 agencies which included media campaigns, initiatives to determine barriers to HPV vaccine, provision of gap-filling adolescent vaccinations, waiver education, recalls and reminders. Many immunization clinics had to close during the pandemic which impacted the ability to administer vaccines. Three LHDs selected SPM 6 (behavioral/mental health) and activities included suicide prevention, gap-filling adolescent depression screening, and provision of mental health education to middle/high school youth. All activities were impacted by the pandemic and occurred in reduced capacity.

Four LHDs worked on LPMs related to adolescent health with gap-filling activities such as well-visit physical exams, family planning services, Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infection (STI) counseling and testing, health education, and links to community services. Ten LHDs diverted LMCH funds to COVID-19 mitigation strategies for adolescents including school safety plan development, testing and adolescent COVID-19 vaccinations.

Michigan's approach to adolescent health focuses on increasing wellness through bullying prevention; suicide prevention; promotion of HPV vaccination; and access to reproductive health services, including contraception. 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, 2020). All-cause mortality among non-Hispanic Black adolescents sharply increased among non-Hispanic Black adolescents from 56.0 per 100,000 in 2019 to 71.7 per 100,000 in 2020 (NVSS). However, the motor vehicle mortality rate (8.0 per 100,000, NVSS, 2017-2019) among adolescents has dropped over the past 10 years to below the national average. Following alarming national trends, the suicide mortality rate (12.9 per 100,000, NVSS, 2017-2019) 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 73.7% in 2019 (NIS), with higher rates of vaccination among Hispanic

(84.0%) and non-Hispanic Black (80.5%) adolescents as compared with non-Hispanic white (67.6%) adolescents. The teen birth rate has also steadily declined from 31.9 per 1,000 females in 2009 to 13.3 in 2020 (MDHHS). However, the teen birth rate was 29.7 and 20.9 in 2020 per 1,000 Black adolescent females and Hispanic adolescent females, respectively. . In 2019-2020, parents reported that 12.6% of Michigan adolescents bullied others (NSCH), compared with 13.7% nationally. In 2019, 27.7% Michigan adolescents (12-17) reported being bullied, a non-significant decrease since 2011 (29.7%, YRBS). Students who identify as lesbian, gay, bisexual or transgender were significantly more likely to report being bullied (43.2%) than those who identified as cis-gender heterosexual (27.1%, YRBS, 2019). Similarly, female students (31.6%) and non-Hispanic White students (29.7%) 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.

Bullying Prevention (FY 2021 Annual Report)

To address the state priority need to “create safe and healthy schools for Michigan students”, NPM 9 was selected and ESM 9.1 was developed. In FY 2021, activities undertaken to address NPM 9 included intensive intervention within five secondary schools that provided access to content experts for direct consultation as well as the implementation of health education curriculum designed to teach the skills necessary to curb bullying and create a safe and healthy school environment. In addition to this focused intervention, a series of professional development opportunities were made available to all schools throughout the state with the goal of preparing more schools to either jumpstart their bullying prevention efforts or grow what is already in place. These opportunities were virtual and well attended. Combining this focused and broad approach garners momentum for the work and meets schools where they are while also pushing for progress.

Title V funding directly supported the work of a project consultant who provided one-on-one consultation with five secondary schools striving to address the needs of LGBTQ+ students within their schools, particularly around creating safe and supportive environments. Funding also provided these schools with stipends to implement the strategies designed in consultation with the project consultant. Schools also received resources relevant to their bullying prevention efforts.

Focusing on the LGBTQ+ student population addresses health inequities while also recognizing that improved school environments for this population mean improved environments for ALL students. Partners interested in bullying prevention, especially as it relates to the experiences of the LGBTQ+ student population, found common ground in the objectives and strategies for NPM 9. Partnering with the Michigan Department of Education (MDE) LGBTQ+ Students Project was essential as the goals of the two projects aligned and the project consultant position is shared between the two programs. This consultant has extensive expertise and a proven track record helping schools to achieve positive outcomes and create safe and supportive environments for LGBTQ+ students. The goal of the LGBTQ+ Students Project is to build the capacity of Michigan schools to impact the health, well-being, and educational outcomes of LGBTQ+ students.

Partnering with the Michigan Organization on Adolescent Sexual Health (MOASH) was also essential given the alignment of its mission to our project goals. MOASH staff bring extensive expertise in centering youth voices, especially LGBTQ+ youth voices, and are leaders within Michigan on the formation and sustaining of vibrant Youth Advisory Councils. Their expertise facilitating youth councils, Gender and Sexuality Alliances (GSA) and training school personnel provided a partnership to ensure youth voice and youth engagement would be an integral component of the project. The involvement of the Michigan School Health Coordinator's Association (MISHCA) was key due to their work with schools across the state training teachers and supporting implementation of the *Michigan Model for Health*™ along with other school health initiatives. They are the local representatives for school health education in Michigan.

These partnerships led to many project successes, but COVID-19 raised significant challenges. Lost instruction time; mental health concerns for students and staff; logistics of virtual and hybrid learning; loss of access to supports found in schools during in-person school days; and staffing shortages all continue to play a role in creating a stressful environment in which teaching and learning is compromised.

The direct impact to this project included delays in decision making around projects that were not directly COVID-19 related. Several educators indicated that they had a team and were ready to participate but weren't successful garnering administrative support. One school joined the project but couldn't move forward due to team members being pulled in different directions. While many learning opportunities were recorded and school teams could access them on their own time, the instructional component and intensive technical assistance component needed to be in real time, albeit in a virtual format. That proved too difficult for some schools to navigate with COVID-19 demands.

COVID-19 created many challenges but through flexibility and moving work online, the project team responded to those challenges, providing quality interventions via virtual formats. The project successfully retained a focus on the LGBTQ+ student population, with LGBTQ+ student voices centered in the work. The *Michigan Model for Health*™ program accelerated the timeline for launching the online platform to March 2020 so that all lessons were available for virtual teaching. The Child, Adolescent and School Health (CASH) conference was postponed but a webinar was provided to address the topic. All statewide trainings, workshops and technical assistance sessions facilitated by project partners were moved to virtual formats.

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.

The first strategy to achieve this objective was for six secondary schools per year to implement the *Michigan Model for Health*™ SEH module in all health education classrooms. In FY 2021, implementation of the MMH SEH lessons in school health classrooms in the five participating secondary schools provided a solid foundation for bullying prevention efforts in the school. Students practiced and learned skills foundational to treating one another with respect and care. MMH SEH curriculum modules were purchased for participating schools (through another funding source) and implementation logs completed to ensure fidelity. School Health Coordinators from the corresponding region provided curriculum training for teachers free of charge. Five secondary schools fully implemented (defined in ESM 9.1 as 80% of lessons taught) the MMH SEH modules in their health education classrooms. A sixth school did not complete project requirements due to COVID-19 pressures.

The second strategy from the original NPM 9 state action plan was for six secondary schools per year to utilize the Collaborative for Academic, Social and Emotional Learning (CASEL) *Guide to Schoolwide Social and Emotional Learning* to implement a school wide SEL process. It became clear early in the school year that this component of the project would be an unrealistic expectation for participating schools, given COVID-19. The activity was dropped from the project and school stipends reduced accordingly from \$5,000 to \$3,500 per school.

For the third strategy, training and technical assistance was provided to secondary schools to help create safe schools for LGBTQ students. Title V funding supported intensive technical assistance with a project consultant who worked with teams (team members were designated at the beginning of the project year) from five participating secondary schools providing hands on support, professional development and technical assistance to create change within their schools. School teams worked with the project consultant to develop visions, goals and strategies around schoolwide bullying prevention that focused on safe schools for LGBTQ+ students. Feedback received demonstrated that educators found this consultation extremely beneficial.

School teams received stipends (\$3,500 per school) this project year to support planning expenses, program implementation costs, substitute teacher coverage or staff stipends to attend curriculum trainings, workshops and/or meetings, and other relevant bullying prevention activities, such as attendance at virtual conferences.

Creating Safe and Supportive Schools for Sexual Minority Youth manuals were purchased for each team member from the five participating secondary schools. These manuals provide a wealth of resources and valuable information for Michigan schools seeking to create school environments that support LGBTQ+ students.

The partnership with the MDE LGBTQ+ Students Project enabled participating schools to take full advantage of the suite of learning opportunities. Providing relevant and impactful professional development was a shared goal of both projects. The MDE project created a series of webinars and workshops on this topic and teams from our participating schools were immediately assured of places in these workshops.

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.

Through the partnership with MDE, MOASH, MISHCA and the CASH conference, schools across Michigan are learning about state laws and model policies along with a variety of other issues surrounding safe and supportive schools for ALL students. Youth panels and Youth Advisory Councils are providing learning opportunities as well as informing the overall work of the projects making up this partnership. The MDE LGBTQ+ Students Project alone provided 27 workshops with 1,827 unduplicated participants from 365 local education agencies and intermediate school districts. Staff members from teen pregnancy prevention programs operating within schools and school health staff from other programs within MDHHS also took advantage of these learning opportunities. It is difficult to determine duplicate schools given the cross section of partners providing learning opportunities and varying levels of tracking attendance, but it is estimated that more than 450 schools were reached through these activities in FY 2021.

Early in the project year a webinar was held for local health departments on NPM 9 and strategies for working with schools on bullying prevention. Five speakers covered a wide variety of components related to bullying prevention in schools, including working with school nurses, promoting comprehensive school health education, partnering with health centers and mental health professionals in schools, and data related to the LGBTQ+ student population. A sample workplan was also provided.

To support this objective, one strategy was to conduct training for regional school health coordinators on relevant guidance for schools on PA 241 and State Board of Ed Model Anti-Bullying policy. Multiple trainings were provided to MISHCA members by project partners and one by MDHHS' child and adolescent health epidemiologist on data related to the LGBTQ+ student population. MOASH facilitated 6.5 total training hours addressing the needs of LGBTQ+ students. Learning opportunities included laws and policies on bullying prevention within the overall focus of safe schools for LGBTQ+ youth. MISHCA members also attended the learning opportunities offered to schools statewide, mentioned previously.

A second strategy was to provide technical assistance (TA) follow up to school health coordinators working directly with schools. This was provided to MISHCA members through a variety of avenues including: MDHHS and MDE participation at quarterly meetings with MISHCA; monthly Lunch and Learns; and through calls and emails. MOASH staff members work closely with coordinators seeking TA in addition to the trainings they provide.

COVID-19 led the Child, Adolescent and School Health (CASH) conference, and therefore the bullying prevention session planned, to be delayed until October 2021. However, the conference planning team provided a webinar on May 4, 2021, led by Dr. Stephen Russell, entitled *Bias Based Bullying*. The session had 128 participants.

The final strategy was to collaborate with MDE to disseminate guidance on Public Act 241 and the SBE Model Anti-Bullying Policy to schools and stakeholders. The Michigan State Board of Education approved a revision of the Model Anti-Bullying Policy in December of 2020. MDE staff highlighted changes to the policy and project staff incorporated this information into written and verbal communication with schools throughout the project year. Information was incorporated into technical assistance provided to the five secondary schools in the project but also in any avenue in which staff worked with schools on anti-bullying efforts.

Objective C: Explore bullying prevention campaigns for CSHCS and determine goals for anti-bullying initiatives in Michigan.

The first strategy to support this objective in FY 2021 was to create a diverse subcommittee with representation from CSHCS staff, Family Center staff, Adolescent and School Health, MDE, CSHCS Advisory Committee leadership, families of CYSHCN, and the Family Center Youth Consultant. The goal of the subcommittee is to create and implement a strategy to address bullying in the CYSHCN population. The subcommittee created a work plan with the following goals: conduct focus studies with CYSHCN families, establish a small grants program to prevent bullying in the CYSHCN population, and evaluate bullying policies through the lens of CYSHCN youth and families. The committee reports quarterly to the CSHCS Advisory Committee.

The second strategy was to conduct a focus group with CYSHCN and their parents. CSHCS utilized the Family Center's Family Leadership Network (FLN) Annual Meeting to hold a focus group regarding the bullying experience for youth with special health care needs. The focus group consisted of 12 participants for a two-hour virtual interview. Questions mirrored those utilized by MISHCA during the Title V Needs Assessment. Several consistent themes were noted during the focus group. Parents agreed the bullying experience is unique for individuals, has individual consequences, and is resolved in individual ways. Parents shared that bullying experiences for their youth with special health care needs are different than those of typically developing youth. Overwhelmingly, parents stressed the challenge of identifying bullying concerns when CYSHCN are non-verbal or struggle with conventional communication. Focus group participants revealed significant concerns regarding cyberbullying, the rapidly developing nature of the cyberbullying space, and the lack of documented ways to address cyberbullying. Families also shared frustration with inconsistent responses in schools and the lack of initiatives specifically aimed to help the CYSHCN population. Families in the focus group agreed that peer-to-peer (P2P) support and restorative justice approaches have been helpful in addressing bullying. Results from the focus group were shared with the CSHCS Advisory Committee and HRSA Region 4/5 Bullying Prevention & CYSHCN workgroup.

For the third strategy, CSHCS partnered with the Family Center to establish a small grants program to address bullying for children and youth with special health care needs. Title V funding was allocated to school districts and buildings for grants up to \$10,000 to create or expand P2P support programs in their schools. The objectives of the grant program are:

1. Contribute to safe cultures within school communities for CYSHCN;
2. Provide or enhance the school environment for peer support for CYSHCN;
3. Increase social and emotional support for CYSHCN; and
4. Expand bullying prevention efforts for CYSHCN.

In FY 2021, 30 grant applications were received and 13 organizations were granted a total of \$106,000. CSHCS has formed a partnership with Grand Valley State University's START (Statewide Autism Resources & Training) Program to provide support to grantees. START has resources and training available for schools interested in P2P programs. Grantees will have access to monthly webinars highlighting aspects of P2P program creation such as Review of the P2P Program Playbook, Implementing P2P Program Surveys, and P2P Medium of Exchange Ideas.

Immunizations – Adolescents (FY 2021 Annual Report)

The Division of Immunization was greatly impacted by the COVID-19 pandemic. During FY 2021, COVID-19 vaccines became available to the public. Initially, availability were only available for high-risk adults or immunocompromised individuals, followed by all adults. By May of 2021, COVID-19 vaccines were available for adolescents, specifically 12-15 years of age, and by October 2021 the vaccines were available for children 5-12 years of age. The Immunization Program was tasked with focusing its efforts on the roll-out of COVID-19 vaccines to the public. Due to competing priorities resulting from the COVID-19 pandemic, especially among Division of Immunization staff, many of the original activities related to Human Papillomavirus (HPV) vaccination for adolescents were unfortunately not completed.

To keep some HPV-focused activities moving forward, the Quality Improvement Coordinator and the Adult and Adolescent Immunization Coordinator remained active members on the Michigan HPV Cancer Prevention Alliance. This group was formed by the American Cancer Society and engaged several partners, both public and private sector, to focus on improving HPV vaccination rates among Michigan adolescents. Further, the Adult and Adolescent Immunization Coordinator worked with colleagues from the MDHHS Cancer Prevention and Control Section on a Tri-County HPV Vaccine Collaborative project. While the goals of this project transitioned due to the COVID-19 pandemic, the Immunization Program and the Cancer Prevention and Control Section worked with local public health and partners to increase HPV vaccination uptake.

Objective A: By 2025, increase the percentage of adolescents who have completed the HPV series to 64%.

Although the goal of an HPV completion rate of 64% for adolescents 13-18 years of age remains a priority for the Immunization Program, some tasks outlined in the FY 2021 state action plan were put on hold due to the COVID-19 pandemic and competing staff priorities, especially among Immunization Program epidemiologists and the Michigan Care Improvement Registry (MCIR) team.

The Immunization Program planned to generate and distribute HPV recall letters to parents of adolescents who had not yet completed the HPV vaccination series. However, due to the complexity of this work, especially as it involves the MCIR, this activity was not completed during FY 2021. The Immunization Program does plan to conduct statewide HPV recalls within the next reporting period.

The Immunization Program continued to collaborate with the American Cancer Society and other public and private stakeholders, including local public health, the MDHHS Cancer Program, Karmanos Cancer Institute, and the Michigan Pharmacists Association to promote HPV vaccination as part of the MI HPV Cancer Prevention Alliance. In FY 2021, some meetings were postponed, and some partners had to join intermittently due to competing COVID-19 priorities. Despite these challenges, the goals of the workgroup progressed, and documents were created to promote HPV vaccination as cancer prevention.

The Quality Improvement Coordinator continued to partner with Michigan health systems to develop strategies to increase HPV vaccination rates among their members. The Quality Improvement Coordinator presented to various healthcare groups, as well as Blue Cross Blue Shield of Michigan, on the benefits of HPV vaccination.

Objective B: Increase outreach to adolescent immunization providers with low immunization rates.

The goal of targeted outreach to adolescent immunization providers with low immunization rates remains a priority for the Immunization Program. However, due to competing priorities within both the Immunization Program and provider offices due to COVID-19, HPV-focused QI visits at targeted provider offices did not occur in FY 2021.

Michigan is required to conduct both Vaccines for Children site visits and quality improvement site visits; however, some visits were either placed on hold or moved to virtual site visits due to the pandemic.

Many family practice and pediatric providers expressed concerns with staffing shortages and combatting the COVID-19 pandemic, thus affecting their overall clinical flow and impacting their immunization rates. The Immunization Program has been closely monitoring the impact of the COVID-19 pandemic on vaccine administration and reporting patterns to the Michigan Care Improvement Registry (MCIR). From FY 2020 to FY 2021, Michigan saw a decline in HPV vaccination rates from 44.1% to 42.8%.

While the Immunization Program was able to use MCIR data to identify adolescent providers with low HPV completion rates, targeted outreach to those provider offices did not occur due to the reasons listed above. Although targeted QI visits did not occur, some local health department site visitors did conduct overall QI visits with providers in their jurisdiction. During these visits, site visitors provided a comprehensive assessment of immunization rates and recommendations for overall clinical flow and practice improvements to increase these rates. Information was also shared on the importance of emphasizing on-time vaccination of adolescents during 11-12-year-old visits.

Although the COVID-19 pandemic is not over, the Immunization Program, in partnership with local public health and providers, aims to focus on all adolescent vaccines in FY 2022. Since COVID-19 vaccines are available to adolescent patients, the Immunization Program hopes to educate providers on promoting all Advisory Committee on Immunization Practices (ACIP) recommended vaccines to adolescents and emphasizing the importance of HPV vaccine as cancer prevention.

Adolescent Health - Application Year

Bullying Prevention (FY 2023 Application)

The percent of adolescents, ages 12-17, who are bullied or who bully others (NPM 9) was selected to address Michigan's 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 the current five-year cycle. Adolescent focus group participants indicated that bullying is a recurring issue in Michigan. Michigan's 2019 YRBS data indicate that students experience bullying at an alarming rate, with 27.7% of high school students reporting in-school or online bullying.

The link between bullying and suicide illuminates the harm bullying inflicts. Michigan students who reported any bullying in the previous year were significantly more likely than students who did not experience bullying to report: feeling sad/hopeless for 2+ weeks in the past month (2.0x as likely); considering suicide in the past year (2.9x as likely); attempting suicide in the past year (3.4x as likely); a suicide attempt requiring medical attention in the past year (6.0x as likely); and engaging in self-harming behaviors (2.6x as likely). Suicide is the second leading cause of death for youth and young adults aged 15-24 years in Michigan.

Students who identify as LGBTQ+ are a subset of the adolescent population that disproportionately and inequitably experiences the harmful consequences of bullying. For LGBTQ+ youth in Michigan, school can be an unsafe place. Michigan's 2019 YRBS data indicate that LGBT students remain at significantly higher risk of being bullied than their non-LGBT counterparts (43.2% vs 27.1% using pooled 2017/2019 data).

According to the Gay, Lesbian and Straight Education Network's (GLSEN) most recent Michigan State Snapshot (2017), most LGBTQ+ students experienced anti-LGBTQ+ victimization at school, including harassment or assault based on sexual orientation (72%), gender expression (58%), and gender (54%). The State Snapshot also found that LGBTQ+ youth experienced school discrimination, including being unable to form a Gay Straight Alliance, or GSA, (16%), and their schools lacked comprehensive anti-bullying policies with protections based on sexual orientation and gender identity/expression (92%). The Trevor Project, a national, toll-free confidential suicide hotline for LGBTQ+ youth, reports receiving over 6,200 calls from LGBTQ+ youth in Michigan in 2020.

Data from the 2020 Michigan School Health Profiles questionnaire (completed by secondary principals) indicate that 67% of high schools have a student led club that aims to create a safe, welcoming and accepting school environment for all youth, regardless of sexual orientation or gender identity. This percentage dropped to 31% for middle schools. Principals were also asked about practices related to LGBTQ+ youth as well as bullying prevention practices. Data demonstrated that, even when practices are mandated by law, not all schools followed the mandated practices.

LGBTQ+ youth and their allies are asking for more supportive policies and education. Focus group participants indicated that more progressive policies and innovative strategies for health education are needed to teach children healthy habits and the risks of dangerous health behaviors. Robust health education programs, in which social emotional health (SEH) is at the forefront, enhances the skills needed to prevent bullying behavior and helps to achieve equitable health outcomes.

Michigan's CYSHCN population also experienced bullying at a higher rate, with 66.6% of CYSHCN being bullied compared to 26.3% of general population students in Michigan (2019-2020 National Survey of Children's Health). During focus groups and listening sessions in the 2020 Title V Needs Assessment, youth and their parents described a need for activities, support groups, and play groups to address a sense of social segregation and

stigma within the community regarding children with special health care needs. In response to this data and feedback, CSHCS utilized \$150,000 of Title V funding to implement a bullying prevention initiative within the CYSHCN population to promote peer support and inclusion.

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.

Addressing concerns voiced by youth focus groups, efforts will center around bullying prevention through health education in the classroom and added supports for LGBTQ+ students. In FY 2023, Michigan will again select six schools to implement an approach to bullying prevention that includes teaching health education and creating safe schools for all students. All grade levels within selected schools will implement the social and emotional health skills module of the *Michigan Model for Health™* (MMH) curriculum. School teams will receive extensive training and customized support on creating safe schools for LGBTQ+ students. Schools will also receive training and support for the establishment, growth, and sustainability of Gender and Sexuality Alliance (or Gay-Straight Alliance) student clubs. This 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 curriculum implementation at all grade levels; to cover costs associated with participation in workshops (sub costs, staff stipends, etc.); and to cover costs to implement strategies related to creating safe and supportive schools for LGBTQ+ youth, including GSA support. Funds will also be used to support the consultant working directly with the school teams, facilitating workshops, and providing customized technical assistance.

The ESM for this NPM will be all classrooms in six selected schools implementing the evidence-based *MMH™* social and emotional health unit/module with at least 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. Additional lessons addressing anti-bullying skills will be added from other curriculum units this project year. Health teachers will complete fidelity lesson logs documenting the implementation of lessons.

The *MMH™* is a K-12 comprehensive school health education curriculum that is evidence-informed and culturally, linguistically, and age-appropriate. It is recognized by the Collaborative for Academic, Social and Emotional Learning (CASEL). Michigan's 22 Regional School Health Coordinators provide training and technical assistance for the *MMH™* and other school health initiatives. Through their work with schools, they have found that the most pressing needs involve creating safe schools for all students, addressing the needs of LGBTQ+ students, and addressing the role of adults in the learning environment.

The second strategy involves intensive training and customized support and technical assistance for a team of staff members from each school focusing on creating safe schools for LGBTQ+ students and implementing schoolwide strategies to improve the school climate. This includes the establishment, growth, and sustainability of a GSA. A series of workshops, along with individualized technical assistance and networking with other schools, builds the skills of educators so they can lead the effort to improve the school climate for all youth, especially those who identify as LGBTQ+. The trainings/workshops, as well as the customized support, are facilitated by a skilled consultant who has worked with schools and LGBTQ+ youth in a variety of settings. The consultant is a contractual consultant currently working with the Michigan Department of Education (MDE) on the MDE LGBTQ+ Students Project.

The workshop series, offered by the MDE, includes sessions devoted to understanding the identities and experiences of LGBTQ+ students; recognizing and addressing barriers to supporting LGBTQ+ students and families; legal and policy issues; LGBTQ+ youth panels; the power of GSAs; safe, supportive and inclusive classrooms; practical strategies for affirming LGBTQ+ students; school-wide policies and best practices; and

accurately reflecting student gender identities in student information systems. The workshops include youth panels, and the training content is developed with input from youth through youth advisory councils. New sessions are always in development, based on the needs voiced by LGBTQ+ youth advisors. Drop-in technical assistance sessions are regularly scheduled and open to all interested schools in Michigan.

Research indicates that school policies supportive of LGBTQ+ youth combined with the presence of a GSA help create school environments where not only LGBTQ+ youth experience peer and teacher support, but the entire student body experiences less bullying and a more supportive school environment. The project consultant, in partnership with the Michigan Organization for Adolescent Sexual Health (MOASH), will provide school teams with training and support specifically related to GSA establishment, growth, and sustainability. MOASH has been helping to build the capacity of GSA clubs in schools across Michigan for years. Their expertise in this area and working with youth via youth advisory councils is unmatched in Michigan. MOASH will partner with schools to lend its expertise in moving through the five stages of GSA development and functioning: Initiation and Organizing, Establishment, Implementation, Recruitment and Participation, and Sustainability. The MOASH annual statewide summit for LGBTQ+ youth is well attended (the summit saw over 400, primarily youth, attendees in 2020). GSA participants from these schools will be encouraged (and financially supported) to attend.

Partnering with MDE, MOASH and School Health Coordinators will ensure that schools receive the training and technical assistance needed for schoolwide *MMH*[™] curriculum implementation; that youth voice will be centered; and that school teams will be provided with the training and support needed to create systemic change. The comprehensive and in-depth nature of these strategies, combined with the demonstrated expertise of our partners and the foundation of youth input ensures that schools will advance the goal of creating safe and supportive environments for LGBTQ+ students.

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.

School districts would benefit from targeted guidance on Michigan's laws and policies to better equip staff to appropriately address bullying. Most school staff members understand that it is imperative to intervene when bullying occurs, but surveys show that many feel ill-equipped to do so, resulting in unhelpful or even harmful staff response.

Michigan's Public Act 241 mandates that schools develop a district anti-bullying policy. The law includes multiple components, based on best practices, required to be included in the policy. However, many school districts neither fully understand the law nor fully implement it. Michigan's State Board of Education (SBE) has a model anti-bullying policy in place to help school districts meet the law. The policy also has components that render it more robust, especially since the most recent revision in December 2020. While Michigan is a local control state—meaning the SBE Model Policy is a recommendation for schools rather than a requirement—the policy helps schools understand what should be included in a comprehensive bullying prevention policy.

For legislation to be effective as a means of decreasing bullying and cyberbullying, it is necessary for schools to adopt (and fully implement) policies. School Health Coordinators work with every district in their region and are aware of districts that need further education and support on this law and what would be included in a model anti-bullying policy. They will work with their local schools to provide guidance on Michigan law and policy related to anti-bullying. Project partners will support their work to create awareness and understanding in the education community by facilitating professional development opportunities on the laws in Michigan and why adopting, and fully implementing, the SBE Model Anti-Bullying Policy is an essential component of bullying prevention efforts.

An additional strategy for promoting safe and supportive school environments for ALL students involves extending the learning opportunities on GSAs to school teams and staff members outside of the six project schools. Increasing

the number of GSAs will help create school environments where not only LGBTQ+ youth experience peer and teacher support but the entire student body experiences less bullying and more supportive classrooms and schools. The project consultant, in partnership with MOASH, will provide learning opportunities in a variety of formats: webinars, lunch and learns, and one-on-one technical assistance on the establishment, growth, and sustainability of GSAs.

Objective C: Explore bullying prevention campaigns for CSHCS and determine goals for bullying prevention initiatives in Michigan.

In 2021, CSHCS and The Family Center hosted a focus group with the Family Leadership Network to obtain feedback on their child's experience with bullying. The Family Leadership Network is comprised of parents of CYSHCN representing each of Michigan's 10 Prosperity Regions. The first strategy in meeting this objective is for CSHCS and the Family Center to replicate the focus group in consecutive years to document changes in perception and occurrence of bullying for CYSHCN. Focus study results will then be utilized to integrate changes in the CSHCS program and bullying prevention activities.

The second strategy is to continue implementing the CSHCS Bullying Prevention small grants program. The Statewide Autism Resources and Training (START) project created a peer-to-peer program playbook specific to youth with autism. This program is an evidence-based practice proven effective in increasing opportunities for students with autism to access general education settings and curriculum. Typically developing peers participate with students with autism throughout the school day in both academic and nonacademic settings, modeling age-appropriate academic and social behavior and promoting improved outcomes in the areas of independence and socialization. Over time, peers learn about one another and develop trust. Expected outcomes of the peer-to-peer support program are decreased anxiety, increased sense of belonging and confidence, increased level of engagement in the school community, and friendships that extend beyond the school building. Although the START Peer-to-Peer playbook was originally specific to children with autism, the small grants program will offer schools the opportunity to apply for up to \$10,000 to replicate the START program for the entire CYSHCN population. Schools must create or expand a START peer-to-peer program and strategies must impact CYSHCN. In addition to the small grants program, CSHCS and the Family Center will support existing grantees through information webinars and a year-end meeting to share lessons learned. CSHCS will also compile evaluation results from previous grant cycles and present outcomes to the CSHCS Advisory Committee and other stakeholders.

In May 2021, states from across HHS Regions 4 (AL, FL, GA, NC, TN) and 5 (IN, MI, MN, OH, WI) expressed interest in creating a workgroup to share strategies for bullying prevention among CYSHCN. The Maternal Child Health Bureau facilitated quarterly meetings to discuss topics such as data capacity, youth advisory councils, and policies. The third strategy for this objective in FY 2023 is for CSHCS to continue serving on the HRSA Region IV/V workgroup.

During FY 2022 CSHCS explored youth advisory councils as a mechanism to infuse youth perspective and feedback into CSHCS programming, including Bullying Prevention efforts. The final strategy for this objective in FY 2023 is to create a Peer Leadership Network. Primary activities in the first year will be to outline Peer Leadership goals, recruit young adults, and determine the process to reimburse youth for their time. Peer Leadership Network members will determine the strategies to meet defined goals, regularity of meetings, meeting length, and agenda topics. Initially, the Peer Leadership Network will be involved with bullying prevention and transition projects within CSHCS.

Immunizations – Adolescents (FY 2023 Application)

Based on the 2020 Title V five-year needs assessment, the state performance measure (SPM) created in 2015 was

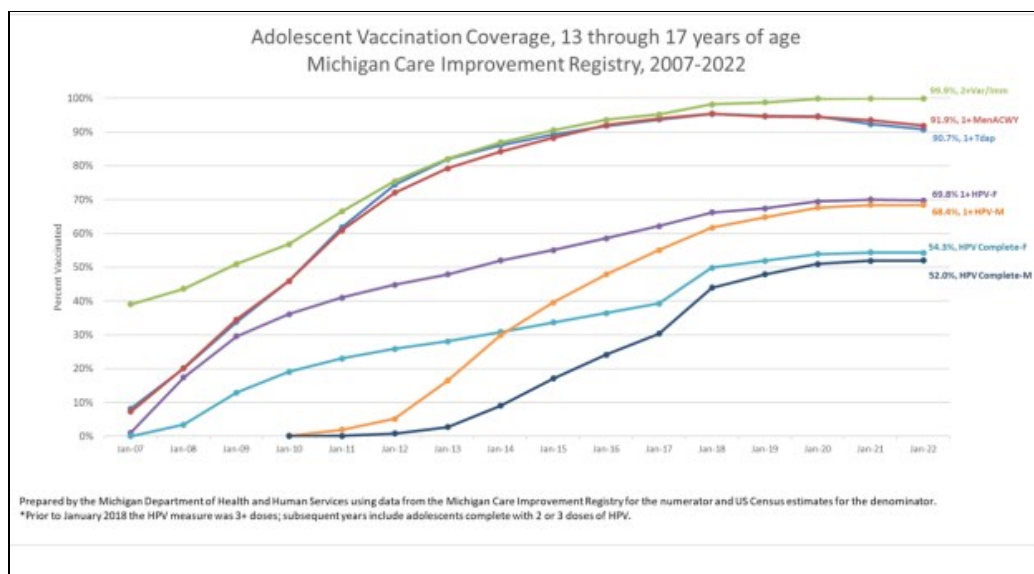
retained, which is the “Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus (HPV) vaccine.” In the 2020 needs assessment, when asked “Which of the following healthcare-related needs are most often unmet among the families you serve?” 37.8% of respondents 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 decreasing, as the overall HPV vaccination rate for both groups increase. Therefore, the Title V program 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. While Michigan has made progress increasing the timely uptake of HPV vaccination for adolescents, much more progress is needed. Further, the COVID-19 pandemic has significantly limited efforts to focus on improving HPV vaccination coverage, due to competing priorities within provider offices.

Since 2016, Michigan has increased the HPV coverage rate by nearly 14%. The Healthy People 2030 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 13-17-year-old females is 45.4% while the rate for 13-17-year-old males is 43.4%. One goal of the MDHHS Immunization Program is to encourage HPV vaccination at 11-12 years of age when it is routinely recommended, although it can be administered as young as 9 years of age. Data from the MCIR show that only 38.6% of adolescents have received a completed HPV series by 13 years of age. This is short of the desired immunization level since it is routinely recommended at this younger age.

As seen in Image 1, HPV vaccination remains the lowest among all adolescent series vaccines, however, the disparity between males and females has decreased.

Image 1: Adolescent Vaccination Coverage, by Vaccine, 13-17 Years

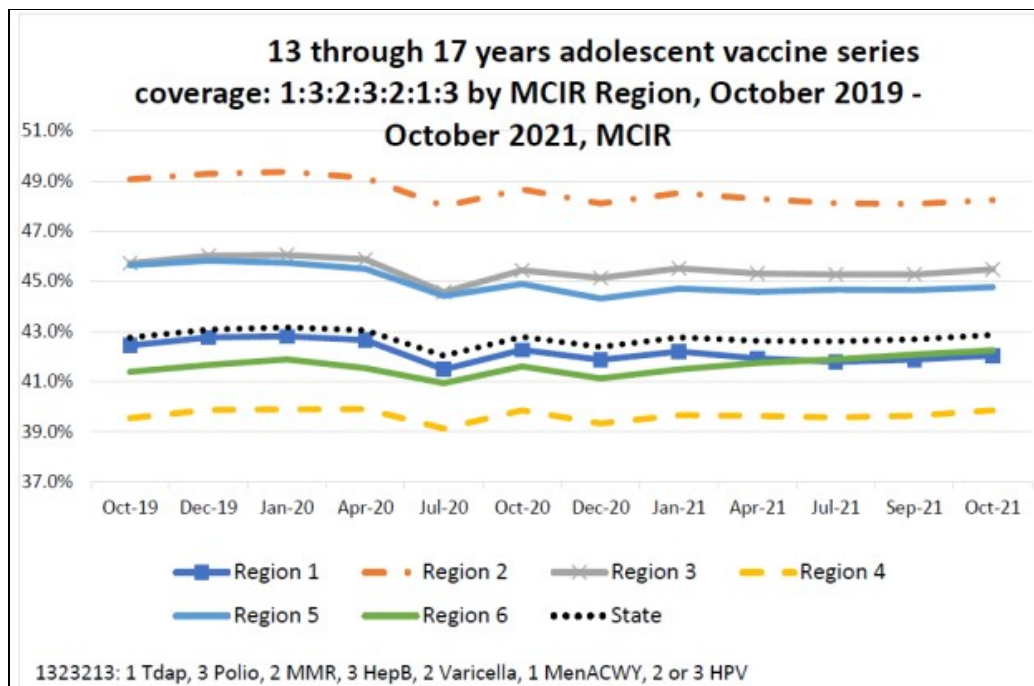


Due to the impact of COVID-19 on all adolescent vaccinations, the Immunization Program plans to target all recommended vaccines for adolescents, with a focus on HPV vaccine. The pandemic has illustrated how diseases

can severely impact the health of communities. Vaccines are developed to protect the health and well-being of individuals and minimize community spread. On-time vaccination of all recommended vaccines will lead to healthier Michigan adolescents.

As discussed in the SPM 2 Children’s Immunization narrative, the Division of Immunization operates the MCIR information system. MCIR data as of February 2022 show that 73.1% of adolescents 13-18 years of age who reside in Michigan have received the routinely recommend 1:3:2:3:2:1 adolescent vaccine series. The 1:3:2:3:2:1 vaccine 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 42.5%. Image 2 indicates that the adolescent vaccine series 1:3:2:3:2:1:3 falls below the desired protection for all recommended adolescent vaccines.

Image 2: Adolescent Series Vaccination Coverage, 13-17 Years



Specifically, two other adolescent-focused vaccines are concerning to the Immunization Program: influenza and meningitis B (MenB) vaccine. As illustrated by the COVID-19 pandemic, respiratory illnesses such as influenza are highly communicable and can be deadly. Every year Michigan’s vaccination rates for influenza are sub-optimal and leave the community susceptible to disease. According to MCIR, and data made available at www.michigan.gov/FLU, for the 2020-2021 influenza season the vaccination coverage for all Michigan residents was 34.27%. Current season estimates for the 2021-2022 influenza season indicate a statewide vaccination coverage of 31.38%. In addition, as of December 2021, adolescent vaccination coverage for 1+ MenB for adolescents 16-18 years was 25.9% (www.michigan.gov/immunize). It is critical to assess for all recommended vaccines and to collectively improve all adolescent vaccination rates.

The Immunization Program plans to use Title V funds to support program work in improving HPV vaccination uptake and working with internal and external partners to improve influenza and meningitis B vaccination rates as illustrated in the activities below. Receiving all recommended vaccines, on-time, protects the health and well-being of Michigan adolescents and their communities.

Objective A: By 2025, increase the percentage of adolescents who have completed the HPV series to 64%.

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. It is important to address these concerns related to health equity and access to care, including vaccinations. The Michigan Immunization Program will assess possible strategies for engaging families and communities in the vaccine dialogue. 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.

Using this information, the Immunization Program will update current HPV materials to reflect up-to-date vaccine changes and effective communication strategies to promote vaccination and make the materials available for providers. The Program will work with the MDHHS Vaccine Equity Strategy Group to ensure materials are culturally and linguistically inclusive. The Program will also provide updated translations of HPV materials to ensure a more equitable approach in addressing HPV vaccine hesitancy. Providers and the public will be able to review these materials on the MDHHS Immunization website, www.michigan.gov/Immunize, and order materials for free at the MDHHS Clearinghouse, www.healthymichigan.com.

The COVID-19 pandemic has contributed to an increase in vaccine hesitancy for all vaccines. The Program will work with national partners, including Centers for Disease Control and Prevention, and the MDHHS Office of Communications/ Vaccinate Organization to promote vaccine confidence among parents of this age group and adolescents themselves through resources, various media, and presentations. While many parents choose to vaccinate their adolescents according to the recommended schedule, some parents may have questions about vaccines and getting answers they can trust may be hard. It is vital that the Program works with partners to address any questions or concerns parents or adolescents may have about vaccinations and to promote vaccine confidence among this group.

Various studies and Michigan's experience indicate that clinical staff tend to overestimate the immunization rates for their practice. Offering vaccination coverage feedback during annual quality improvement visits, based on MCIR data, is insightful to provider offices and enables staff to consider recommendations to improve how vaccines are promoted and administered. Simple changes could be ensuring that vaccines are assessed and offered at every visit. The Immunization Program will work with local public health to offer quality improvement visits to providers, emphasizing on-time HPV vaccination, and provide a comprehensive assessment of immunization rates and recommendations for practice improvements.

Further, the Program has made it routine to provide data and information to local health department clinic staff on coverage levels for patients in their immunization clinics and coverage levels at the county population level with the Michigan Immunization Report Cards. The Immunization Report Cards are posted on the MDHHS website at www.michigan.gov/Immunize and provide population-based immunization coverage levels for each county with rankings compared to other counties in Michigan.

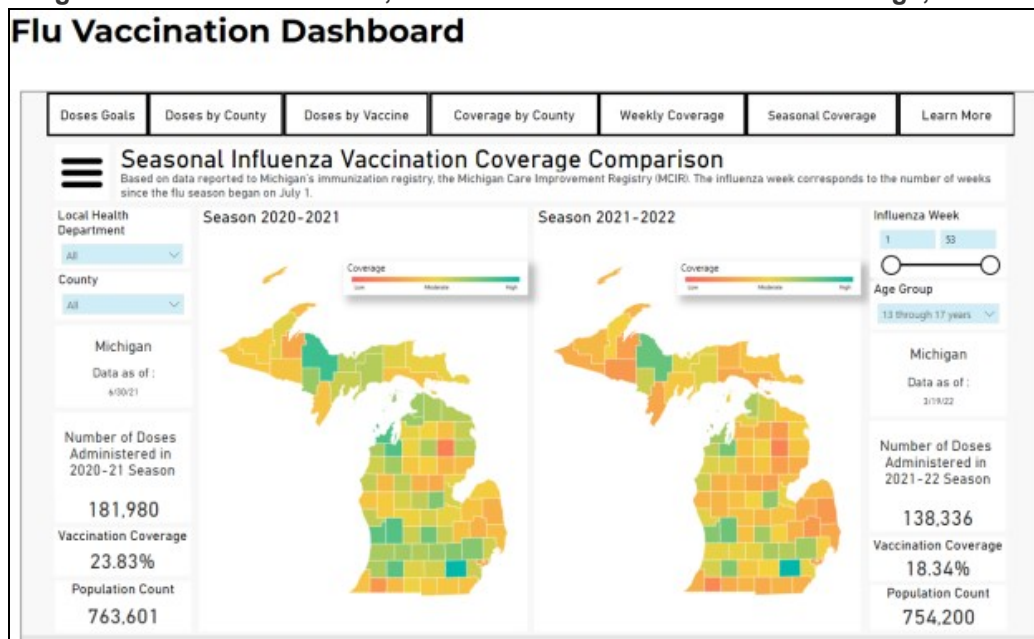
The Michigan Immunization Program will analyze the MCIR data to identify disparities between the adolescent vaccines and to monitor the uptake of HPV vaccine and the adolescent vaccine series. The Program will emphasize that providers that see adolescents for vaccine visits need to assure they are strongly recommending all recommended vaccines and not missing an opportunity to administer the HPV vaccine.

Objective B: Emphasize routine assessment of all recommended vaccines for adolescents to increase influenza and meningococcal vaccine rates by 3% among this age group by 2025.

As discussed above, due to the impact of COVID-19 on all adolescent vaccinations, the Immunization Program plans to target all recommended vaccines for adolescents, in addition to HPV vaccine. The pandemic has illustrated how diseases, especially respiratory illnesses, can be deadly and wreak havoc on the health of communities. Vaccines are developed to protect the health and well-being of individuals and to minimize community spread. On-time vaccination of all recommended vaccines will lead to healthier Michigan adolescents.

In FY 2023, the Immunization Program will work with internal and external stakeholders on a statewide influenza campaign to improve influenza vaccination coverage among all ages, including adolescents. Every year Michigan's vaccination rates for influenza are sub-optimal and leave the community susceptible to disease. According to MCIR, and data made available at www.michigan.gov/FLU, for the 2020-2021 influenza season the vaccination coverage for all Michigan adolescents, 13-17 years of age, was 23.8%, below the statewide average of 34.27%. Current season estimates for the 2021-2022 influenza season indicate a statewide vaccination coverage of 18.34% among this age group, as illustrated in Image 3. This is extremely concerning to the Immunization Program and emphasizes that now is the time to target influenza vaccine, in addition to offering to COVID-19 vaccine, among this age group.

Image 3: Influenza Dashboard, Seasonal Influenza Vaccination Coverage, 13-17 Years



The COVID-19 pandemic has significantly impacted immunization rates at every age. The Immunization Program will produce a COVID-19 Impact Report to illustrate the impact the pandemic has had on childhood and adolescent immunization rates, while encouraging providers to catch Michigan children back up on 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.

Using the data from this report, the Program will generate and distribute a letter to Michigan healthcare providers highlighting the importance of catching children and adolescents back up on routine vaccines that they may have missed due to the COVID-19 pandemic.

Finally, the Program will work with external stakeholders to conduct targeted outreach to improve meningitis B vaccination rates for adolescents 16 through 18 years of age. Although it is uncommon, meningitis B (MenB) is a serious infection caused by the bacterium *Neisseria meningitidis* group B, which can cause an infection of the membrane that surrounds the brain and spinal cord. It can also cause septicemia, a serious infection of the bloodstream. Although most people recover, even with appropriate treatment, up to 1 in 10 patients will die, sometimes within 24 hours after the onset of symptoms. Further, up to 1 in 5 survivors of meningitis will experience long-term consequences including hearing loss, skin scarring, neurological problems, or limb loss.

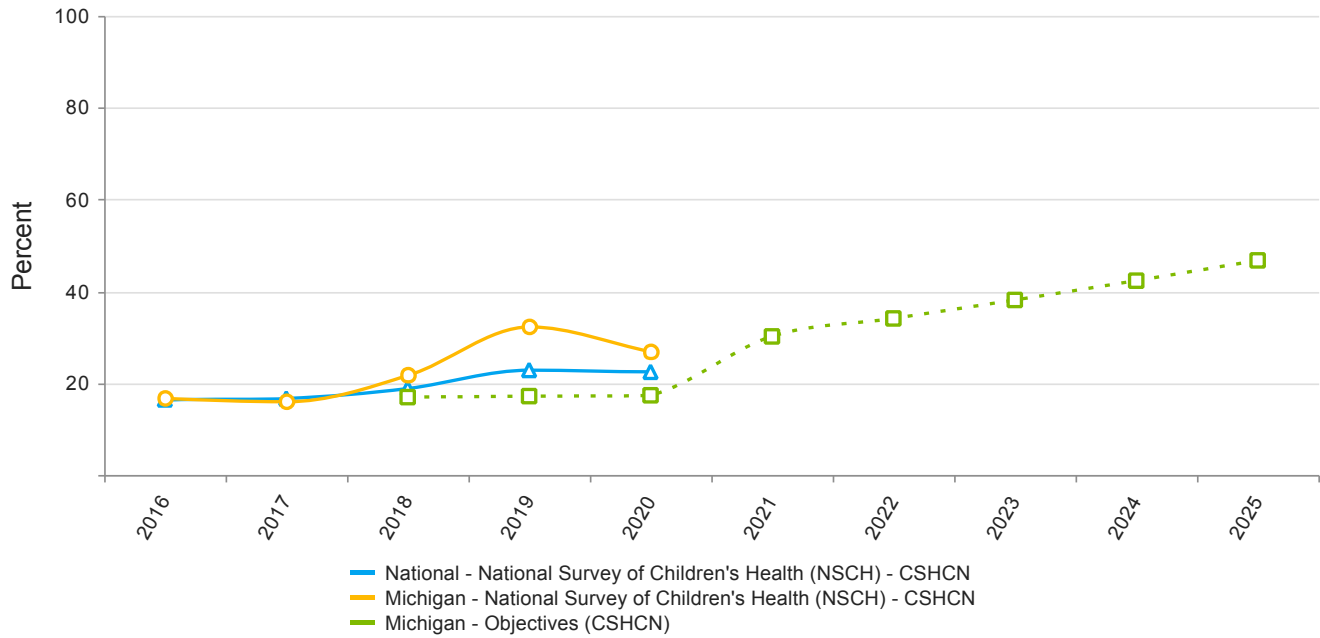
While most people are familiar with MenACWY vaccine, many are unaware that there are two meningitis vaccines needed to protect adolescents from all serotypes of meningitis. The Emily Stillman Foundation was founded by a Michigan mother who lost her daughter from meningitis B in 2013, 36 hours after being admitted to the hospital. The Emily Stillman Foundation has combined forces with the Meningitis B Action Project to raise awareness for Meningitis B vaccine. The Immunization Program plans to work with these organizations to conduct targeted outreach to Michigan adolescents and their parents to improve Meningitis B vaccination rates. As of December 2021, adolescent vaccination coverage for 1+ Meningitis B for adolescents 16-18 years was only 25.9% (www.michigan.gov/immunize). In comparison, the vaccination rate for 1+ MenACWY for adolescents 13-17 years of age was 77.0%.

It is important to assess for all recommended vaccines and to collectively improve all adolescent vaccination rates. Michigan plans to use statewide quarterly immunization report cards to monitor vaccination uptake for HPV vaccine, adolescent series (1:3:2:3:2:1:3) vaccination coverage, 1+MenB and 1+ Flu (6 months – 17 years) to assess the impact of these strategies.

Children with Special Health Care Needs

National Performance Measures

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services to prepare for the transition 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					
	2017	2018	2019	2020	2021
Annual Objective		17	17.2	17.4	30.2
Annual Indicator	16.7	16.0	21.6	32.3	26.7
Numerator	32,776	34,325	48,634	69,326	54,089
Denominator	196,702	215,008	225,148	214,341	202,891
Data Source	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year	2016	2016_2017	2017_2018	2018_2019	2019_2020

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	34.1	38.1	42.3	46.7

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	2020	2021
Annual Objective	40	43	46	49	49.2
Annual Indicator	52.5	49.9	46.7	46.5	45.3
Numerator	1,705	1,725	1,787	1,995	1,923
Denominator	3,246	3,459	3,828	4,289	4,245
Data Source	CSHCS database, Medicaid Claims, UM Provider Datab	CSHCS database, Medicaid Claims, UM Provider Datab	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	2019	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	49.4	49.6	49.8	50.0

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						
	2017	2018	2019	2020	2021	
Annual Objective	89.9	90.9	91.9	92.9	89.5	
Annual Indicator	89.1	88.9	88	88	88.6	
Numerator	20,556,206	14,678,590	10,365,782	7,297,774	4,977,264	
Denominator	23,074,740	16,507,392	11,783,520	8,289,380	5,616,000	
Data Source	CAHPS	CAHPS	CAHPS	CAHPS	CAHPS	
Data Source Year	2017	2018	2019	2020	2021	
Provisional or Final ?	Final	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	90.0	90.5	91.0	91.5

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 to prepare for the transition 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) Establish the foundation to expand the school wellness center learning collaborative to promote Health Care Transition (HCT) to students, grades 9-12, through school-based clinics A2) Launch and promote the revised CSHCS website with HCT resources A3) Continue to contract with U of M CHEAR to monitor transition work using an Evidence-informed Strategy Measure (ESM) A4) Pilot an automated HCT letter for 14-year-old CSHCS enrollees utilizing the CSHCS database system A5) Utilize the MHP contract, site review, and compliance review processes to improve HCT for CYSHCN enrolled in MHPs

B1) Implement the marketing plan to promote Got Transition's health professional courses to providers across the state B2) Engage with the clinic partners for the HRSA-funded CYE initiative to provide HCT education to providers B3) Leverage the CSHCS eligibility expansion to adults with sickle cell disease to improve HCT for these individuals B4) Continue working with MITT to ensure HCT is included in the Michigan Model for Secondary Transition

C1) implement Got Transitions “Current Assessment of Health Care Transition Activities” with LHDs partners to develop a baseline C2) Annually implement the “Current Assessment of Health Care Activities” with CYE partner clinics

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 implementing special programs to reduce financial burdens for CSHCS-eligible families A2) Expand the capacity of specialty clinics to ensure delivery of patient-centered, family-friendly, equitable care through Children's multidisciplinary specialty (CMDs) clinics A3) Continue expansion of telemedicine through the HRSA-funded Children and Youth with Epilepsy (CYE) grant

B1) Continue building a coordinated and systematic approach to family engagement B2) Continue to move forward with the outlined multi-staged approach to obtain feedback from the network of CSHCS providers B3) Maintain a competent workforce that is knowledgeable about CSHCS and able to assist families accessing the system of care

C1) Continue to explore, develop, and implement a statewide benefit to improve care for children with medical complexities (CMC) C2) Complete the process of developing a comprehensive evaluation plan to measure CSHCS's capacity and ability to provide effective, efficient, and high-quality services to clients C3) Continue to ensure CSHCS families are receiving care coordination in a high-quality, family-centered, and well-functioning system C4) Improve the system of care by identifying and responding to health inequities

Children with Special Health Care Needs - Annual Report

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. In FY 2022, Title V funds were also used to support bullying prevention activities specific to CSHCN. Other federal funds that support CSHCS include a HRSA Epilepsy grant and Medicaid. Key partners include Medicaid, Medicaid Health Plans, 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.

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 current five-year cycle, the CSHCS program also began to work on bullying prevention for CSHCN.

LHDs, in addition to direct CSHCS funding, can elect to expend additional LMCH dollars for CSHCN. In FY 2021, three LHDs selected NPM 12 (transition) to identify enrollees of transition age and provide education and plans of care for gap-filling transition services. Additionally, three LHDs used 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. Most agencies were able to complete these activities at reduced capacity due to COVID-19.

According to the 2019-2020 National Survey of Children's Health (NSCH), 21.3% of Michigan's children have special health care needs, as compared to the national average of 19.4%. However, 28.6% of non-Hispanic Black children were identified with a special health care need, compared with 18.9% of non-Hispanic white children. Additionally, only 14.8% of Michigan parents of children with special health care needs report that their children receive care in a well-functioning system (NSCH, 2019-2020).

Transition (FY 2021 Annual Report)

The Title V Maternal & Child Health Needs Assessment Report completed in 2020 identified opportunities related to transition to adult health care for CYSHCN in Michigan. According to the National Survey of Child Health (NSCH), only 26.7% of CYSHCN in Michigan had the support needed to transition to adult care. Focus studies and encounter surveys noted silos in communication across providers and provider turnover as challenges that contribute to difficulties with transition to adult health care. In response to these results, Michigan continued the commitment to NPM 12 (Percent of adolescents with and without special health care needs who received services necessary to make transition to adult healthcare) as a priority focus.

Through a partnership with University of Michigan's Child Health Evaluation and Research (CHEAR) unit, an

Evidence-based Strategy Measure (ESM) was developed to provide ongoing analysis and support related to the CSHCS program and transition. 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) CSHCS database; 2) CHAMPS (Medicaid claims); and 3) University of Michigan's provider database which includes providers statewide. In FY 2021, CHEAR reported 45.3% of targeted clients had encounters with only adult providers indicating a successful transition to the adult model of care.

To address this NPM, CSHCS created and implemented a comprehensive strategic plan to improve transition services across the state. Accomplishments in FY 2021 included participation as an advisor in a collaborative effort between the School Based Health Alliance and Got Transition to create a playbook for school-based health centers; the roll-out of monthly reports to communicate transition clients to Local Health Departments (LHDs); and continued collaboration with the Michigan Interagency Transition Taskforce to integrate health care transition into the Michigan Model for Transition.

CSHCS works through LHDs to improve transition to adult health care for youth with special health care needs. The COVID-19 pandemic continued to create challenges in moving this work forward. LHD staff resources have been redirected to pandemic response, limiting their availability to work with youth on transition to adult services. In response, CSHCS focused on streamlining transition resources that are available in the virtual environment and adjusting strategies to allow flexibility for partners. Another challenge during the reporting year was a turnover in staffing for the Transition specialist position at MDHHS for approximately four months. Initiatives moved more slowly due to this vacancy.

Key collaborations and partnerships in FY 2021 included the Michigan Interagency Transition Taskforce (MITT), Medicaid Health Plans (MHPs), LHDs, the MDHHS Child and Adolescent Health Center (CAHC) section, HRSA-funded CYE grant recipients, and *Got Transition*.

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%.

The first strategy was to expand the school wellness center learning collaborative. Plans to expand the learning collaborative were impeded by the ongoing COVID-19 pandemic. School-based clinics continued to respond to rapidly changing environments. After modifying participation opportunities due to the pandemic, School-Based Health Centers remain reluctant to commit to a transition learning collaborative. Michigan utilized lessons learned from the school-based health center pilot to serve as an advisor in a collaboration between *Got Transition* and the School-Based Health Alliance to build a playbook for school-based health centers. The transition specialist participated in meetings, provided samples from the Michigan pilot, responded to requests for information, and participated in review of the final playbook.

The second strategy was to increase delivery of family-centered transition educational efforts by utilizing the Family Center and Family Center youth consultant to reach families and family advocacy organizations throughout the state. The Family Center youth consultant is integral to the success of Michigan's health care transition efforts. The youth consultant co-presented with the transition specialist at the virtual conference for Child and Adolescent Health Centers. The presentation shared the importance of the health care transition process from a youth and professional standpoint and walked through the "Current Assessment of Health Care Transition Activities." Attendees heard tips on how to engage with both youth and professionals to ensure a smooth transition for youth.

The youth consultant and transition specialist also partnered with Michigan Family Voices and Michigan Alliance for Families to provide training for parents and professionals in St. Clair County. In addition, the youth consultant participated in a youth panel for the Children and Youth with Epilepsy HRSA Grant annual meeting, sharing a youth

perspective. The youth consultant is a member of the AAP's Children and Youth with Epilepsy Advisory Committee and the Pediatric Care Young Adult Advisory Committee. Although outreach opportunities continued to be limited due to COVID-19, CSHCS continues to collaborate with Michigan Family Voices and The Family Center to identify opportunities to provide transition information to families.

The third strategy was to work with family partners to create and implement a marketing plan to promote the Transition to Adulthood online module. In FY 2021, the Transition to Adult Services online module had 27 individuals complete the entire module. Of the individuals who completed the training, 22% were age 21-25 and 78% were 26 and older. Forty-five percent (45%) of completing individuals reported the course would have an impact on their transition to adult services and 70% rated the course four or five out of five stars (with five being the best rating). Participants responded that the course was great for pediatric case managers to learn about transition and to help teen clients and their families. Work to redesign the transition website is currently in process and is discussed later in the annual report. One goal of the website redesign is to find a prominent location to improve ease of access to the Transition to Adulthood online module. Once relocated, the transition specialist will create and implement a marketing plan for the Transition to Adulthood online module.

The final strategy was to explore transition to adult health care and create strategies to improve this experience for young adults with sickle cell disease in Michigan. During FY 2021, the transition specialist collaborated with the Special Projects Coordinator in the Hemoglobinopathy Quality Improvement Program to review barriers for adolescents with sickle cell disease who are establishing care with an adult provider. Pediatric providers and clinics who serve adolescents were identified. In FY 2022, work will continue to complete a contact directory for adult providers who serve patients with sickle cell disease. In FY 2021, the transition specialist and Special Projects Coordinator collaborated with Michigan State University Institute of Health Policy to create an outline for a toolkit for clinics. Work will continue in FY 2022 to complete the clinic toolkit and utilize it as a framework for a family and MHP toolkit. The goal of the toolkit is to provide sickle cell disease specific resources. This project will continue into FY 2023.

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 was to promote online transition resources to providers, community partners, and families. In FY 2021, a committee with representation from CSHCS, the Family Center, LHD representatives and medical consultants was formed to review, update, and add website resources for families, providers, LHDs, and MHPs. Website format was redesigned to improve usability for visitors. All resources have been updated to be consistent with Got Transition Six Core Elements of Transition 3.0. As mentioned previously, providing a prominent location for the Transition to Adulthood online module will assist in marketing that resource. Work on the website continues, with testing and roll out planned in FY 2022.

The second strategy was to continue to support the HRSA CYE grant partners to improve transition for children and youth with epilepsy in rural communities. In FY 2021, clinic sites initiated a quality improvement activity combining both health care transition and telehealth. Recognizing the difficulties clinics were facing during the pandemic, the Leadership Team combined the two focus areas to support providers with telehealth by using it as a tool to offer health care transition services to adolescent patients and their families. During this activity, clinics reported assessments were completed for 139 adolescents. Work continues to collect the number of completed HCT readiness assessments from providers.

One-on-one calls were scheduled during February and March 2021 with each clinic team to discuss their activities related to telehealth and health care transition. All but one of the pediatric providers identified or adapted a

specific health care transition readiness assessment. The other provider is in the process of incorporating HCT questions into an existing assessment used with their adolescent population. Assessments adopted by participating clinics include Got Transition tools, the University of Illinois Transition Checklist for Teens, TRAQ, and internally developed tools. Providers in the four adult neurology clinics (Beaumont Health, Detroit Medical Center, Mercy Health, and MSU) review HCT assessments completed by the pediatric provider when the patient is within the same health system and EHR. This is much more difficult when the patient transitions from a different health system. One of the adult neurologists has developed processes to identify young adults not ready for transition. She established a weekly transition clinic to see new patients who are then screened for self-management skills. The neurologist evaluates the screening and addresses the issues with the patient. She is also developing a monthly training session for new patients to serve as an informal support group. For both the pediatric and adult providers, common challenges include expanding use of an HCT readiness assessment across all populations, gaining buy-in from their colleagues to use a HCT assessment in their practices, and prioritizing uncompensated HCT activities.

The third strategy is to ensure health care transition is included in the secondary transition in school systems. During the grant period, the transition specialist served as an integral member of the Michigan Interagency Transition Taskforce (MITT). This taskforce is a collaboration with representation from the Department of Education, Protection & Advocacy Services, Developmental Disabilities Council, Department of Labor and Economic Opportunity, the Arc Michigan, Behavioral Health and Developmental Disabilities Administration, Disability Rights Council, and Services to Enhance Potential. The taskforce continues to work with the National Technical Assistance Center on Transition to create a Michigan State Model for Secondary Transition. In FY 2021, the taskforce finalized objectives, fidelity checklist, and flow of services. Work will continue in FY 2022 and 2023.

Objective 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.”

The first strategy was to adopt and implement the “Current Assessment of Health Care Transition Activities with partners. In FY 2021, the transition specialist and Family Center youth consultant presented at the 2021 Adolescent Health Initiative annual conference. This conference brings together an interdisciplinary community of health care professionals to share research and best practices and aims to improve adolescent-centered care. The event hosts over 450 attendees from nearly all 50 states. CSHCS’s virtual presentation led more than 150 attendees through the “Current Assessment of Health Care Transition Activities” and resulted in each team taking home three action steps to improve transition in their states. The “Current Assessment of Health Care Transition Activities” was also implemented with clinical partners at the annual CYE meeting.

The second strategy was to utilize the “Current Assessment of Health Care Transition Activities” and other data to compile and publish scorecards to assist partner organizations. The scorecard will be piloted with LHDs and will highlight transition specific data, such as the number of care coordination/case management visits with a transition focus and number of individuals receiving transition letters during the year. This strategy was delayed due to the MDHHS transition specialist staffing vacancy and continued reallocation of resources to COVID-19 response at LHDs and provider offices. Work will continue in FY 2022 and 2023.

The third strategy was to continue working with CHEAR to identify a set of indicators to measure transition outcomes. The current ESM was created to provide ongoing analysis and support related to the CSHCS program. The ESM has shown incremental decreases in successful transitions, in contrast to results on the National Survey of Children’s Health NPM on Transition. The National Survey of Children’s Health indicated significant improvement for Michigan in CYSHCN receiving transition services needed for transitions from 16.0% in 2016-2017 to 26.7% in 2019-2020. This ESM decrease is related to change in policy at the University of Michigan. In 2019, the University of

Michigan moved the target to begin transition from age 18 to age 21. Since the ESM specifically targets transfer of care by age 18, this policy directly impacts our outcomes. In 2022, CSHCS will re-evaluate this ESM and make changes to ensure it better represents transition to adult health care for the program.

Medical Care and Treatment for CSHCN (FY 2021 Annual Report)

Michigan's SPM for the CYSHCN population measures the percentage of CYSHCN enrolled in Children's Special Health Care Services (CSHCS) that receive timely medical care and treatment without difficulty. The measure addresses Michigan's 2021-2025 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."

The mission of CSHCS is to find, diagnose, and treat children who have chronic illnesses or disabling conditions, enabling them to achieve improved health outcomes and enhanced quality of life. CSHCS accomplishes this mission by reducing barriers to medical care and treatment and minimizing financial burden for families. Approximately 36% of Michigan's Title V funding was used for medical care and treatment in FY 2021. CSHCS utilizes two survey questions from 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). In FY 2021, the result was 88.6%.

Ongoing response to the COVID-19 pandemic continues to be a challenge for CSHCS. LHD partners have diverted program staff and other resources to operate vaccination clinics and complete contact tracing, resulting in fewer staff members dedicated to CSHCS families. This ongoing response coupled with pressure from local communities has resulted in a fatigued public health work force. Accomplishments in FY 2021 include successfully expanding CSHCS eligibility to adults with sickle cell disease, continued progress on a comprehensive program evaluation, and the completion of a provider survey to understand strengths and opportunities for the CSHCS program.

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 achieve this objective was to provide payment assistance for specialty care and treatment related to a qualifying condition by enrolling CYSHCN in CSHCS. 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 apply. Most of those who qualify for Medicaid are served through a Medicaid Health Plan.

CSHCS covered an average of 41,000 individuals each month in FY 2021. Enrollees had at least one of 2,600 qualifying diagnoses with 21.4% of enrollees having more than one severe, chronic health condition. Families with CSHCS receive care coordination through LHDs. In FY 2021, LHDs provided more than 13,000 care coordination or case management encounters to 8,500 unduplicated clients.

CSHCS implemented policies in response to COVID-19 to ensure the CYSHCN population continued to have access to enrollment in the program. In addition, Medicaid suspended all case closures during the public health emergency. Together, these policies helped the CSHCS dually eligible population maintain access to both CSHCS and Medicaid through continued enrollment.

Difficulty with reliable transportation continues to be a barrier for families of CYSHCN. The 2021 CAHPS scores regarding transportation indicated 7.1% of respondents requested transportation assistance from CSHCS. When asked to rate if the assistance met the needs of their family, 80.6% of respondents shared that the assistance "Usually" or "Always" met the needs. CSHCS provided \$275,500 to commercial vendors and \$826,000 to families to support transportation for medical needs of CSHCS beneficiaries. The amount provided to vendors decreased

significantly due to COVID-19.

The Insurance Premium Payment Benefit (IPPB) maintains access to private insurance coverage for eligible families with inadequate financial resources to pay for the portion of their family's insurance premium specific to the CSHCS eligible child. In FY 2021, CSHCS provided \$282,450 in premium payments for 151 families with 43.7% of those served having an insurance other than Medicaid or Medicare.

The second strategy was to expand the capacity of specialty clinics to ensure the delivery of patient-centered, family-centered care through Children's Multi-Disciplinary Specialty (CMDS) clinics. CMDS services are provided as a comprehensive package by a team of pediatric specialty physicians and other appropriate health care professionals. In FY 2020, CMDS clinics reported 3,387 client encounters with more than \$405,000 of enhanced reimbursement provided to clinics. In FY 2021, four additional CMDS clinics were added to the CSHCS network.

The third strategy was to expand/support the use of telemedicine to improve access to specialty care in rural and underserved areas. This is accomplished through the HRSA Children and Youth with Epilepsy (CYE) grant which utilizes telehealth strategies to increase access to care for youth with epilepsy. The CYE project leadership met virtually with clinic partners to discuss progress toward project objectives. During these calls, clinics discussed the telehealth options utilized as well as challenges and successes experienced. All clinic partners utilize some form of telehealth, but the scope of telehealth use varies by practice. Primary care providers are less likely to offer/encourage telehealth because of the need for physical exams and administration of immunizations. Neurologists usually made telehealth more available to patients, especially a clinic in Michigan's Upper Peninsula where telehealth has been a common practice for many years. Telehealth has proven to be a good option for follow-up neurology visits. In an annual cross-site survey, parents indicated they utilized telehealth less than the previous year. However, among those who did utilize telehealth, they reported it helped them obtain answers to questions or visit with their provider more quickly than if they had scheduled a face-to-face visit. CYE project partners completed 32 training and outreach events that reached 700 parents, youth, school staff, health professionals, and general community members. Training topics included parent mentoring, seizure first aid/epilepsy 101, advocacy, and behavioral health issues. CYE activities will continue into FY 2022.

The fourth strategy was to improve the delivery of care for Michigan's children with medical complexity (CMC). CSHCS is exploring the development of a CSHCS/Medicaid Health Home CMC benefit to improve the system of care through provision of an intensive, patient-centered care coordination model. The goal of the model is to improve health outcomes and quality of life while minimizing hospitalization and reducing health care costs. In FY 2021, CSHCS continued participation in the National Center for Care Coordination's Care Coordination Academy. The Academy has provided opportunities to expand knowledge of evidence-based and informed approaches to care coordination and case management. In addition, it provides an opportunity for staff to learn from national experts and other states about how to incorporate tools and methods that lead to improvements for the children and families we serve and the health care system. CSHCS participated in stakeholder meetings with Partners for Children, Children's Hospital of Michigan, and DeVos Children's Hospital to learn more about their capacity to participate in a CMC benefit. CSHCS prepared a detailed work plan and GANT chart to identify and outline the necessary steps to move this process forward and describe how various program areas within the State Medicaid Agency will be impacted by the development and implementation of the CMC/health home benefit.

Other activities included completing a billing audit to ensure the Partners for Children Program is maximizing billing opportunities and exploring methodologies for defining the CMC population for Michigan. This work will continue in FY 2022.

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 to ensure all eligible families have access to the CSHCS resources and that these resources are understandable and relatable. In FY 2021, CSHCS, in partnership with the Public Health Administration, submitted a \$6.7 million proposal to the Governor's Office to establish a comprehensive approach for improving systems of care, health care coverage, and social supports for individuals with sickle cell disease. Initiatives include a Sickle Cell Clinic Expansion and Enhancement grant, support for the Sickle Cell Disease Association–Michigan Chapter (SCDAA-MI) and a CSHCS program eligibility expansion to include adults with sickle cell disease. The proposal was embraced by the governor's office and included in the executed FY 2022 budget.

Activities in preparation for the eligibility expansion included: identifying the target population, determining the pathway to enrollment, updating systems and coding, creating a communications plan, establishing a plan for ongoing evaluation, and updating policies and procedures. CSHCS anticipates an additional 2,400 enrollees, including up to 400 CSHCS-only enrollees. The eligibility expansion began on October 1, 2021, and work will continue in FY 2022 to implement the expansion plans for enrollment, communications, and monitoring.

The Family Center is a statewide, parent-directed center within CSHCS. The Family Center offers emotional support, information, and connections to community resources to families of CYSHCN. The second strategy that supported this objective was to continue building a coordinated and systematic approach to family engagement. In FY 2021, the Family Phone Line fielded 9,750 calls and parent consultants assisted 490 individuals.

The Family Center continued to shift training to a virtual environment. Parent Mentor training was completed by 61 parents, and 30 parents were matched with mentors. Bereavement Parent Mentor trainings were completed by four parents. Parent Connect Calls are virtual events that provide parents and caregivers of CYSHCN with resources, support, and an opportunity to discuss the most pressing issues for parents/caregivers of CYSHCN. The Family Center provided 19 Parent Connect Calls which reached 128 parents/caregivers.

The Family Center alleviates financial burden for families with CYSHCN by offering summer camp and conference scholarships. Conference scholarships are available for parents/youth to attend a conference to learn about medical advances and how to advocate for their needs. Summer camp scholarships provide up to \$250 for CYSHCN to attend a licensed Michigan summer camp. In FY 2021, 39 camp scholarships were awarded, which is a 33% reduction in camp scholarships when compared to FY 2019 – the last full year prior to COVID-19. Also due to COVID-19, no conference scholarships were requested.

The third strategy was to implement a comprehensive outreach plan to improve awareness of CSHCS among providers, partners, and families. In FY 2021, the CSHCS communications committee created a strategy to strengthen relationships with key stakeholders and provide education on the program to organizations that represent populations diverse in race, ethnicity, geography, and income level. The committee reviewed the CSHCS website and created a plan to update the website and make it more user friendly. Professional Connect Calls are hosted by the Family Center and include information presentations and discussions designed for professionals to share insight into the family center and discuss opportunities to partner to support families of youth with special needs. In FY 2021, the Family Center hosted six Professional Connect Calls reaching 121 professionals.

The final strategy was to maintain a competent workforce to assist families. In FY 2021, CSHCS held virtual annual meeting with LHDs to ensure a competent workforce. The first meeting focused on pediatric asthma management. A specialist provided detailed clinical information on the asthma disease process; a registered nurse shared information on how to appropriately use asthma medication devices; and the event hosted a family panel to provide background on the experiences of youth with asthma. CSHCS also held virtual regional meetings with LHDs to

continue discussions regarding care coordination and case management (CC/CM) in the CSHCS program. The meetings utilized various case studies to better understand how different LHDs bill for CC/CM. Post meeting surveys indicated 85% of survey respondents improved their understanding of the guidelines and expectations surrounding CSHCS funding and billable services. Ninety-five percent (95%) of survey respondents indicated the regional training was very or somewhat effective in meeting their needs. CSHCS also held two collaborative meetings with LHD and MHP representatives and offered MI Bridges training to LHDs.

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 was to develop a comprehensive evaluation plan to measure CSHCS's capacity and ability to provide effective, efficient, and high-quality services to clients. In FY 2020, a CSHCS team was accepted into the National MCH WDC's 2020 Cohort with the goal of creating a comprehensive program evaluation. In FY 2021, CSHCS focused the evaluation design and established evaluation questions. Evaluation questions were divided into the following categories: program scope, access, family support, quality improvement, and sustainability. Work will continue in FY 2022.

The second strategy was to gather feedback from CSHCS providers on their experience with the program, and to use this feedback to identify opportunities to implement program improvements. A multi-staged approach to obtaining provider feedback was utilized. Interactive discussions were conducted with executive leadership at the three largest children's hospitals to gather information about overall satisfaction; highlight positive aspects; and identify opportunities for improvement related to the program. An electronic CSHCS provider satisfaction survey was delivered to 904 CSHCS specialty and subspecialty physicians by mail and electronically. A total of 92 responses were received resulting in a 10% response rate. The CSHCS Provider Satisfaction Survey explored the overall impression and satisfaction with the CSHCS program; knowledge of CSHCS services and benefits; ease of completing CSHCS program components; coordination of care and services; and availability of onsite Case Management/Care Coordination. CSHCS and a CSHCS Advisory Committee workgroup are reviewing the survey findings to identify opportunities for improvement. The goal is to amplify and elevate the perspectives of CSHCS providers while improving the CSHCS program experience for families, clients, and providers.

The third strategy is to continue to ensure CSHCS families are receiving high-quality, family-centered care coordination in a well-functioning system. This is accomplished through site visits with CMDS Clinics and MHPs, and accreditation visits for LHDs. CSHCS conducted six virtual CMDS clinic site visits in FY 2021. Site visits indicated that CMDS clinics excel in the areas of communication and education of families and referrals with other providers and community resources. The most frequent recommendations were related to transition to adult providers and documentation. CSHCS participated in MHP site visits with Managed Care Plan division staff, Office of Medical Affairs (OMA), and other program areas across MDHHS. In FY 2021, CSHCS visited with 11 MHPs with a focus on discussing case management and care coordination received by CSHCS enrollees. LHD site visits continued to be paused through FY 2021 due to COVID-19.

Children with Special Health Care Needs - Application Year

Transition (FY 2023 Application)

Through the Title V 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.

In Michigan, 26.7% of CYSHCN reported they received services to transition to adult health care (NSCH, 2019-2020). While Michigan performs better than the national average, the data indicate that more than two-thirds of Michigan’s CYSHCN are not receiving necessary Health Care Transition (HCT) services, making them vulnerable to worsening chronic health conditions, behavioral health issues, and underutilization of needed health care services.

Several National Survey of Children’s Health (NSCH) indicators for HCT decreased in 2020 during the COVID-19 pandemic. For example, the percentage of care plans for CYSHCN that address transition to doctors and other health care providers who treat adults in Michigan decreased from 44.4% in 2018-2019 to 33.8% in 2019-2020. These indicators identify areas that are challenging in a pandemic setting and most likely to be impacted by ongoing pandemic response.

Based on the needs assessment and NSCH data, three objectives were developed to address the state priority need, while focusing on promoting awareness, developing skills, and creating capacity for measuring improvement. These objectives align with the Michigan Title V needs assessment pillars of improving capacity to achieve equitable health outcomes; engaging families and communities; and delivering culturally, linguistically, and age-appropriate health education. Through strong partnerships, CSHCS ensured stakeholder input was integrated in objectives and strategies. CSHCS partnerships 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 HCT services. HCT is also integrated in the LHD accreditation process as a Minimum Program Requirement.

Objective A: By 2025, increase the percentage of CYSHCN ages 12 and older receiving services necessary to transition from pediatric to adult health care from 21.6% to 25%.

With the support of a replication grant from the Association for Maternal and Child Health Programs (AMCHP), CSHCS completed a pilot program to develop a process and toolkit for integrating HCT programming into Child and Adolescent Health Center (CAHC) school wellness centers. The pilot project replicated Got Transition’s “Incorporating the Six Core Elements of Health Care Transition into a Medicaid Managed Care Plan: Lessons Learned from a Pilot Project” with a rural school-based health center. Activities included completing a pre-assessment of clinic HCT activities, customization of Core Elements of Transition, implementation of the core elements, data collection, a post-assessment of clinic HCT activities, and sharing results with stakeholders. After demonstrating success in the pilot project, CSHCS planned to expand the pilot and further refine the toolkit. Due to COVID-19 and the varied impact it had on school-based health centers, these plans were delayed.

The first strategy for this objective is to expand the pilot project completed in 2018/2019. In FY 2023, CSHCS will lay the groundwork for this expansion by working with MDHHS CAHC to establish a leadership committee. The committee will review the Transition Toolkit and ensure it continues to meet the Quality Improvement requirements for school-based clinics, school-linked clinics, and school wellness centers. Three to five clinics will be identified that represent diverse populations and have the capacity to implement the pilot. Implementation of customized documents, processes, and data collection will begin in August 2023 and continue throughout the 2023/2024 school

year.

The second strategy for this objective is to launch and promote the revised website with CSHCS transition resources. All pages will be reviewed for ADA compliance and to ensure they are culturally appropriate. CSHCS will collaborate with the Family Center to promote the website to LHDs, MHPs, clients, families, and providers.

As a third strategy, MDHHS will continue to contract with the Regents of the University of Michigan (U of M), Child Health Evaluation and Research (CHEAR) Unit to monitor transition work using an Evidence-informed Strategy Measure (ESM) developed by CHEAR and to provide ongoing analyses and support related to the CSHCS program. The ESM was created in 2017 and provides data on the percent of CSHCS clients ages 18 to 20 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider. In FY 2023, CSHCS will work with CHEAR to review the ESM, identify opportunities for improvement and inform program changes in response to the data.

The fourth strategy is to pilot an automated HCT letter for 14-year-old CSHCS enrollees utilizing the CSHCS database system. CSHCS has existing automated letters (for ages 16, 17, 18 and 21) which are generated through the Community Health Automated Medicaid Processing System (CHAMPS) database. The 14-year-old letter was created to align with Got Transition age recommendations and to encourage families to begin the HCT process. This new letter will be piloted through the CSHCS database. Utilizing the CSHCS database will improve consistency, enhance reporting options, and provide a more streamlined way for LHDs to access this information.

The final strategy for this objective is to utilize the MHP contract, site review, and compliance review processes to improve HCT for CYSHCN enrolled in MHPs. In FY 2022, following the guidance provided by Got Transition's "Medicaid Managed Care Contract Language to Expand the Availability of Pediatric-to-Adult Transitional Care," CSHCS recommended contract revisions to include a definition of HCT, coordinate with LHDs to begin the HCT process prior to age 14, and ensure services appropriate for HCT. CSHCS will build on this effort in FY 2023 with recommendations to require MHPs to incorporate pediatric-to-adult transition planning as part of members' comprehensive care plans. In addition, CSHCS will ensure that MHPs report HCT outcomes during the compliance review process. CSHCS will attend site visits to engage with MHPs, provide additional resources if necessary, and provide technical assistance.

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 create and implement a marketing plan to promote courses on HCT to providers across Michigan. In partnership with Health Services for Children with Special Needs, Inc., Got Transition created an online continuing education course designed for pediatric and adult primary and specialty physicians, nurses, and social workers. The course offers a brief review of the updated clinical recommendations on HCT and the quality improvement approach of the Six Core Elements of Health Care Transition. The transition specialist will work with Got Transition staff to establish a baseline for providers in Michigan who have completed the course. The data will be utilized to identify areas for targeted outreach to encourage providers to complete the training courses. Data will be monitored annually to determine effectiveness of the marketing strategy.

The second strategy is to engage with the clinic partners for the HRSA-funded CYE initiative to provide HCT education to providers. Michigan's CYE team has a goal of increasing the number of completed transition readiness assessments of youth (ages 14-22) with epilepsy by 75%. To achieve this goal the project will support follow-up on HCT topics through in-person and technology enhanced options. In previous years, the project team obtained input from youth with epilepsy on technology-enhanced tools to support self-management. This input was shared with participating clinics. Project leadership compiled in-person training and online modules for different transition topics.

In FY 2023, in partnership with the Epilepsy Foundation of Michigan and the Family Center, the project team will offer training to community partners (schools, daycares, and health care professional groups) to promote HCT strategies and resources. In addition, the project will conduct targeted HCT trainings, such as Teen Transition Workshops for children with epilepsy and their families.

Through a partnership between CSHCS and the Public Health Administration (PHA), the FY 2022 budget included an expansion of CSHCS eligibility to include adults (ages 21 and over) with qualifying sickle cell disease diagnoses. The third strategy for this objective is to leverage the CSHCS eligibility expansion to improve HCT for individuals with sickle cell disease. To accomplish this, CSHCS will focus on expanding the CMDs model to clinics providing care to children and adults with sickle cell disease. The CSHCS transition specialist will work with the PHA and Michigan Public Health Institute to create a HCT toolkit for clinics. The toolkit will be reviewed by Office of Medical affairs providers and families of children with special health care needs. In FY 2023, two clinics, one pediatric and one adult, will be identified to pilot the toolkit.

The fourth strategy for this objective is to continue working with the Michigan Interagency Transition Taskforce (MITT) to ensure HCT is represented in models moving forward. MITT was formed to align transition services across state agencies, reduce duplication of services, promote common understanding of secondary transition, and improve student outcomes. In FY 2023, the transition specialist will continue to ensure HCT is included as a tenant in the Michigan State Model for Secondary Transition and a recognized step on a pathway towards independence. The transition specialist will utilize Got Transition resources to help guide educational staff in assisting adolescents in navigating their transition to adult providers and maintaining adequate insurance coverage.

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.”

The first strategy for this objective is to implement Got Transition’s “Current Assessment of Health Care Transition Activities” with LHD partners to develop a baseline. This strategy will be completed utilizing an electronic survey distributed to CSHCS staff at each LHD. Once baseline results for LHDs are documented, the survey will be replicated annually to begin documenting trends. These surveys will be utilized to make decisions on training topics and program development. Once the process is established, CSHCS will look to replicate the survey with other partners such as MHPs, providers, and school-based health clinics.

The second strategy for this objective will be to continue to support the HRSA CYE grant partners in implementing the “Current Assessment of Health Care Transition Activities” annually. Each year, the CYE grant partners host an in-person meeting. Partners discuss upcoming components of the grant period, hear from an epilepsy panel which includes adolescents with epilepsy and their parents, and share best practices identified in their individual projects. Each year partners complete the “Current Assessment of Health Care Transition Activities” to meet a requirement of the cross-site evaluation for the grant. In FY 2023, partners will complete the annual assessment, continue to monitor the progress of clinic sites, and determine plans for improving HCT activities across the project partners.

Medical Care and Treatment for CSHCN (FY 2023 Application)

Children’s Special Health Care Services (CSHCS) was created to find, diagnose, and treat children who have chronic medical 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.

The CSHCS benefit, while not intended to cover all the care a child needs, helps to ensure that necessary specialty care for a child’s qualifying diagnosis will not create undue financial burden for families. CSHCS is the payer of last

resort and requires families to follow their primary and secondary insurance. If a family's income indicates that they may be eligible for Medicaid, they are required to apply.

Most CSHCN who qualify for Medicaid and the CSHCS benefit continue to receive care through Medicaid Health Plans (MHP). Children who are already receiving Medicaid, and are determined to be medically eligible for CSHCS, are automatically enrolled. Automatic enrollment into CSHCS increases family access to care coordination and case management services. CSHCS works with local health departments (LHD), hospital systems, and MHPs to ensure continued enrollment.

During FY 2021, 53,474 individuals were enrolled in CSHCS and of these individuals, 44,154 were also eligible for Medicaid (MDHHS Data Warehouse, 3/23/22). Although there is an annual fee to enroll in CSHCS, the 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 (approximately 36% of the total Title V block grant) to support medical care and treatment of CSHCS recipients.

Focus groups conducted for the 2020 Title V needs assessment indicated CSHCS beneficiaries experience barriers, including transportation and respite care, that impact their access to timely health care services. Additionally, respite care was identified as a significant need to reduce stress for families of CSHCN. Language and cultural barriers, as well as lack of specialty providers and insurance challenges were also identified. 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 for families created by a complex health care system. In response, the state performance measure—percent of CSHCN enrolled in CSHCS that receive timely medical care and treatment without difficulty—was chosen to align with the priority needs identified through Michigan's 2020 needs assessment.

In addition to the medical care benefit, CSHCS empowers families to become engaged, self-determined, and informed advocates for their children. This work is accomplished through local health departments and the Family Center for Children and Youth with Special Health Care Needs (Family Center), which provides ongoing support, education, and resources to families of CSHCN. The Family Center is housed within the CSHCS Division. All families of CSHCN 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 for this objective is to continue offering special programs to reduce financial burdens for CSHCS-eligible families. Through the Insurance Premium Payment Benefit program, CSHCS can pay for all or part of the beneficiary's private health insurance premiums when families demonstrate financial need, and it is cost effective for CSHCS.

Transportation continues to be a challenge for families and creates barriers to accessing care. In FY 2023, CSHCS will continue to provide the transportation benefit, which provides reimbursement for mileage, lodging, and non-emergent travel. The treatment requiring transportation must be related to the qualifying medical condition and be provided by a CSHCS approved provider. In FY 2022, CSHCS ended the prior authorization requirement for

transportation assistance, thereby removing a barrier to families fully utilizing this benefit.

The Michigan Children with Special Needs Fund (CSN Fund) is a privately funded program within CSHCS. The CSN Fund was created to help CSHCN when other funding sources are not available. Working together with CSHCS, Family Center, LHDs, and other stakeholders, the Fund can assist children across Michigan in obtaining necessary equipment and home modifications that they need but could not otherwise afford.

The CSHCS respite benefit provides limited and temporary relief for families caring for beneficiaries with complex health care needs that require nursing services. A maximum of 180 hours of CSHCS respite services may be authorized per family during a 12-month eligibility period. In response to the Title V Needs Assessment and feedback from families, CSHCS will explore an expansion of the CSHCS respite benefit in FY 2023.

The second strategy is to expand specialty clinics to ensure delivery of medical care through Children's Multi-Disciplinary Specialty (CMDS) clinics. Efforts in FY 2023 will focus on recruiting additional clinics in the specialties of pulmonology (asthma) and hematology/oncology (sickle cell disease). CSHCS is currently reviewing and updating CMDS policy language to reflect current activities and is working to incorporate CMDS clinics into the Michigan Medicaid State Plan. The CMDS enhanced reimbursement rate will be reviewed to ensure that it provides appropriate support for services provided.

The third strategy is to continue expansion of telemedicine through the HRSA-funded Children and Youth with Epilepsy (CYE) grant. The CYE project aims to increase access to care for CYE by 25% by 8/31/2023. Progress will be measured by the number of clinics conducting, billing, and receiving reimbursement for telemedicine visits. Additionally, the project will document the number of clinic sites suggesting telehealth tools and the number of CYE or their parents who utilize telehealth tools. The project will support expansion of telemedicine visits offered through participating clinic sites, and adoption of telehealth strategies for patient education and clinic support. The Family Center Youth Consultant will review material, provide presentations when appropriate, and guide adolescent outreach to improve effectiveness.

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.) who improve knowledge of the CSHCS program.

The first strategy is to continue building a coordinated and systematic approach to family engagement. This will be accomplished through the work of the Family Center. In FY 2023, the Family Center will continue to provide camp and conference scholarships, the Parent Mentor program, the Family Phone Line, virtual Professional Connect calls, virtual Parent Connect calls, and utilization of a Youth Consultant to maximize outreach to adolescents. The Family Center coordinates Introduction to Sibshops and Sibshop Facilitator trainings for parents, caregivers, and community-based service providers and offers grants to support Sibshops across the state.

The Family Center facilitates the Family Leadership Network (FLN) to obtain perspectives of families and receive input on programs and special projects. The network meets quarterly and welcomes two representatives from each of Michigan's ten Prosperity Regions. They participate in focus groups and serve as a link between families and partners such as LHDs, providers, and MHPs. In FY23, efforts will focus on recruiting members for FLN and identifying additional ways FLN can inform CSHCS program decisions.

Finally, the Family Center provides annual grant opportunities for LHDs to increase family support, knowledge, and advocacy skills through implementation of family-centered support/educational groups for families of CSHCN. For FY23, the Family Center has a goal of increasing the number of LHD awards to eight grants totaling \$40,000.

The second strategy for this objective is to continue implementation of a multi-staged approach to improve provider engagement. Through these activities, CSHCS will gather information from physicians on how to improve services provided to CSHCS beneficiaries and their families. CSHCS and the Michigan State University Institute for Health Policy (MSU-IHP) adopted a multi-staged approach which included key informant meetings with executive leadership at three children's hospitals, an electronic satisfaction survey, and a plan to work with stakeholders to interpret and respond to feedback received from the survey. In FY23 CSHCS will continue to interpret and respond to feedback from providers. This initial cycle demonstrated significant value for the program. In FY23, leadership will determine a cycle for repeating these activities to ensure continued, consistent feedback from and engagement with providers.

The final strategy is to maintain a competent workforce that is knowledgeable about CSHCS and able to assist families accessing services. MDHHS will continue to contract with the MSU Institute for Public Policy to design and offer regional training opportunities to LHDs and MHPs. In FY 2023, a mix of statewide and regional trainings will be provided to meet the needs of LHDs and MHPs. LHD trainings will focus on enhancing program staffs' ability to identify, enroll, and renew clients in CSHCS, as well as additional program components such as Insurance Premium Payment Assistance program, transportation benefit, and CSN Fund. MHP staff will receive training to improve their awareness of the CSHCS program and the challenges families of CSHCN face. CSHCS will continue offering regularly scheduled calls with MHP and LHD representatives to improve care coordination.

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 is to continue the exploration of a statewide benefit to improve care for children with medical complexity (CMC). CSHCS has been assessing the current system of care for CMC, and identifying opportunities to improve this system, including consideration of a Medicaid Health Home benefit which would provide an intensive, patient-centered care coordination model. In FY 2023, CSHCS will continue to develop and then refine the details of the CMC Health Home, while engaging with key internal and external stakeholders. Several key decision areas have been identified (i.e., payment methodology; payment rates; provider and beneficiary enrollment; role of CMDS clinics, MHPs, and primary care provider) which will be fully explored in FY 2023 for this effort to progress.

The second strategy is to complete a comprehensive evaluation plan to assess and then improve CSHCS's capacity and ability to provide effective, efficient, and high-quality services to clients. Utilizing the CDC's framework for program evaluation, CSHCS has engaged stakeholders, utilized logic models and causal loop diagrams to create a comprehensive program description, and developed evaluation questions. In FY 2023, the team will collect credible evidence and draw conclusions which will be cross referenced with stakeholder feedback. Benchmarks will be established, and a program dashboard will be created. The program evaluation will be shared with stakeholders and continually reviewed, updated, and implemented.

The third strategy is to continue to ensure CSHCS families are receiving care coordination in a high-quality, family-centered, and well-functioning system. This will be accomplished through annual site reviews with CMDS clinics, focus studies and compliance reviews with MHPs, and accreditation of LHDs. CMDS site visits are scheduled for all clinics within a four-year cycle. CSHCS participates in annual focus studies with MHPs, alternating years between CSHCS-specific focus studies and participating on a team of reviewers from the Managed Care Plan Division. Accreditation of LHDs occurs on a three-year cycle, with a diverse team from the CSHCS Division evaluating LHD performance on a set of six minimum program requirements. The LHD requirements and associated indicators are reviewed and updated every three years.

The final strategy for this objective is to improve the system of care by identifying and responding to health inequities.

Beginning in FY 2022, the expansion of CSHCS eligibility for individuals with sickle cell disease throughout adulthood was authorized by the Michigan legislature. CSHCS had requested this eligibility expansion due to the disparities experienced by adults, especially young adults, with sickle cell disease. In FY 2023, CSHCS will continue outreach to adults with sickle cell disease in Michigan. MDHHS will contract with the University of Michigan CHEAR program to utilize data from the Michigan Sickle Cell Data Collection program to assist CSHCS in identifying adults for targeted outreach regarding the expanded eligibility for CSHCS. In conjunction with these efforts, CSHCS will prioritize CMDS clinic expansion to oncology/hematology specialists to improve availability and accessibility of sickle cell providers that utilize a multi-disciplinary model and ensure more regional locations for known sickle cell populations.

As part of this final strategy, CSHCS will continue the “Expanding Equity in CSHCS” project that was launched in FY 2022. The goal of this project is to support MDHHS in eliminating racial and ethnic disparities in healthcare. The project will create a valid/reliable system to quantify and monitor racial/ethnic disparities and identify gaps in care experienced by CSHCS clients, initially focusing on clients in MHPs. In partnership with the Medicaid Managed Care Plan Division and MHPs, health plan financial performance incentives will be utilized to incentivize MHP behavior to address the disparities identified in FY 2022. In addition, enhanced MHP contract expectations will be developed to address these disparities.

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		
State Provided Data				
	2019	2020	2021	
Annual Objective			Yes	
Annual Indicator			Yes	
Numerator				
Denominator				
Data Source			State Title V and MCH Programs	
Data Source Year			FY2021	
Provisional or Final ?			Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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
- D) Support students' mental health and wellness through implementation of Handle with Care (HWC)

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) Create, publish, and promote a series of webinars to provide information on CSHCS and community mental health services C2) Continue providing CSHCS and Family Center educational sessions at conferences for the community mental health workforce C3) Ensure the challenges of CYSHCN and their families are reflected in the discussions and decisions related to the MDHHS behavioral health restructuring process
- D1) Design, develop and pilot test an online portal to track HWC notices D2) Monitor HWC notices among counties participating in the initiative D3) Provide training/onboarding to new schools and counties to assist in expanding HWC

Cross-Cutting/Systems Building - Annual Report

Cross-Cutting Overview

Public health can play a key role in mental health promotion and 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 integration of these systems. The COVID-19 pandemic has had a significant impact on mental health across population domains and has underscored the need to create mental and behavioral health systems that are accessible and meet the needs of all Michiganders.

In March 2022, MDHHS announced a restructuring to ensure that services are supported across community-based, residential, and school locations. The changes will make addressing the needs of children and families a priority, while benefitting people of all ages. As part of the restructuring, the MDHHS Health and Aging Services Administration was renamed to the Behavioral and Physical Health and Aging Services Administration. This administration, in addition to current responsibilities administering Medicaid and services for aging adults, will oversee community-based services for adults with intellectual and developmental disabilities, serious mental illness, and substance use disorders. The restructuring also created the Bureau of Children's Coordinated Health Policy and Supports to improve and build upon the coordination and oversight of children's behavioral health services and policies. Additionally, substance use, and gambling disorder prevention programs were moved to the Public Health Administration, Bureau of Health and Wellness, Division of Chronic Disease.

The Bureau of Children's Coordinated Health Policy and Supports will manage the implementation of the Infant Mental Health program, a home visiting model that is a needs-driven, relationship-focused intervention for perinatal women, infants, and toddlers and coordinates with public health home visiting programs. The Substance Use Disorder Treatment Section in the Bureau of Community-Based Services will support a network of substance use treatment programs designed specifically for pregnant women and women with young children. MDHHS and the Michigan Department of Education have partnerships related to early childhood mental health, adolescent/school mental health, and infant and early childhood mental health consultation in childcare, as well as Infant and Early Childhood Mental Health Consultation (IECMHC) in home visiting. In addition, MDHHS is supporting the development of Certified Community Behavioral Health Clinics (CCBHCs) in several locations. The CCBHCs will provide integrated services with an array of mental health services across ages (adults and children) regardless of ability to pay or type of insurance. These changes are intended to streamline and coordinate resources and improve policies and processes.

The Title V 2020 needs assessment identified gaps in behavioral health services across population domains. 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 2020 (25.5%, BRFSS) in reporting two or more weeks of poor mental health over the previous

month. From 2016 to 2019 the percentage of Michigan women who reported receiving a screening for depression in the year prior to their pregnancy rose from 35.8% to 45.4% (PRAMS). Similarly, major postpartum depression symptoms rose from 2014 (12.6%) to 2019 (14.8%, 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 attention deficit disorder (9.7% versus 8.9% nationwide, NSCH, 2019-2020). 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 (35.0%, NSCH 2018-2019). For the first time in over a decade, the youth suicide rate in 2020 for adolescents ages 10-19 years was lower in Michigan (6.1 per 100,000) than in the US overall (6.7 per 100,000, WISQARS). In 2019, 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; this metric was even higher among Hispanic students (46.5%, YRBS). Michigan adolescents have also increasingly reported considering suicide, from 15.7% in 2011 to 18.7% in 2019 (YRBS). Parents report that 71.4% of children with special health care needs experienced bullying in the past year, compared to 36.5% of non-CSHCN (NSCH 2019-2020), which is linked to adverse mental health outcomes. These data indicate that Michigan has unmet needs for mental and behavioral health services across MCH populations.

The COVID-19 pandemic has resulted in additional economic, social, and physical health challenges that are impacting the mental health and well-being of the MCH population. As of March 2022, over 480,000 cases of COVID-19 have been confirmed among children ages 0-19 years. Nearly 12% of children ages 0-9 years and 20.8% of adolescents ages 10-19 years have had a confirmed COVID-19 case since March 2020 (MDSS 2022). In the 2020 birth cohort, over 1,300 Michigan women were identified as having a confirmed COVID-19 diagnosis during pregnancy, of which 1,288 had confirmed pregnancy outcomes resulting in 1,316 live births. While low birthweight rate in this cohort (10.4%) was similar to state average rates (10.0%), Neonatal Intensive Care Unit Admissions (NICU) admissions were significantly higher among births to mothers with confirmed COVID-19 diagnoses during pregnancy (9.3%), than the state average (7.5%) (MDHHS, 2021). In addition, the 2020 PRAMS cycle found 2.6% of respondents reported a positive COVID-19 diagnosis during pregnancy. Non-Hispanic Black mothers were nearly twice as likely to report COVID-19 during their 2020 pregnancy than non-Hispanic white mothers (PRAMS, 2020).

According to the [“Kids, Families and COVID-19: Pandemic Pain Points and the Urgent Need to Respond”](#) report published in December 2020, 22% of Michigan households with children reported feeling down, depressed, or hopeless. The report states, “Mental health, already a pressing issue for young people, has become an acute concern for millions in 2020, as they deal with everything from uncertainty and isolation to the profound grief associated with the coronavirus-related deaths of family and friends.” The [Child and Adolescent Mental Health as a Result of COVID: a Michigan Perspective](#) report found that in the first year of the pandemic, “trends show increased isolation, fear of contagion, political and racial unrest along with economic uncertainty have resulted in increased anxiety and depression.” The report noted other stressors that compound the effects of the pandemic, including financial stressors such as job loss and eviction. Additionally, an issue brief from the Kellogg Family Foundation (February 2021) entitled [“The Implications of COVID-19 for Mental Health and Substance Use”](#) indicated that the mental health of women with children and people of color were disproportionately impacted during the pandemic. The ongoing impacts of the pandemic are discussed in detail in the Needs Assessment Update in this application. The role of Title V in addressing several behavioral health needs across population domains are described in this state action plan.

Behavioral/Mental Health (FY 2021 Annual Report)

Through the 2020 Title V needs assessment, a new state priority need was identified to “Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems.” To align with this priority need, a new SPM was

created for the 2021-2025 cycle to “Support access to developmental, behavioral, and mental health services through Title V activities and funding.” In FY 2021, this SPM and the objectives in the state action plan focused on work across population domains that was directly supported or funded by Title V: the work of local health departments (LHDs) in addressing developmental, behavioral, and mental health needs; the work of Regional Perinatal Quality Collaboratives (RPQCs) in addressing behavioral and mental health; and increased engagement between Children’s Special Health Care Services (CSHCS) and behavioral health partners.

The COVID-19 pandemic continued to impact this SPM. For example, LHDs were heavily involved in COVID-19 mitigation and vaccination efforts, which impacted their capacity for other work including MCH. In relation to the RPQC work, staffing and patient flow at prenatal care clinics were impacted, ultimately delaying the implementation of new screening services. At the height of the pandemic, patients were not allowed to wait inside the clinic prior to their appointment or were being seen via a virtual visit, which changed how universal screening technology was implemented in some clinics. Despite the continued pandemic challenges in FY 2021, efforts to expand behavioral and mental health services in Michigan were able to achieve some progress and success, as discussed below. Strong partnerships and commitment to the work continue to be key drivers in these efforts.

Objective A: Support the work of local health departments in addressing developmental, behavioral, and mental health needs in their jurisdictions through 2025.

This objective helps to illustrate how behavioral/mental health is being addressed at the local level with the support of Title V funding. Of the 45 local health departments (LHDs) in Michigan, four LHDs addressed some aspect of mental health as a performance measure in their FY 2021 annual plans through the Local Maternal Child Health Program. Each LHD completed separate and unique activities related to behavioral/mental health including mental health education to youth through face-to-face and prerecorded presentations; staff attendance at virtual suicide prevention and other mental health trainings; and gap-filling depression screening or extra social work encounters for pregnant women, women, and adolescents. In total, these LHDs served 3,252 individuals (women, pregnant women, and children 1-21) and expended \$97,239 in LMCH funds.

The COVID-19 pandemic impacted LHDs’ ability to deliver services in FY 2021. Presentations had to be prerecorded and listened to virtually for training and education. One agency used a proprietary presentation that was unable to accommodate virtual alterations, so the suicide prevention information could not be offered to high school students. School schedules, including virtual and hybrid education, were challenges that could not be overcome as schools eliminated outside presenters when classroom education resumed. Depression screening became part of telehealth when home visits were halted during the pandemic. Progress toward anticipated goals was halted as staff were pulled into pandemic response activities. An unanticipated consequence of the pandemic was that youth mental health reached a higher priority status in the community.

In FY 2021, the LMCH program planned to provide support, guidance, and technical assistance to health departments. As part of this plan, LMCH created an “Evidence-Based Strategies by Performance Measures for Local MCH” document to provide guidance and technical assistance to LHDs as they created their action plans. The LMCH action plan contains a column to identify evidence-base/informed strategies. The document provides some potential evidence-based/informed or promising practice strategies that may be used in action plans, including SPM 6. Monthly technical assistance “office hours” were not attended and canceled midway through the fiscal year due to the pandemic. A webinar on bullying prevention (NPM 9), which had overlapping behavioral/mental health material, was presented in February 2021 to five participants. It was recorded with 13 views to date. The pandemic stretched resources at local health departments and agencies were overwhelmed with case investigation, contact tracing, vaccine distribution, and public education. The MDHHS LMCH team provided support when able and avoided inundating agencies with requests that may have further overburdened LHDs during the pandemic.

Objective B: Support the work of Regional Perinatal Quality Collaboratives in addressing behavioral and mental health in their respective Prosperity Region through 2025.

Poor behavioral and mental health outcomes continue to plague Michigan, especially in the maternal and infant populations. In 2019, 13.6% of birthing individuals in Michigan with a live birth indicated they smoked while pregnant; in the same year, the Neonatal Abstinence Syndrome (NAS) rate in Michigan was 623.7 per 100,000 live births with individual regions ranging from 2721.1 per 100,000 live births to 336.9 per 100,000 live births; and in the years 2013-2017, 32% of pregnancy-associated, not related deaths were attributed to accidental poisoning/drug overdose and 5.1% were attributed to suicide.^[1]

Michigan supports the Regional Perinatal Quality Collaboratives (RPQCs) through direct consultation; overall leadership of the Michigan Perinatal Quality Collaborative by a designated coordinator; and financial support through Title V federal funds, which serve as gap-filling funds for the RPQCs. Through efforts of three RPQCs, nine prenatal clinics implemented a universal electronic behavioral and mental health screening tool and app, managed through Michigan State University (MSU). This app, called the Mom's Checkup app, utilizes evidence-based Screening, Brief Intervention and Referral to Treatment (SBIRT), as well as evidence-based screening tools for depression and trauma; specific screening tools are based on clinic preference. If patients provide permission via the app, the screening results are shared with their provider and further referrals to treatment and resources can be provided through the clinic. If patients decide not to share their screening results, they still can receive a brief intervention, which is consistent with best practice recommendations.

The original design of the electronic screening tool model was for patients to complete the screener in the clinic on a tablet while waiting for their prenatal appointment. However, due to restrictions during the COVID-19 pandemic in which patients no longer sat in waiting rooms prior to their appointment, the app implementation team created a link and QR code so patients could access the Mom's Checkup app from their personal device. This allows patients the opportunity to still complete the behavioral and mental health screening tools and receive a brief intervention; providers can receive screening results pending permission of the patient. At the conclusion of every screening session, patients are asked to complete an evaluation, providing an opportunity for feedback on the screening tool and app. Patients consistently rate the app 'easy to use' and are satisfied with the methodology used. 90-100% of patients agree to share their screening results with their provider. Results are later scanned into the patient's electronic medical record.

After initial implementation of the screening tool and app, RPQCs and the MSU team continue to support the prenatal clinics as they utilize the Mom's Checkup app to screen patients and connect to appropriate resources and treatment. In FY 2021, an infant safe sleep module was added to the app. In Michigan, substance use is a characteristic of families that experience infant sleep-related deaths. Therefore, including this module in the app to 'screen' and educate families on safe sleep practices, including the association between substance use and unsafe sleep, made sense.

Additional funding has allowed the MSU team to start recruiting additional clinics across Michigan for implementation of the Mom's Checkup app and universal screening tool. The current nine clinics are at various stages of implementation, ranging from completing the internal security review process to staff training to waiting for their implementation date. These eight sites are in two additional regions outside of the three discussed above. As these clinics begin implementation, it is expected that even more clinics will become interested in the Mom's Checkup app and universal screening tool.

Prenatal clinics from a large health system in a fourth RPQC region have also implemented universal behavioral and mental health screening but are utilizing a different evidence-based screening tool. This screening tool was

previously provided to patients on a paper form while they are waiting for their appointment. However, the clinics now do virtual/phone prenatal intake appointments, and therefore, the screening questions are asked to the patient verbally. It is expected that as the use of the Mom's Checkup app expands into this region, the health system utilizing the previously mentioned screening tool will transition to the electronic universal screening program on the Mom's Checkup app.

In collaboration with the implementation of the Mom's Checkup app universal screening tool, one RPQC contracted with an outside vendor to provide tele-behavioral and mental health services to patients who are unable to utilize local resources or live in areas without resources nearby. Other prenatal care clinics utilizing the Mom's Checkup app continue to evaluate the resources available in their respective regions and will connect patients to telehealth services as available and appropriate.

The Michigan Child Collaborative Care (MC3) is a virtually based program that provides psychiatry support to primary care providers in Michigan who are managing patients with behavioral and mental health concerns. Through the Governor's Healthy Moms, Healthy Babies initiative, MC3 has expanded engagement of perinatal providers in the program and offers short-term remote consultation and care coordination between patients and remote behavioral health consultants. MDHHS and the RPQCs support MC3 through sharing program information, hosting program presentations and promoting informational MC3 webinar opportunities.

Another consequence of the COVID-19 pandemic is that many in-person childbirth education and breastfeeding classes were canceled. This left pregnant and postpartum people in certain areas of the state without options for education and support. A couple RPQCs helped to fill the gap during this time. The Region 8 PQC (southwest Michigan) hosted virtual childbirth and breastfeeding education and support classes for pregnant and postpartum individuals and families residing in this respective region. In FY 2021, 12 childbirth series (three classes per series) and nine breastfeeding education and support sessions were held. These courses provide opportunities for participants to review pregnancy and childbirth education, ask questions of the course instructor, and connect with other pregnant and postpartum people in their cohort. Additionally, the Region 7 PQC (mid-Michigan) hosted nine virtual support groups for pregnant and postpartum people in their region in FY 2021. These support groups were designed to help participants practice coping skills, discover mutual support strategies, identify symptoms of stress, and connect with others in the group.

Objective C: Support increased collaboration and engagement between Title V and behavioral health partners.

In FY 2021, MDHHS launched the MI Kids Now Initiative, a statewide effort to improve behavioral health services for children and youth with Medicaid coverage and/or in the foster care system. The mission of MI Kids Now is to ensure that every child and youth in Michigan has access to behavioral health services and support. CSHCS will provide a voice for children with special health care needs and their families while serving on the Health and Aging Services (HASA) Internal MI Kids Now Workgroup. The CSHCS Advisory Committee will receive regular updates and opportunities to provide feedback during quarterly committee meetings and through MI Kids Now Feedback Forums. Significant work will continue in FY 2022.

CSHCS continues to facilitate the Children's Special Health Care Services, Behavioral Health and Intellectual and Developmental Disabilities Collaborative. Due to COVID-19 and the shift in focus to the MI Kids Now Initiative, activities of the collaborative were on hold for much of FY 2021. The goal of the collaborative is to provide support to families to access more comprehensive and integrated care for children and families.

CSHCS and the Michigan Developmental Disabilities Council developed a strong partnership in FY 2021. The CSHCS Division Director continues to serve by gubernatorial appointment on the Michigan Developmental

Disabilities Council (DD Council), representing Title V. In addition, the CSHCS Policy Specialist represents CYSHCN on the Michigan DD Council Policy workgroup. New in FY 2021, CSHCS began a partnership with the DD Council to provide educational information to families of children with mental/behavioral health or developmental disability-related needs regarding accessing services and resources. The result of the partnership will be a video series to help families of children with special health care needs navigate behavioral, developmental, and CSHCS systems more effectively. The video series will also facilitate cross-system education between local behavioral and developmental service providers and CSHCS programs provided through local health departments.

Objective D: Support students' mental health and wellness through implementation of Handle with Care (HWC).

This objective was added to the FY 2022 state action plan and was not included in the original FY 2021 plan. However, in FY 2021, design and development began on the HWC centralized online notification system that streamlines and automates HWC notices from law enforcement to the appropriate school liaison. Detailed reporting information will be included in the FY 2022 annual report.

^[1] Source: Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services

Cross-Cutting/Systems Building - Application Year

Behavioral/Mental Health (FY 2023 Application)

The findings from the Title V needs assessment led to a new state priority need in 2020 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, a new SPM was also created for the 2021-2025 cycle to “Support access to developmental, behavioral, and mental health services through Title V activities and funding.”

Creation of this new SPM was intended to better capture existing and new work across population domains related to behavioral and mental health and to identify opportunities for expanded work in the future. For the state action plan, the Title V program initially focused on three specific areas that are either directly supported or funded by Title V: 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 the Title V CSHCN program and behavioral health partners. In FY 2022, a fourth objective was added for the Handle with Care (HWC) initiative. HWC focuses on students’ mental health and well-being and is supported by Title V funding.

The annual objective in this state action plan is “yes” to signify the ongoing commitment to mental and behavioral health initiatives within Title V systems work and community-based work that is funded by Title V. This annual objective was chosen to capture and reflect, in one state action plan, the array of work across Title V programs, population domains, and local initiatives. This state action plan is not an exhaustive reflection of efforts to better integrate or expand mental and behavioral health access or services. Other MCH initiatives and partnerships are underway but are not discussed in this state action plan, as the intent of the plan is to capture cross-domain 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.

Mental health was a strategic priority identified by approximately one-third (12) of Michigan’s local health departments (LHDs) in the 2017 Local Maternal Child Health (LMCH) needs assessment. The COVID-19 pandemic exacerbated stressors that many women and families faced prior to the pandemic. It also led to new stressors such as social isolation, job loss, housing insecurity, and poverty. Some providers are noting dramatic increases in depression and anxiety among patients, including at younger ages. Additionally, the LHD workforce is simultaneously experiencing high levels of stress as many public health employees have faced harassment and pushback regarding pandemic mitigation efforts such as masking, social distancing, and vaccination.

The objective in this state action plan helps to illustrate how behavioral/mental health needs are being addressed at the local level with the support of Title V funding. The 45 LHDs in Michigan receive approximately one-third of Michigan’s total Title V allocation through the LMCH program. Each health department has the flexibility to use Title V funds to align with their local MCH strategic priorities. Some LHDs work on mental/behavioral health with Title V funds; other LHDs may work on mental/behavioral health with other funds or in broader MCH program areas and therefore their activities may not be captured in Title V LMCH workplans.

Many LHDs report having a long and rich history of being active partners with established community groups, advisory boards, collaboratives, and coalitions in their local district such as Community Mental Health, Child Abuse Neglect Prevention, Child Advocacy, school nurses and law enforcement. LHDs describe receiving family feedback on services through paper and telephone surveys. LHDs value and elevate parent and adolescent voices by

recruiting and promoting consumer involvement in decision making on collaboratives, councils, and advisory boards.

Seven LHDs are addressing some aspect of mental health as a performance measure in their current annual plans such as depression, adverse childhood experiences and suicide prevention within the women/maternal health and adolescent health domains. Notably, since Title V funding is often used as a gap-filling funding source by LHDs, if an LHD does not choose a behavioral health measure for their Title V workplan it does not mean they are not doing meaningful work in their community on this issue.

For example, SPM 6 was utilized in the women/maternal health domain by two LHDs that used Title V funds to provide universal stress/depression screening for pregnant and postpartum home visiting clients using the Edinburgh Postpartum Depression Scale and abbreviated Perceived Stress Scale. The LHDs educated pregnant/postpartum clients on stress, depression prevention and management, and created treatment goals with clients during case management. Women who scored as high risk for depression were referred for mental health treatment. Some families faced access challenges due to the COVID-19 pandemic, particularly during pandemic related closures, while others adapted to using telehealth visits when possible. Outcome measurements include the number of women screened for depression, the number of women receiving case management for depression, and the number of referrals for treatment.

An example of SPM 6 in the adolescent health domain is an LHD that provides education to middle and high school students on mental health topics such as stress management, depression, body image, and substance use during health education classes. This LHD has high school students and a teacher on their reproductive health advisory board, and the health educator uses age-appropriate health education strategies. This LHD measures the number of adolescents who received the education and measures knowledge gained through pre/post-test evaluations.

State strategies to support LHD work on this measure include provision of support, guidance, and technical assistance from the MDHHS LMCH consultant. To support the Title V pillars, LHDs will be encouraged to use a health equity lens in the formation of workplans, and to involve families as partners in their work. Sample LMCH workplans and webinars will be provided to LHDs in FY 2023 to demonstrate inclusion, equity, and family engagement strategies. The Title V program recognizes that LHDs have faced significant and ongoing demands responding to the COVID-19 pandemic which may limit their capacity to make significant adjustments to their workplans for FY 2023.

The LMCH program will continue to 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 people, as illustrated through several indicators. For example, in 2020, 14.5% of individuals in Michigan with a live birth indicated that they smoked while pregnant; in 2020, the Neonatal Abstinence Syndrome (NAS) rate for Michigan was 624.1 per 100,000 live births; and from 2014-2018, 36.1% of pregnancy associated injury deaths were attributed to accidental poisoning/drug overdose and 4.5% were attributed to suicide^[1]. Furthermore, approximately 70% of individuals with a live birth in 2019 stated they had experienced one or more life stressors (i.e., homelessness, close family member sick or died, loss of job, etc.) in the 12 months prior to delivery and 23% stated they had one or more unmet basic needs (i.e., skipped meals because there was not enough money for food; did not have safe housing; could not keep basic utilities on; etc.) during pregnancy.^[2]

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 perinatal substance use through implementation of universal prenatal screening, increasing treatment capacity in their respective region, supporting nonpharmacological treatment of infants born substance-exposed, and offering educational opportunities in unconscious bias and stigma reduction. 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, as well as other services and resources to improve care and treatment of mental and behavioral health in pregnant people and their infants. Previous surveys of prenatal care clinics illustrated a lack of consistent or universal screening of patients for perinatal substance use and/or mental health conditions, such as depression and anxiety. Universal screening of all pregnant people is the first step in addressing behavioral and mental health in this population, as well as the related stigma that surrounds these conditions in general. Subsequent linkage to behavioral and mental health professionals, treatment, and other supportive services is the essential next step for those identified through universal screening, or otherwise.

Four RPQCs have implemented prenatal screening at clinics that serve residents of their respective regions. West Michigan's major health system has built their preferred evidence-based screening tool into their electronic medical record. The screening tool is being 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 people with behavioral and/or mental health concerns that might not otherwise have been assessed or addressed. Patients utilizing the screening tool have expressed their overall satisfaction and commented on the ease of use. Expansion of universal screening throughout the State is expected into FY 2023.

Recognizing the need for additional medication assisted treatment (MAT) providers in their region, Northern Lower Michigan has been supporting efforts to train prenatal care providers for MAT certification to increase the capacity for treatment of pregnant people with substance use disorder. Other regions are also supporting efforts to expand treatment capacity within their respective regions. In addition, three RPQCs have implemented nonpharmacological care and rooming-in at birthing hospitals within their respective region for treatment of infants born substance-exposed. The programs encourage a family-centered approach where infants remain with their birthing person in a quiet, calming environment in which breastfeeding, skin-to-skin and bonding techniques are encouraged instead of the infant immediately being admitted to the Neonatal Intensive Care Unit (NICU). Additionally, families will be linked to supportive services and resources prior to discharge from the hospital. It is expected that as the hospitals continue implementation and garner patient feedback, they will grow and expand their programs.

Stigma and bias can impede care and treatment for pregnant people with mental and behavioral health concerns, leading to adverse health outcomes. RPQCs will be encouraged to continue providing educational opportunities in bias, equity, and stigma reduction for Collaborative members, as well as prenatal care providers. These opportunities are intended to be arenas for personal growth; increasing awareness and knowledge, while reinforcing the need to be conscious of and recognize personal biases to prevent biases from affecting clinical judgement. Ideally, the opportunities will also stimulate the desire to create systemic and cultural change within the provider's facility, creating a safer and more inclusive space for prenatal, postpartum, and infant care.

Objective C: Support increased collaboration and engagement between Title V and behavioral health partners.

In FY 2019, the CSHCS Division and the Behavioral Health and Developmental Disabilities Administration (BHDDA) formed a collaborative committee to explore and identify challenges in accessing services by populations served by mental/behavioral health, intellectual and developmental disabilities (I/DD), and physical health systems. The collaborative committee includes members from the Family Center, Family to Family Health Information Center, MDHHS CSHCS, MDHHS Behavioral Health and Development Disabilities Administration (BHDDA), local Community Mental Health (CMH), local health departments (LHDs), ARC of Michigan, CMH Association, MDHHS child welfare and juvenile justice, family members, and Medicaid Health Plans. The purpose of the collaborative workgroup is to develop tools to assist families in communicating their needs and accessing appropriate services; develop tools to assist CMH staff in understanding CSHCS youth and their families; and develop tools to assist LHDs in understanding mental health and I/DD services and how to assist families in accessing these services.

The first strategy for this objective is for the collaborative workgroup to create, publish, and promote a series of webinars titled “What is CSHCS?”, “Is my Child Eligible for CSHCS?”, “Is my Child Eligible for Community Mental Health Services?”, and “How to Access Community Health Services.” These will be short, easily digestible videos designed to provide families with the resources they need to navigate either system of care.

The second strategy for this objective is to continue providing CSHCS and Family Center educational sessions at the Home and Community-Based Waiver Conference, the Michigan Council for Exceptional Children Conference, and Community Mental Health Association seasonal conference series. These educational sessions provide general information on the CSHCS program, describe how to access services, explain the relationship between CSHCS and the community mental health system of care, and introduce the Family Center for Youth with Special Health Care Needs.

In FY 2022, Michigan launched a behavioral health restructuring within MDHHS to ensure services are supported across community-based, resident and school locations as well as other settings. Changes to this system of care will benefit people of all ages, with addressing the needs of children and their families as a top priority. These changes will streamline and coordinate resources and improve policies and process to make them more effective. Behavioral health is a priority for Michigan’s state legislature, which recently allocated an investment of \$91 million in support of children’s behavioral health services. The third strategy is to ensure the unique challenges of CYSHCN and their families are reflected in the decisions related to the behavioral health restructuring process through CSHCS participation on various workgroups. This will create opportunities for the CSHCS Advisory Committee (CAC) to provide comments and feedback to the MDHHS behavioral health leadership team.

Objective D: Support students’ mental health and wellness through implementation of Handle with Care.

Handle with Care (HWC) is an initiative designed to promote communication between local law enforcement and schools. When law enforcement is on the scene of an incident that was experienced or witnessed by a school-aged child, they determine what school the child attends and a “Handle with Care” notice is sent to the child’s school before the school bell rings the next day. School staff are encouraged to handle that child with care and look for potential signs that the trauma the child experienced is affecting his or her behavior or ability to succeed in school.

The goal of HWC is to help students succeed in school. Regardless of the source of trauma, the common thread for effective intervention is the school. Research shows that trauma can undermine children’s abilities to learn, form relationships, and function appropriately in the classroom. A recent national survey of the incidence and prevalence of children’s exposure to violence and trauma revealed that 60% of American children have been exposed to violence, crime, or abuse; forty percent were direct victims of two or more violent acts. Prolonged exposure to

violence and trauma can impact a child's ability to focus, behave appropriately, and learn in school. In turn, this can lead to school failure, truancy, suspension, or expulsion, dropping out, or involvement in the juvenile justice system.

HWC promotes school-community partnerships to ensure that children who are exposed to trauma in their home, school or community receive appropriate interventions to help them achieve academically despite experiences of trauma. HWC is a partnership between law enforcement, schools, and mental health providers, and connects students and families to mental health services. Schools that participate in HWC are encouraged to implement individual, classroom and whole school trauma sensitive strategies so that traumatized children are "Handled with Care." If a child needs more intervention, on-site trauma-focused mental healthcare is available at the school or a referral is made to a community provider.

Strategies to help achieve Objective D include the design, development, pilot testing, implementation and tracking of a centralized online notification system that streamlines and automates HWC notices from law enforcement to the appropriate school liaison. Currently, no such system exists in Michigan to support the 49 counties currently implementing HWC. Each site has been tasked with manually creating, tracking, and responding to notifications. Local HWC partners have expressed a need for a centralized system for reporting notices. A centralized online portal will create efficiency across the state and will provide an efficient process for law enforcement to submit the HWC notice and for the local school entity to receive the information.

Once the system is established, it will allow the state to monitor HWC notices among counties participating in the initiative. The statewide data will be used to help with quality improvement and to make informed decisions regarding the program. The online portal will also assist with the expansion of HWC over time, as the streamlined system will decrease the amount of work needed when creating a HWC program in a new jurisdiction.

Title V block grants dollars are being used to fund the development, design, pilot testing and maintenance costs associated with the online portal. A comprehensive training document has been developed for each of the key roles utilizing the HWC portal including Law Enforcement Administration, Law Enforcement Officer, and School Administration. It is anticipated that the development of this portal will be an incentive for additional counties to adopt the HWC initiative and allow for more widespread trauma-informed supports in Michigan's schools. It is anticipated that the online portal will be available in FY 2023 to all interested counties.

^[1] Source: Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services

^[2] 2019 Birth Year: Michigan PRAMS Maternal and Infant Health Summary Tables

III.F. Public Input

A draft of the Title V FY 2023 application/FY 2021 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 over 50 MCH and CSHCN advisory groups, community-based partners, nonprofit partners, advocacy groups and other state programs. Notice will be sent to all 45 local health departments via the Local MCH program. Additionally, individuals who participated in the 2020 Needs Assessment Stakeholder Group and Population Domain Workgroups will receive notification of the posting. Public comments will then be presented to the Title V steering committee and relevant MCH program staff for review and consideration prior to submission of the final grant application.

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.

Families and consumers are also represented in strategic planning initiatives aimed at improving maternal, infant, and child health outcomes. They serve on advisory committees for home visiting, oral health, Family Planning, Child and Adolescent Health Centers, infant safe sleep, Teen Pregnancy Prevention Program local coalitions, Parent Leadership in State Government, and Fetal Alcohol Spectrum Disorder. Additionally, to implement the state's *Mother Infant Health and Equity Improvement Plan*, MDHHS partners 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, MDHHS completed a statewide five-year needs assessment in 2020 to identify the FY 2021-2025 state priority needs and performance measures for Title V. The Needs Assessment Planning Committee prioritized engaging 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, which included more than 70 MCH stakeholders from across Michigan. 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 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 application.

III.G. Technical Assistance

As Michigan's Title V program implements state action plans over the current five-year period, it will identify any areas of needed technical assistance. Based on Michigan's current priorities, these areas may include:

- Implementation of the ACE Kids Act and its impact on efforts to enhance or establish financially sustainable systems of care and care coordination for children with medical complexity.
- Best practices in the integration of physical and behavioral health for maternal and child health populations.
- Integration and implementation of health equity and family engagement strategies in MCH work and Title V state action plans.
- Ongoing learning opportunities and technical assistance related to identification, refinement, and assessment of evidence-based or informed strategy measures (ESMs).
- Sharing of best practices and other peer learning opportunities (e.g., between states or within regions).
- Additional assistance or information related to Title V and the MCH population in relation to COVID-19.

Many training needs are met by professional development opportunities provided by HRSA and AMCHP throughout the year, including the AMCHP Conference, HRSA learning labs, and regional meetings. Training or technical assistance provided by HRSA and AMCHP, especially in relation to performance measures, the Title V Information System, and other Title V priorities or requirements, is shared with relevant MCH programs and staff. Lastly, in FY 2023 Michigan will begin the planning process for the next Title V five-year needs assessment and may seek out technical assistance, if needed.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - [MichiganStatePlan EXCERPT.pdf](#)

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - [Annotated Bibliography Sources.pdf](#)

Supporting Document #02 - [Title V NPM-SPM Chart FY2021-2025.pdf](#)

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - [MIH-CAH-CSHCS Org Charts.pdf](#)

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Michigan

	FY 23 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 19,480,200	
A. Preventive and Primary Care for Children	\$ 6,482,000	(33.2%)
B. Children with Special Health Care Needs	\$ 6,994,200	(35.9%)
C. Title V Administrative Costs	\$ 643,000	(3.4%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 14,119,200	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 52,970,400	
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)	\$ 8,363,000	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 62,123,400	
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)	\$ 81,603,600	
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)	\$ 340,960,300	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 422,563,900	

OTHER FEDERAL FUNDS	FY 23 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	\$ 1,796,700
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 1,453,700
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 160,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	\$ 160,000
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)	\$ 494,100
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	\$ 10,952,500
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	\$ 151,440,700
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy	\$ 502,600
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	\$ 6,775,400
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	\$ 245,000
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)	\$ 159,079,600

	FY 21 Annual Report Budgeted		FY 21 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 19,415,900 (FY 21 Federal Award: \$ 18,917,629)		\$ 19,007,027	
A. Preventive and Primary Care for Children	\$ 6,536,500	(33.7%)	\$ 6,459,907	(33.9%)
B. Children with Special Health Care Needs	\$ 6,994,200	(36%)	\$ 7,003,576	(36.8%)
C. Title V Administrative Costs	\$ 602,800	(3.1%)	\$ 529,011	(2.8%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 14,133,500		\$ 13,992,494	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 42,008,500		\$ 49,686,928	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0		\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 790,000		\$ 574,036	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 7,868,700		\$ 6,955,280	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 50,667,200		\$ 57,216,244	
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		\$ 76,223,271	
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		\$ 314,180,132	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 385,971,200		\$ 390,403,403	

OTHER FEDERAL FUNDS	FY 21 Annual Report Budgeted	FY 21 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	\$ 1,914,500	\$ 1,663,263
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	\$ 1,582,600	\$ 1,503,838
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 150,000	\$ 183,234
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	\$ 187,500	\$ 237,684
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventive Health and Health Services Block Grant	\$ 200,000	\$ 190,000
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	\$ 459,296
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	\$ 9,330,700	\$ 8,801,702
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	\$ 153,550,606
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy	\$ 439,600	\$ 372,326
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	\$ 100,000	\$ 118,720
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	\$ 235,000	\$ 63,468
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	\$ 970,000	\$ 0
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	\$ 7,600,000	\$ 6,950,796

OTHER FEDERAL FUNDS	FY 21 Annual Report Budgeted	FY 21 Annual Report Expended
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	\$ 147,601,900	\$ 132,519,459
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	\$ 7,565,740

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	Field Name:	1.FEDERAL ALLOCATION
	Fiscal Year:	2021
	Column Name:	Annual Report Expended
	Field Note:	The total FY21 amount expended in Line 1 includes carryover funds from FY20, which is why the expended amount is higher than the FY21 federal award amount.
2.	Field Name:	Federal Allocation, C. Title V Administrative Costs:
	Fiscal Year:	2021
	Column Name:	Annual Report Expended
	Field Note:	Title V administrative costs were less than expected due to a vacant position.
3.	Field Name:	3. STATE MCH FUNDS
	Fiscal Year:	2021
	Column Name:	Annual Report Expended
	Field Note:	The State MCH Match Funds were lower than expected due to realized Medical Care and Treatment expenses being lower than anticipated.
4.	Field Name:	5. OTHER FUNDS
	Fiscal Year:	2021
	Column Name:	Annual Report Expended
	Field Note:	Other Funds were lower than expected due to the Children with Special Needs Fund Earning being lower than the anticipated amount.
5.	Field Name:	6. PROGRAM INCOME
	Fiscal Year:	2021
	Column Name:	Annual Report Expended
	Field Note:	Program Income was lower than budgeted due to Newborn Screening earnings being less than appropriated.

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 23 Application Budgeted	FY 21 Annual Report Expended
1. Pregnant Women	\$ 838,900	\$ 1,017,382
2. Infants < 1 year	\$ 1,390,000	\$ 1,129,425
3. Children 1 through 21 Years	\$ 6,482,000	\$ 6,459,907
4. CSHCN	\$ 6,994,200	\$ 7,003,576
5. All Others	\$ 3,132,100	\$ 2,867,726
Federal Total of Individuals Served	\$ 18,837,200	\$ 18,478,016

IB. Non-Federal MCH Block Grant	FY 23 Application Budgeted	FY 21 Annual Report Expended
1. Pregnant Women	\$ 2,471,500	\$ 1,337,421
2. Infants < 1 year	\$ 10,782,000	\$ 9,038,511
3. Children 1 through 21 Years	\$ 1,982,400	\$ 2,003,711
4. CSHCN	\$ 44,973,000	\$ 43,121,349
5. All Others	\$ 1,914,500	\$ 1,715,251
Non-Federal Total of Individuals Served	\$ 62,123,400	\$ 57,216,243
Federal State MCH Block Grant Partnership Total	\$ 80,960,600	\$ 75,694,259

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 23 Application Budgeted	FY 21 Annual Report Expended
1. Direct Services	\$ 9,369,200	\$ 9,343,111
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	\$ 267,400	\$ 253,019
B. Preventive and Primary Care Services for Children	\$ 4,150,100	\$ 4,126,366
C. Services for CSHCN	\$ 4,951,700	\$ 4,963,726
2. Enabling Services	\$ 6,694,689	\$ 6,102,311
3. Public Health Services and Systems	\$ 3,416,311	\$ 3,561,605
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		\$ 4,492,407
Physician/Office Services		\$ 1,868,358
Hospital Charges (Includes Inpatient and Outpatient Services)		\$ 724,499
Dental Care (Does Not Include Orthodontic Services)		\$ 376,927
Durable Medical Equipment and Supplies		\$ 188,452
Laboratory Services		\$ 0
Other		
Special Projects and Local MCH		\$ 1,692,468
Direct Services Line 4 Expended Total		\$ 9,343,111
Federal Total	\$ 19,480,200	\$ 19,007,027

IIB. Non-Federal MCH Block Grant	FY 23 Application Budgeted	FY 21 Annual Report Expended
1. Direct Services	\$ 43,025,200	\$ 41,367,958
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	\$ 263,184
C. Services for CSHCN	\$ 42,745,400	\$ 41,104,774
2. Enabling Services	\$ 5,979,650	\$ 5,476,104
3. Public Health Services and Systems	\$ 13,118,550	\$ 10,368,700
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		\$ 30,976,298
Physician/Office Services		\$ 1,593,509
Hospital Charges (Includes Inpatient and Outpatient Services)		\$ 4,500,966
Dental Care (Does Not Include Orthodontic Services)		\$ 85,767
Durable Medical Equipment and Supplies		\$ 2,862,736
Laboratory Services		\$ 0
Other		
Medical Care and Treatment		\$ 1,348,682
Direct Services Line 4 Expended Total		\$ 41,367,958
Non-Federal Total	\$ 62,123,400	\$ 57,212,762

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

None

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated

State: Michigan

Total Births by Occurrence: 103,838

Data Source Year: 2021

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Valid Screen	(B) Aggregate Total Number of Out-of-Range Results	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	102,959 (99.2%)	3,114	282	282 (100.0%)

Program Name(s)				
3-Hydroxy-3-Methylglutaric 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	Holocarboxylase Synthase Deficiency
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, βeta-Thalassemia	S,C Disease	S,S Disease (Sickle Cell Anemia)	Severe Combined Immunodeficiencies	Spinal Muscular Atrophy Due To Homozygous Deletion Of Exon 7 In SMN1
β-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) Total Number Receiving at Least One Screen	(B) Total Number Presumptive Positive Screens	(C) Total Number Confirmed Cases	(D) Total Number Referred for Treatment
Early Hearing Detection & Intervention (EHDI) Program	98,494 (94.9%)	5,932	192	192 (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 with metabolic disorders and sickle cell disease.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	Field Name:	Data Source Year
	Fiscal Year:	2021
	Column Name:	Data Source Year Notes
	Field Note:	Data Source: 2021 Provisional Live Birth File, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services
2.	Field Name:	Early Hearing Detection & Intervention (EHDI) Program - Total Number Receiving At Least One Screen
	Fiscal Year:	2021
	Column Name:	Other Newborn
	Field Note:	Data Source: Preliminary EHDI information based on 2021 provisional data of hospital and midwife births reported as of April 2022.

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 2021

Form 5a – Count of Individuals Served by Title V
(Direct & Enabling Services Only)

Types Of Individuals Served	(A) Title V Total Served	Primary Source of Coverage				
		(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	7,665	40.4	0.0	57.1	2.1	0.4
2. Infants < 1 Year of Age	13,657	40.4	0.0	57.1	2.1	0.4
3. Children 1 through 21 Years of Age	443,316	35.0	0.0	61.0	4.0	0.0
3a. Children with Special Health Care Needs 0 through 21 years of age^	54,568	78.5	3.6	16.0	1.9	0.0
4. Others	69,626	17.0	0.0	76.0	7.0	0.0
Total	534,264					

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	104,074	No	103,434	100.0	103,434	7,665
2. Infants < 1 Year of Age	103,122	No	103,838	100.0	103,838	13,657
3. Children 1 through 21 Years of Age	2,544,079	Yes	2,544,079	72.0	1,831,737	443,316
3a. Children with Special Health Care Needs 0 through 21 years of age^	564,861	Yes	564,861	72.0	406,700	54,568
4. Others	7,314,627	Yes	7,314,627	5.0	365,731	69,626

^Represents a subset of all infants and children.

Form Notes for Form 5:

Form 5a includes the number of individuals who received a direct or enabling service funded by both Federal Title V dollars and Non-federal state match dollars as reported on Form 2, line 8. Duplication in counts is possible because some individuals may have received more than one service.

Form 5b is the total percentage of the population that received Federal Title V and Non-federal state match programs, as reported on Form 2, line 8. It includes all levels of the MCH pyramid. 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:	2021
<hr/>		
Field Note:		
Individuals in the pregnancy category expending funds from Federal Title V funds include Local Maternal Child Health Program pregnant women [5,929]; MI-APPT and MI APP [15]; and Family Planning (includes pregnant/seeking pregnancy FY 2021) [182].		
Individuals in the pregnancy category expending funds from the Title V match include Family Planning (includes pregnant/seeking pregnancy data FPAR, preliminary 2021 and Planned Parenthood of Michigan FY 2021) [1,036]; Nurse Family Partnership and Rural MHVI HFA [685]; note that MHVI and MIECHV 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 2021, 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.		
<hr/>		
2.	Field Name:	Infants Less Than One Year Total Served
	Fiscal Year:	2021
<hr/>		
Field Note:		
Infant counts expending Federal Title V funds include Local Maternal Child Health Program [773]; MI-APPT and MI APP [17]; and Infant Safe Sleep Outreach Training [758].		
Nurse Family Partnership and Rural MHVI [495], and Infant Safe Sleep initiatives [11,614] are part of the Title V match. 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 Occurrent births, preliminary, 2021, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.		
<hr/>		
3.	Field Name:	Children 1 through 21 Years of Age
	Fiscal Year:	2021

Field Note:

Children 1-21 expending Federal Title V funds includes dental sealants [3,669]; childhood lead prevention program [256,517]; Local Maternal Child Health Program [109,799]; Family Planning (unduplicated count of girls and boys ≤15-24, PPMI FY 2021) [8,009]; Fetal Alcohol Spectrum Disorder [563]; Breastfeeding mini grants to organizations serving adolescent parents [132]; MI-APPPT and MI APP [112]; adolescent fatherhood engagement for infant safe sleep [332]; PREP Michigan Organization on Adolescent Sexual Health [2,891]; and immunizations (purchased supply not used due to impact of COVID-19 pandemic and slower demand) [0].

Title V match counts in children 1-21 include Family Planning (unduplicated count of girls and boys ≤15-24, FPAR, preliminary 2021) [5,798]; Nurse Family Partnership and Rural MHVI [919]; Adolescent Health Training [7]. Note that MHVI and MIECHV counts are from the state match from general funds, not MIECHV federal funds.

The number recorded here is the number of children 1-21 plus the number of CSHCN age 0-21 (line 3a). Population estimates were used for Primary Sources of Insurance coverage from American Community Survey - Children 1-21, 2019.

4. **Field Name:** **Children with Special Health Care Needs 0 through 21 Years of Age**

Fiscal Year: **2021**

Field Note:

All CSHCN counts are from the Federal Title V expenditures which includes medical care and treatment for CSHCN. Medical insurance coverage is reported by the CSHCS program (MDHHS, Data Warehouse). Michigan serves a much larger CSHCS Medicaid population (78.5%) than the National Survey of Children's Health – CSHCN, 2019-2020 (46%).

5. **Field Name:** **Others**

Fiscal Year: **2021**

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, fathers, families, and grandparents. Examples of direct and enabling service counts expended with Federal Title V funds include: MI-APPT and MI APPP [29]; Local Maternal Child Health [59,500]; FIMR family interviews [48]; and Parent Leadership in State Government [63]. Breastfeeding projects received funding from both Federal Title V and Title V match [1,163].

Additional Title V match funds included in the Others count include Family Planning (FPAR, 2021, preliminary) [7,674]; and Nurse Family Partnership, rural MHVI, Inter-tribal MIECHV [1,149]. Note that MHVI and MIECHV counts are from the state match from general funds, not MIECHV federal funds.

Population estimates were used for Primary Sources of Insurance Coverage from American Community Survey - Adults 22+, 2019.

Field Level Notes for Form 5b:

1. **Field Name:** **Pregnant Women Total % Served**

Fiscal Year: **2021**

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, the state has nine Perinatal Care Quality Improvement (PCQI) projects, with Federal Title V support for three projects and Title V match for five projects. A population estimate of births in each Title V supported region was used. Pregnant women calling Michigan 2-1-1 for services, a Federal Title V expenditure, were also included. Duplication of services may be possible.

2. **Field Name:** **Pregnant Women Denominator**

Fiscal Year: **2021**

Field Note:

Denominator from Birth Certificate Resident births, preliminary, 2021, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services

3. **Field Name:** **Infants Less Than One Year Total % Served**

Fiscal Year: **2021**

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. Newborn screening follow up is included in Form 2, line 6 expenditures. Note that 2-1-1 calls coded to infants were not included in this count due to high potential for duplication.

4. **Field Name:** **Infants Less Than One Year Denominator**

Fiscal Year: **2021**

Field Note:

Reference data for denominator is 2021 provisional live birth file, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.

5. **Field Name:** **Children 1 through 21 Years of Age Total % Served**

Fiscal Year: **2021**

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 since staff time for Title V match supported the program. The curriculum is widely used across Michigan for school-aged children. Media analytics from an advertising campaign targeting adolescent parents was used, which is part of the Federal Title V expenditures. 2-1-1 calls coded to children were included. Due to age range overlap, some duplication is possible. Increase in the percentage served from 2020 was due to a large media campaign.

6. **Field Name:** **Children with Special Health Care Needs 0 through 21 Years of Age Total % Served**

Fiscal Year: **2021**

Field Note:

CSHCS is a subset of Children 1-21. Form 5a CSHCS counts with Federal Title V funds were used for the service with the largest reach for a given population. 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.

7. **Field Name:** **Others Total % Served**

Fiscal Year: **2021**

Field Note:

In addition to Others from Form 5a, numerators were used for the programs and services with the largest reach for a given population. For Others, counts from Federal Title V expenditures include the Local Maternal Child Health (Includes population counts such as media campaign analytics, distribution of materials at a health fair/outreach events); professional participants in the Black Breastfeeding Week panel; support for community members on advisory board; professional training for Family Planning and Health Equity; cases reviewed in the FIMR process; professional training/staff development; autopsy services; and media campaign. Michigan 2-1-1 calls coded to non-pregnant women or families is included. Title V match expenditures included support of the Maternal Infant Summit. Due to the wide range of services, duplication of counts may be possible.

Data Alerts: None

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: Michigan

Annual Report Year 2021

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	103,434	70,145	17,442	6,660	400	3,454	70	322	4,941
Title V Served	103,434	70,145	17,442	6,660	400	3,454	70	322	4,941
Eligible for Title XIX	41,789	28,004	6,706	3,532	139	1,422	26	139	1,821
2. Total Infants in State	103,838	70,450	17,488	6,679	402	3,466	70	323	4,960
Title V Served	103,838	70,450	17,488	6,679	402	3,466	70	323	4,960
Eligible for Title XIX	41,946	28,123	6,724	3,541	140	1,428	26	139	1,825

Form Notes for Form 6:

Source: 2021 PROVISIONAL Live Birth File, received April 8, 2022, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.

Field Level Notes for Form 6:

1.	Field Name:	1. Total Deliveries in State
	Fiscal Year:	2021
	Column Name:	Total
	Field Note: Source: 2021 PROVISIONAL Live Birth File, received April 8, 2022, Resident births, preliminary 2021 Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services. Note: Multiple race data currently includes only American Indian multiple race which are coded in the state system using tribal information. Other multiple race information is not currently available and therefore is undercounted.	
2.	Field Name:	1. Title V Served
	Fiscal Year:	2021
	Column Name:	Total
	Field Note: As per Form 6 instructions, the "Total Deliveries" served by Title V is related to the count of pregnant women served in Form 5b. Form 5b Title V pregnant women served is 100%.	
3.	Field Name:	1. Eligible for Title XIX
	Fiscal Year:	2021
	Column Name:	Total
	Field Note: Source: 2021 PROVISIONAL Live Birth File, received April 8, 2022, Table 3: Live births by race/ancestry of mother and pay source, Michigan Residents, preliminary 2021, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.	
4.	Field Name:	2. Total Infants in State
	Fiscal Year:	2021
	Column Name:	Total
	Field Note: Source: 2021 PROVISIONAL Live Birth File, received April 8, 2022, Occurrent births, preliminary 2021, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services. Note: Multiple race data currently includes only American Indian multiple race which are coded in the state system using tribal information. Other multiple race information is not currently available and therefore is undercounted.	
5.	Field Name:	2. Title V Served
	Fiscal Year:	2021

Column Name:	Total
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Field Note:

As per Form 6 instructions, the "Total Infants" served by Title V is related to the count of infants served in Form 5b. Form 5b Title V infants served is 100%.

6.	Field Name:	2. Eligible for Title XIX
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Fiscal Year:	2021
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Column Name:	Total
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Field Note:

Source: 2021 PROVISIONAL Live Birth File, received April 8, 2022, Table 3: Live births by race/ancestry of mother and pay source, Michigan Occurrences, preliminary 2021, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: Michigan

A. State MCH Toll-Free Telephone Lines	2023 Application Year	2021 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"		5,133

B. Other Appropriate Methods	2023 Application Year	2021 Annual Report Year
1. Other Toll-Free "Hotline" Names	Family Phone Line	Family Phone Line
2. Number of Calls on Other Toll-Free "Hotlines"		9,750
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:

None

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) 614-0804
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 / 48933
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 / 48933
Telephone	(517) 241-7197
Extension	
Email	BushC9@michigan.gov

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: Michigan

Application Year 2023

No.	Priority Need
1.	Develop a proactive and responsive health system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, age 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

Form Notes for Form 9:

None

Field Level Notes for Form 9:

Field Name:

Priority Need 1

Field Note:

For FY2022, "age" was added to this priority need statement. To stay within the form's character limit capacity, "healthcare system" was changed to "health system."

Form 9 State Priorities – Needs Assessment Year – 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 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
2020	79.6 %	0.1 %	81,703	102,677
2019	79.9 %	0.1 %	84,123	105,304
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
2019	78.3	2.7	821	104,832
2018	76.2	2.7	816	107,111
2017	71.2	2.6	773	108,494
2016	76.6	2.7	844	110,190
2015	69.4	2.9	578	83,251
2014	72.6	2.6	807	111,153
2013	73.4	2.6	810	110,390
2012	77.6	2.7	854	110,113
2011	65.7	2.4	730	111,184
2010	74.2	2.6	828	111,609
2009	63.1	2.4	722	114,473
2008	62.4	2.3	736	117,923

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
2016_2020	18.7	1.9	102	546,733
2015_2019	16.7	1.7	93	555,971
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
2020	8.9 %	0.1 %	9,288	104,004
2019	8.7 %	0.1 %	9,414	107,801
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
2020	10.2 %	0.1 %	10,639	104,033
2019	10.3 %	0.1 %	11,070	107,837
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
2020	26.6 %	0.1 %	27,671	104,033
2019	26.2 %	0.1 %	28,207	107,837
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
2020/Q3-2021/Q2	2.0 %			
2019/Q4-2020/Q3	2.0 %			
2019/Q1-2019/Q4	2.0 %			
2018/Q4-2019/Q3	1.0 %			
2018/Q3-2019/Q2	1.0 %			
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
2019	6.4	0.2	693	108,208
2018	6.2	0.2	686	110,358
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
2019	6.4	0.2	688	107,886
2018	6.2	0.2	684	110,032
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
2019	4.3	0.2	464	107,886
2018	4.0	0.2	445	110,032
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
2019	2.1	0.1	224	107,886
2018	2.2	0.1	239	110,032
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
2019	266.0	15.7	287	107,886
2018	230.8	14.5	254	110,032
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 - 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
2019	109.4	10.1	118	107,886
2018	113.6	10.2	125	110,032
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 - Percent of women who drink alcohol 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 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	6.0	0.2	635	106,275
2018	6.8	0.3	738	108,119
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
2019_2020	11.2 %	1.4 %	227,418	2,030,383
2018_2019	10.6 %	1.4 %	218,787	2,055,137
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
2020	17.5	1.3	181	1,036,299
2019	18.4	1.3	192	1,043,749
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
2020	37.0	1.7	458	1,238,443
2019	30.3	1.6	380	1,254,923
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
2018_2020	8.4	0.7	162	1,931,909
2017_2019	8.0	0.6	156	1,959,646
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
2018_2020	11.4	0.8	220	1,931,909
2017_2019	12.9	0.8	253	1,959,646
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
2019_2020	21.3 %	1.5 %	455,735	2,144,486
2018_2019	20.7 %	1.6 %	447,060	2,161,379
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
2019_2020	14.8 %	2.9 %	67,434	455,735
2018_2019	17.2 %	3.0 %	76,812	447,060
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
2019_2020	2.6 % ⚡	0.8 % ⚡	48,107 ⚡	1,820,405 ⚡
2018_2019	2.9 % ⚡	0.9 % ⚡	53,351 ⚡	1,833,949 ⚡
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
2019_2020	9.7 %	1.2 %	175,649	1,816,458
2018_2019	9.2 %	1.2 %	167,152	1,816,967
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
2019_2020	60.6 %	4.7 %	167,502	276,511
2018_2019	65.0 %	4.8 %	165,018	253,918
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
2019_2020	90.6 %	1.2 %	1,942,111	2,142,491
2018_2019	89.4 %	1.4 %	1,928,648	2,158,291
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
2018	13.7 %	0.1 %	10,479	76,573
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
2019	15.3 %	1.2 %	61,855	404,273
2017	16.7 %	2.0 %	68,699	410,229
2015	14.3 %	0.9 %	59,911	419,182
2013	13.0 %	0.9 %	56,333	432,033
2011	12.1 %	0.8 %	59,594	493,753
2009	11.9 %	0.7 %	56,213	473,335
2007	12.4 %	1.0 %	60,426	488,806
2005	12.0 %	1.1 %	58,930	492,546

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
2019_2020	15.7 %	2.2 %	147,214	938,438
2018_2019	17.3 %	2.5 %	157,972	913,180
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
2019	3.2 %	0.2 %	68,740	2,139,769
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 who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	70.3 %	3.4 %	79,000	113,000
2016	70.0 %	3.5 %	80,000	114,000
2015	68.2 %	4.0 %	78,000	114,000
2014	67.5 %	3.9 %	77,000	115,000
2013	62.0 %	4.2 %	71,000	114,000
2012	59.8 %	4.9 %	68,000	114,000
2011	70.1 %	3.8 %	80,000	115,000

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
2020_2021	54.7 %	2.0 %	1,106,248	2,022,391
2019_2020	54.9 %	1.5 %	1,103,989	2,010,909
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
2020	76.9 %	2.6 %	481,916	626,327
2019	73.7 %	3.0 %	465,543	631,758
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
2020	91.9 %	1.8 %	575,366	626,327
2019	89.2 %	2.2 %	563,675	631,758
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
2020	95.7 %	1.3 %	599,189	626,327
2019	95.4 %	1.4 %	602,575	631,758
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
2020	13.5	0.2	4,190	310,009
2019	15.1	0.2	4,758	315,633
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
2020	16.1 %	1.2 %	15,799	97,859
2019	14.8 %	1.2 %	15,090	101,871
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 unable to obtain needed health care in the past year


Data Source: National Survey of Children's Health (NSCH)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019_2020	2.2 %	0.6 %	46,175	2,134,338
2018_2019	2.5 %	0.7 %	53,381	2,156,185
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	2020	2021
Annual Objective			25.8
Annual Indicator	27.3	26.5	27.4
Numerator	9,510	9,054	9,173
Denominator	34,845	34,117	33,452
Data Source	NVSS	NVSS	NVSS
Data Source Year	2018	2019	2020

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	25.6	25.4	25.2	25.0

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)					
	2017	2018	2019	2020	2021
Annual Objective	79.7	80.5	81.2	82.7	83.3
Annual Indicator	75.9	77.7	83.0	85.3	84.4
Numerator	86,976	88,168	86,380	88,053	90,193
Denominator	114,556	113,401	104,098	103,283	106,835
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2014	2015	2016	2017	2018

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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)					
	2017	2018	2019	2020	2021
Annual Objective	21.5	31.1	32.9	34.4	36.2
Annual Indicator	22.6	23.9	28.4	25.8	29.8
Numerator	25,415	25,921	28,764	25,629	30,994
Denominator	112,351	108,464	101,206	99,495	103,862
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2014	2015	2016	2017	2018

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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	2020	2021
Annual Objective			87.6	86.8	87.7
Annual Indicator	81.4	83.3	82.5	84.9	85.4
Numerator	86,585	87,247	85,511	85,912	83,784
Denominator	106,318	104,718	103,596	101,194	98,121
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2017	2018	2019	2020

State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective			87.6	86.8	87.7
Annual Indicator	81.9	83.5	82.5	84.9	
Numerator	87,760	87,247	85,511	85,912	
Denominator	107,091	104,517	103,596	101,194	
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	
Data Source Year	2016	2017	2018	2019	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	88.9	90.0	91.1	92.3

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	2020	2021
Annual Objective		35.7	45	45.2
Annual Indicator	39.2	38.9	40.6	41.5
Numerator	39,142	38,781	39,451	38,620
Denominator	99,861	99,669	97,218	92,994
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019	2020

State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective			35.7	45	45.2
Annual Indicator	74.7	34	39.2	38.9	
Numerator	77,520	34,751	39,142	38,781	
Denominator	103,790	102,182	99,861	99,669	
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	
Data Source Year	2015	2016	2017	2018	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	47.3	49.3	51.4	53.5

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	<p>Weighted numbers were used to represent the general population.</p> <p>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.</p>
2.	Field Name:	2019
	Column Name:	State Provided Data
	Field Note:	<p>Weighted numbers were used to represent the general population. In birth year 2016, Michigan was ranked 17th out of 29 total PRAMS states for this measure. In the 2017 birth year, Michigan was ranked 2nd out of 26 total PRAMS states for this measure.</p>
3.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	<p>Weighted numbers were used to represent the general population.</p>

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	2020	2021
Annual Objective		54.4	68.2	70
Annual Indicator	58.3	59.8	63.1	66.7
Numerator	58,277	59,314	61,216	62,663
Denominator	99,994	99,167	96,949	93,957
Data Source	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019	2020

State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective			54.4	68.2	70
Annual Indicator	74.6	51.8	58.3	59.8	
Numerator	78,063	52,803	58,277	59,314	
Denominator	104,629	101,994	99,994	99,167	
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	
Data Source Year	2015	2016	2017	2018	
Provisional or Final ?	Final	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	73.1	75.9	78.5	80.9

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 based on a combination of three 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).
4.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Weighted numbers were used to represent the general population

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	2020	2021
Annual Objective			26.2
Annual Indicator	29.8	28.0	28.0
Numerator	127,314	117,383	117,383
Denominator	426,596	418,810	418,810
Data Source	YRBSS	YRBSS	YRBSS
Data Source Year	2017	2019	2019
Federally Available Data			
Data Source: National Survey of Children's Health (NSCH) - Perpetration			
	2019	2020	2021
Annual Objective			26.2
Annual Indicator	20.0	16.1	12.6
Numerator	145,381	116,534	92,956
Denominator	727,587	723,002	735,046
Data Source	NSCHP	NSCHP	NSCHP
Data Source Year	2018	2018_2019	2019_2020
Federally Available Data			
Data Source: National Survey of Children's Health (NSCH) - Victimization			
	2019	2020	2021
Annual Objective			26.2
Annual Indicator	48.0	44.5	37.4
Numerator	349,295	321,323	274,732
Denominator	727,587	721,708	733,815
Data Source	NSCHV	NSCHV	NSCHV
Data Source Year	2018	2018_2019	2019_2020

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	25.4	24.7	24.0	23.3

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 to prepare for the transition to adult health care - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2017	2018	2019	2020	2021
Annual Objective		17	17.2	17.4	30.2
Annual Indicator	16.7	16.0	21.6	32.3	26.7
Numerator	32,776	34,325	48,634	69,326	54,089
Denominator	196,702	215,008	225,148	214,341	202,891
Data Source	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year	2016	2016_2017	2017_2018	2018_2019	2019_2020

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	34.1	38.1	42.3	46.7

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)					
	2017	2018	2019	2020	2021
Annual Objective	56.2	56.4	57.4	58.5	53.6
Annual Indicator	53.6	49.8	49.2	51.3	40.8
Numerator	57,883	53,356	51,874	53,228	40,909
Denominator	108,083	107,079	105,470	103,825	100,195
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2015	2017	2018	2019	2020

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	54.1	54.7	55.2	55.7

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)					
	2017	2018	2019	2020	2021
Annual Objective		77.6	78.4	88.2	79.5
Annual Indicator	76.1	77.9	77.7	76.5	76.6
Numerator	1,584,320	1,629,730	1,618,664	1,574,401	1,556,280
Denominator	2,082,991	2,092,116	2,083,849	2,058,613	2,032,403
Data Source	NSCH	NSCH	NSCH	NSCH	NSCH
Data Source Year	2016	2016_2017	2017_2018	2018_2019	2019_2020

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	80.4	81.0	81.6	82.2

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					
	2017	2018	2019	2020	2021
Annual Objective	22.1	24.6	27.1	29.6	50
Annual Indicator	25	43.4	45.8	48.1	45.3
Numerator	1,048	1,308	1,671	994	718
Denominator	4,190	3,017	3,646	2,068	1,586
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2017	2018	2019	2020	FY2021
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	52.5	55.0	57.5	60.0

Field Level Notes for Form 10 SPMs:

1.	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 $\geq 5 \mu\text{g/dL}$ 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 $\geq 5 \mu\text{g/dL}$ from 1/1/2017 to 12/31/2017.

2.	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 $\geq 5 \mu\text{g/dL}$ ($> 4.5 \mu\text{g/dL}$ – 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

3.	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 $\geq 5 \mu\text{g/dL}$ ($> 4.5 \mu\text{g/dL}$ – 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

4.	Field Name:	2020
	Column Name:	State Provided Data

Field Note:

DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for the last quarter of 2020 (October – December 2020) are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 2/1/2021. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test $\geq 5 \mu\text{g/dL}$ ($> 4.5 \mu\text{g/dL}$ – Michigan began storing test results as unrounded numbers in 2017: this number was chosen to 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 has been another significant improvement in the algorithm used by the MDHHS Data Warehouse to assign unique identifiers to individual children, which has corrected instances where children have been assigned incorrect identifiers in the past. This may contribute to the differences between the previously reported 2016 and 2017 indicators. NOTE: The annual indicator for CY 2020 already exceeded future annual objectives, so the annual objectives for 2021-2026 were adjusted.

5. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

Results reported are for initial elevated capillary blood tests conducted in FY 2021 (October 1, 2020-Sept 30, 2021) with confirmatory testing completed and reported before December 4, 2021.

DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: Data collection for the last quarter of 2021 are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 12/4/2021. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test $\geq 5 \mu\text{g/dL}$ ($> 4.5 \mu\text{g/dL}$ – Michigan began storing test results as unrounded numbers in 2017: this number was chosen to maintain consistency in identifying elevated levels with past years when blood lead test results were rounded to the nearest whole number) from 10/1/2020 to 09/30/2021 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 10/01/2020 to 09/30/2021.

NOTE: Beginning in FY21, data is reported to align with the grant reporting cycle. Previous years' data are calculated for calendar year and therefore FY21 data can not be compared to prior years. Since this is the start of a new reporting period, the decision was made by CLPPP to align with the FY grant reporting period to better reflect the activities of the grant. All future reports will be reported using FY data. The target of 50% for FY21 remains in place and subsequent targets remain unchanged. For past data by FY, there has been a steady increase of the percent of EBLL capillary results that have had a venous confirmatory within 30 days, FY16: 27.8%, FY17: 34.7%, FY18: 37.9%, FY19: 39.1%, FY20: 41.5%.

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					
	2017	2018	2019	2020	2021
Annual Objective	76	77	75	76	77
Annual Indicator	75	74.1	74.1	70.7	69.4
Numerator	125,853	123,596	121,707	119,786	113,259
Denominator	167,842	166,746	164,167	169,474	163,218
Data Source	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry	Michigan Care Improvement Registry
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	78.0	79.0	80.0	80.0

Field Level Notes for Form 10 SPMs:

1.	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.
2.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	The immunization rates are dropping for children 19-36 months over the past year.
3.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	The COVID-19 pandemic is impacting the immunization rates in children.
4.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	The COVID-19 pandemic has negatively impacted childhood immunization rates.

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	2020	2021
Annual Objective			44	54	56
Annual Indicator	39.3	41.9	52.4	44.1	42.8
Numerator	295,138	313,144	334,188	331,995	326,193
Denominator	750,281	746,563	637,751	752,019	762,977
Data Source	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)	Michigan Care Improvement Registry (MCIR)
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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.
4.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	The COVID-19 pandemic has negatively impacted vaccination rates among pediatric and adolescent patients.

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					
	2017	2018	2019	2020	2021
Annual Objective	89.9	90.9	91.9	92.9	89.5
Annual Indicator	89.1	88.9	88	88	88.6
Numerator	20,556,206	14,678,590	10,365,782	7,297,774	4,977,264
Denominator	23,074,740	16,507,392	11,783,520	8,289,380	5,616,000
Data Source	CAHPS	CAHPS	CAHPS	CAHPS	CAHPS
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	90.0	90.5	91.0	91.5

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	<p>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).</p>
2.	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)

3. **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)

4. **Field Name:** 2020

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, 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" (1,848) B: Number of respondents who answered this question (2,255) "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" (865) D: Number of respondents who answered this question (919)

5. **Field Name:** 2021

Column Name: State Provided Data

Field Note:

To determine the percent of CSHCN enrolled in CSHCS that receive timely medical care and treatment without difficulty, CSHCS considered responses to two CAHPS questions. In 2021, the first question was number 4, "In the last 6 months, how often did you get appointments for your child with a specialist as soon as he or she needed?" and the second question was number 8, "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 following formula was used to calculate the average of independent probabilities: $((A*2D) + (C*2B)) / (2B*2D)$. For question 4, A: Number who reported "usually" or "always" (1,716) B: Number of respondents who answered this question (2,000). For question 8, A: Number who reported "usually" or "always" (642) B: Number of respondents who answered this question (702). For 2021, the result is 88.6%.

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

Measure Status:		Active		
State Provided Data				
	2019	2020	2021	
Annual Objective			59.8	
Annual Indicator	57.2	59.8	59.8	
Numerator	59,915	61,665	59,813	
Denominator	104,673	103,197	100,096	
Data Source	PRAMS	PRAMS	PRAMS	
Data Source Year	2018	2019	2020	
Provisional or Final ?	Final	Final	Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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
2.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	Weighted numbers were used to represent general population.
3.	Field Name:	2021
	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		
State Provided Data				
	2019	2020	2021	
Annual Objective			Yes	
Annual Indicator			Yes	
Numerator				
Denominator				
Data Source			State Title V and MCH Programs	
Data Source Year			FY2021	
Provisional or Final ?			Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	Yes	Yes	Yes	Yes

Field Level Notes for Form 10 SPMs:

None

**Form 10
Evidence-Based or –Informed Strategy Measures (ESMs)**

State: Michigan

ESM 2.1 - Number of birthing hospitals participating in Michigan AIM

Measure Status:		Active	
State Provided Data			
	2019	2020	2021
Annual Objective			72
Annual Indicator		50	62
Numerator			
Denominator			
Data Source		Michigan AIM/Michigan Hospital Association	Michigan AIM/Michigan Hospital Association
Data Source Year		2019	2020
Provisional or Final ?		Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	74.0	76.0	78.0	80.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	For the 2020 reporting year, 2019 designation awards were used as the definition of "participating in MI AIM."
2.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	MI AIM designation awards are used as the data source for MI AIM participation. 2020 designation data was used for FY21, as 2021 designations were not available at the time of reporting.

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

Measure Status:				Active	
State Provided Data					
	2017	2018	2019	2020	2021
Annual Objective	17	20	23	26	29
Annual Indicator	14.5	19.5	18.8	18.8	16.3
Numerator	12	16	15	15	13
Denominator	83	82	80	80	80
Data Source	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	18.0	19.0	20.0	21.0

Field Level Notes for Form 10 ESMs:

1.	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.
2.	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)
3.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	One birthing unit in Michigan closed in November 2020, bringing the total number of birthing hospitals from 80 to 79. This will not affect FY 2020 data but will need to be noted for FY 2021. Annual objectives for FY2022-2026 were updated due to the closing of a birthing hospital and the impact of the COVID-19 pandemic.

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	2020	2021
Annual Objective			85	84	83
Annual Indicator			83	83	78
Numerator					
Denominator					
Data Source			Maternal Infant Health Program (MIHP) staff	Maternal Infant Health Program (MIHP) staff	Maternal Infant Health Program (MIHP) staff
Data Source Year			2019	2020	2021
Provisional or Final ?			Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	83.0	83.0	83.0	83.0

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:	State Provided Data
	Field Note:	There were 83 MIHP Agencies in FY 2020. Staff at all agencies have been trained.
3.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	There were 78 MIHP agencies in FY 2021. Staff at all agencies have been trained.

ESM 5.2 - Increase the number of agencies that receive technical assistance and support with implementing or revising/updating a safe sleep policy/protocol

Measure Status:		Active		
State Provided Data				
	2019	2020	2021	
Annual Objective			10	
Annual Indicator			1	
Numerator				
Denominator				
Data Source			Infant Safe Sleep Program	
Data Source Year			2021	
Provisional or Final ?			Final	

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

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2021
	Column Name:	State Provided Data

Field Note:

The original ESM active in 2021 was "Number of agencies that have implemented or revised/updated a safe sleep policy/protocol." In 2021, eight programs volunteered to participate in this project. Due to a variety of constraints (staff turnover, COVID-19 pandemic) only one program was able to implement a policy. This ESM was updated in 2022 to focus on technical assistance to agencies.

ESM 5.3 - Increase the number of hospitals that receive technical assistance and support with implementing or revising/updating a safe sleep policy/protocol

Measure Status:		Active		
State Provided Data				
	2019	2020	2021	
Annual Objective			2	
Annual Indicator			2	
Numerator				
Denominator				
Data Source			Infant Safe Sleep Program	
Data Source Year			FY2021	
Provisional or Final ?			Final	

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

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2021
	Column Name:	State Provided Data

Field Note:

The original ESM active in 2021 was "Number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU." Two hospitals participated in this project. Both had an existing safe sleep policy. One did not make any revisions and the other plans to finalize updates next fiscal year. This ESM was updated in 2022 to focus on technical assistance to hospitals.

ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity

Measure Status:		Active		
State Provided Data				
	2019	2020	2021	
Annual Objective			5	
Annual Indicator			5	
Numerator				
Denominator				
Data Source			Classroom Implementation Logs	
Data Source Year			2020-2021	
Provisional or Final ?			Final	

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	11.0	17.0	23.0	29.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2021
	Column Name:	State Provided Data

Field Note:

Data reported over the 2020-2021 school year. Six schools were recruited, but one school was unable to continue with the Michigan Model for Health-Social and Emotional Health module implementation due to COVID-19.

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	2020	2021
Annual Objective	40	43	46	49	49.2
Annual Indicator	52.5	49.9	46.7	46.5	45.3
Numerator	1,705	1,725	1,787	1,995	1,923
Denominator	3,246	3,459	3,828	4,289	4,245
Data Source	CSHCS database, Medicaid Claims, UM Provider Datab	CSHCS database, Medicaid Claims, UM Provider Datab	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	2019	2019
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	49.4	49.6	49.8	50.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	<p>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.</p> <p>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.</p>

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.

4. **Field Name:** 2020

Column Name: State Provided Data

Field Note:

ESM includes clients ages 18, 19 and 20. Clients age out on their 21st birthday. In FY 2019, 46.5% 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. In FY2021, due to consistent performance near 46.0%, CSHCS adjusted targets for FY2021 to FY2026 to be more realistic with performance and to adjust goals to conform to changing practice standards regarding age of transfer to an adult provider.

5. **Field Name:** 2021

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. The ESM includes clients ages 18, 19 and 20. Clients age out on their 21st birthday. In FY 2020, 45.3% 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.

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	2020	2021
Annual Objective			390	410	430
Annual Indicator	636	648	401	423	439
Numerator					
Denominator					
Data Source	FY2017 MDHHS Tracking Database	FY2018 MDHHS Tracking Database	FY2019 MDHHS Tracking Database	FY2020 MDHHS Tracking Database	FY2021 MDHHS Tracking Database
Data Source Year	FY2017	FY2018	FY2019	FY2020	FY2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	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.
3.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	FY 2020 slightly exceeded the annual target for provider education due to the addition of educational activities across the state. Due to COVID-19, many educational events and conferences were cancelled or held virtually with lesser attendance. In addition, preventative dental services ceased for several months due to the pandemic and much education shifted to COVID-19 related provider education. It was challenging to keep provider education counts high regarding perinatal and infant oral health.
4.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	FY 2021 slightly exceeded the annual target for provider education due to the addition of educational activities across the state. COVID-19 continued to cause challenges to the OHP, including education. The OHP worked diligently to offer virtual educational opportunities and meet the changing needs of the health professional community and seek out new partners to promote perinatal and infant oral health.

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		
State Provided Data				
	2019	2020	2021	
Annual Objective			40	
Annual Indicator			21.2	
Numerator			8,466	
Denominator			39,940	
Data Source			Medicaid Data 2020	
Data Source Year			FY2020	
Provisional or Final ?			Provisional	

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

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2021
	Column Name:	State Provided Data

Field Note:

Data have a one-year lag time for reporting. COVID-19 was a barrier to the receipt of dental care during pregnancy for women on Medicaid in 2020.

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					
	2017	2018	2019	2020	2021
Annual Objective	5,927	6,127	6,327	6,527	6,727
Annual Indicator	6,677	6,964	6,897	6,168	3,639
Numerator					
Denominator					
Data Source	SEAL MI 2017 All Grantees Data Report	SEAL MI 2018 All Grantees Data Report	SEAL MI 2019 All Grantees Data	SEAL MI 2020 All Grantees Data Report	SEAL MI 2021 All Grantees Data Report
Data Source Year	2017	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives				
	2022	2023	2024	2025
Annual Objective	6,927.0	6,927.0	7,127.0	7,327.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Goal was achieved, this is likely due to the additional funding under Title V.
2.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Goal was exceeded, likely due to funding opportunities that supported program expansion.
3.	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.
4.	Field Name:	2020
	Column Name:	State Provided Data
	Field Note:	The original 2020 annual objective (which was set before the COVID-19 pandemic) was not achieved due to challenges resulting from the COVID-19 pandemic. As a response to the COVID-19 pandemic, schools and preventive dentistry were closed under Executive Order No. 2020-17 between March 21, 2020 and May 29, 2020. Thus, SEAL! Michigan providers were unable to serve students via school-based care for several months as the Executive Order expanded into summer vacation, and various school closures extended into the fall.
5.	Field Name:	2021
	Column Name:	State Provided Data
	Field Note:	The annual objective was not reached due to the COVID-19 pandemic.

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

Measure Status:	Active									
Goal:	To reduce the number of young children in Michigan with an unconfirmed elevated blood lead level									
Definition:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <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> </table>		Unit Type:	Percentage	Unit Number:	100	Numerator:	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	Denominator:	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
Unit Type:	Percentage									
Unit Number:	100									
Numerator:	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									
Denominator:	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									
Data Sources and Data Issues:	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).									
Significance:	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.									

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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>Number of 19-36 month old children who have a completed 4313314 series.</td> </tr> <tr> <td>Denominator:</td> <td>Population of 19-36 month old children</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	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								
Numerator:	Number of 19-36 month old children who have a completed 4313314 series.								
Denominator:	Population of 19-36 month old children								
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:	<p>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.</p> <p>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.</p>								

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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>Number of 13 to 18 year old adolescents in the MCIR who have a completed the HPV 3 dose series</td> </tr> <tr> <td>Denominator:</td> <td>Population of 13 to 18 year old adolescents in MCIR</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	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								
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								
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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>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</td> </tr> <tr> <td>Denominator:</td> <td>Number of questions contributing to the numerator</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	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							
	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								
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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>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.</td> </tr> <tr> <td>Denominator:</td> <td>All Michigan mothers of live born infants</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	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								
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								
Data Sources and Data Issues:	<p>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.</p> <p>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?"</p> <p>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.</p>								
Significance:	<p>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.</p> <p>American College of Obstetricians and Gynecologists. Prepregnancy counseling. Committee Opinion No. 762. <i>Obstet Gynecol</i> 2019; 133(1): e78-89. https://www.acog.org/Committee-Opinions/no.762</p> <p>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. <i>MMWR Recomm Rep</i> 2014;63 (No. RR-4): 1-29. DOI: http://dx.doi.org/10.15585/mmwr.rr6304a1</p>								

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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Text</td> </tr> <tr> <td>Unit Number:</td> <td>Yes/No</td> </tr> <tr> <td>Numerator:</td> <td>N/A</td> </tr> <tr> <td>Denominator:</td> <td></td> </tr> </table>	Unit Type:	Text	Unit Number:	Yes/No	Numerator:	N/A	Denominator:	
Unit Type:	Text								
Unit Number:	Yes/No								
Numerator:	N/A								
Denominator:									
Data Sources and Data Issues:	State Title V and MCH Programs								
Significance:	<p>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.</p>								

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:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Unit Type:</td> <td>Count</td> </tr> <tr> <td>Unit Number:</td> <td>80</td> </tr> <tr> <td>Numerator:</td> <td>Number of birthing hospitals participating in Michigan AIM</td> </tr> <tr> <td>Denominator:</td> <td></td> </tr> </table>		Unit Type:	Count	Unit Number:	80	Numerator:	Number of birthing hospitals participating in Michigan AIM	Denominator:	
Unit Type:	Count									
Unit Number:	80									
Numerator:	Number of birthing hospitals participating in Michigan AIM									
Denominator:										
Data Sources and Data Issues:	Michigan AIM									
Significance:	<p>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.</p> <p>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.</p>									

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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>Number of Michigan birthing hospitals with Baby-Friendly designation</td> </tr> <tr> <td>Denominator:</td> <td>Number of Michigan birthing hospitals</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	Numerator:	Number of Michigan birthing hospitals with Baby-Friendly designation	Denominator:	Number of Michigan birthing hospitals
Unit Type:	Percentage								
Unit Number:	100								
Numerator:	Number of Michigan birthing hospitals with Baby-Friendly designation								
Denominator:	Number of Michigan birthing hospitals								
Data Sources and Data Issues:	Baby-Friendly USA, Inc. (BFUSA)								
Significance:	<p>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.</p>								

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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Count</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>N/A - this is a count</td> </tr> <tr> <td>Denominator:</td> <td></td> </tr> </table>	Unit Type:	Count	Unit Number:	100	Numerator:	N/A - this is a count	Denominator:	
Unit Type:	Count								
Unit Number:	100								
Numerator:	N/A - this is a count								
Denominator:									
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 receive technical assistance and support with implementing or revising/updating 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:	Increasing the number of agencies that have implemented or revised/updated a safe sleep policy/protocol will help ensure staff are knowledgeable about safe sleep guidelines and how to support parents. It will also ensure parents receive safe sleep me								
Definition:	<table border="1"> <tr> <td>Unit Type:</td> <td>Count</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>N/A – this is a count</td> </tr> <tr> <td>Denominator:</td> <td></td> </tr> </table>	Unit Type:	Count	Unit Number:	100	Numerator:	N/A – this is a count	Denominator:	
Unit Type:	Count								
Unit Number:	100								
Numerator:	N/A – this is a count								
Denominator:									
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 received technical assistance and support with implementing or revising/updating a 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 receive technical assistance and support with implementing or revising/updating 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:	Increasing the number of birthing hospitals that have implemented or revised/updated a safe sleep policy/protocol will help ensure parents receive safe sleep messaging and that infant safe sleep is modeled by hospital staff, thereby reducing the numb								
Definition:	<table border="1"> <tr> <td>Unit Type:</td> <td>Count</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>N/A – this is a count</td> </tr> <tr> <td>Denominator:</td> <td></td> </tr> </table>	Unit Type:	Count	Unit Number:	100	Numerator:	N/A – this is a count	Denominator:	
Unit Type:	Count								
Unit Number:	100								
Numerator:	N/A – this is a count								
Denominator:									
Data Sources and Data Issues:	Data Source will be the Infant Safe Sleep Program. The Infant Safe Sleep Program will track all hospitals that received technical assistance and support with implementing or revising/updating their safe sleep policy/protocol.								
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).								

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

Measure Status:	Active								
Goal:	Annually increase by six the number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity								
Definition:	<table border="1"> <tr> <td>Unit Type:</td> <td>Count</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <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></td> </tr> </table>	Unit Type:	Count	Unit Number:	100	Numerator:	The number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity	Denominator:	
Unit Type:	Count								
Unit Number:	100								
Numerator:	The number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity								
Denominator:									
Data Sources and Data Issues:	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.								
Significance:	<p>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.</p> <p>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.</p>								

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 to prepare for the transition 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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>The number of CSHCS enrollees, aged 18 to 21, that have transferred care from a pediatric to an adult provider.</td> </tr> <tr> <td>Denominator:</td> <td>The total number of CSHCS enrollees, aged 18 to 21, that have received care from a pediatric provider.</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	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								
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.								
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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Count</td> </tr> <tr> <td>Unit Number:</td> <td>1,000</td> </tr> <tr> <td>Numerator:</td> <td>N/A - This is a count</td> </tr> <tr> <td>Denominator:</td> <td></td> </tr> </table>	Unit Type:	Count	Unit Number:	1,000	Numerator:	N/A - This is a count	Denominator:	
Unit Type:	Count								
Unit Number:	1,000								
Numerator:	N/A - This is a count								
Denominator:									
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								
Goal:	To increase the percentage of women who utilize the perinatal adult dental benefit for pregnant women within the state of Michigan								
Definition:	<table border="1"> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> <tr> <td>Numerator:</td> <td>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)</td> </tr> <tr> <td>Denominator:</td> <td>Number of pregnant women on Medicaid during the perinatal period</td> </tr> </table>	Unit Type:	Percentage	Unit Number:	100	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								
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								
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:	<table border="1"> <tr> <td>Unit Type:</td> <td>Count</td> </tr> <tr> <td>Unit Number:</td> <td>10,000</td> </tr> <tr> <td>Numerator:</td> <td>N/A - This is a count measure</td> </tr> <tr> <td>Denominator:</td> <td></td> </tr> </table>	Unit Type:	Count	Unit Number:	10,000	Numerator:	N/A - This is a count measure	Denominator:	
Unit Type:	Count								
Unit Number:	10,000								
Numerator:	N/A - This is a count measure								
Denominator:									
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 11
Other State Data
State: Michigan**

The Form 11 data are available for review via the link below.

[Form 11 Data](#)

**Form 12
MCH Data Access and Linkages**

State: Michigan

Annual Report Year 2021

Data Sources	Access				Linkages	
	(A) State Title V Program has Consistent Annual Access to Data Source	(B) State Title V Program has Access to an Electronic Data Source	(C) Describe Periodicity	(D) Indicate Lag Length for Most Timely Data Available in Number of Months	(E) Data Source is Linked to Vital Records Birth	(F) Data Source is Linked to Another Data Source
1) Vital Records Birth	Yes	Yes	Quarterly	12		
2) Vital Records Death	Yes	Yes	Quarterly	12	Yes	
3) Medicaid	Yes	Yes	More often than monthly	1	Yes	
4) WIC	Yes	No	Quarterly	12	No	
5) Newborn Bloodspot Screening	Yes	Yes	More often than monthly	0	Yes	
6) Newborn Hearing Screening	Yes	Yes	More often than monthly	0	Yes	
7) Hospital Discharge	Yes	Yes	Quarterly	18	Yes	
8) PRAMS or PRAMS-like	Yes	Yes	Annually	18	Yes	

Form Notes for Form 12:

None

Field Level Notes for Form 12:

None