Maternal and Child Health Services Title V Block Grant

Michigan

FY 2022 Application/ FY 2020 Annual Report

Created on 5/27/2021 at 1:05 PM

Table of Contents

I. General Requirements

I.A. Letter of Transmittal

A Letter of Transmittal will be uploaded prior to submission to HRSA.

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: January31, 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 a wide array of MCH programs and policies, including oversight of program-specific work as well as statewide multisystem collaboratives, as discussed throughout this application. Since March 2020, Michigan's MCH programs and Title V leadership have been involved in responding 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 and the Needs Assessment Update.

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 Title V state priorities are:

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

As 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 related to 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 mothers (from 29.6% in 2012 to 31.1% in 2018, down to 29.8% in 2019) while the percentage of low-risk cesarean deliveries to White mothers has decreased (from 29.5% to 27.7%, 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 Alliance for Innovation on Maternal Health bundle and providing bias and equity training for providers.

The second goal in this domain is to increase the percent of women with a preventive dental visit during pregnancy (NPM 13.1). In 2018, only 49.3% of Michigan women had their teeth cleaned during their most recent pregnancy, a decline from a peak of 53.6% in 2015 (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 pregnant women; education via the WIC oral health module; and exploring alternative models of care for service delivery.

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

Perinatal/Infant Health

The first perinatal/infant health goal is to increase the percent of infants who are ever breastfed and the percent of infants breastfed exclusively through six months (NPM 4). While breastfeeding rates have increased in Michigan, exclusivity rates still fell short of the Healthy People 2020 goal (25.5% of infants exclusively breastfed through six months). In Michigan, 87.7% of infants are ever breastfed and 23.9% are exclusively breastfed through six months (MDHHS, Division of Vital Records & Statistics; National Immunization Survey 2017 Breastfeeding Report Card). According to PRAMS, initiation rates among Black mothers in Michigan continue to be 13% lower than White mothers. To impact breastfeeding rates, MDHHS will implement strategies to increase the number of home visitors trained on breastfeeding support and increase the number of Baby-Friendly© hospitals. To address disparities, Michigan will identify ways to support non-Hispanic Black women who initiate breastfeeding, including promotion of culturally responsive messages and racially diverse breastfeeding professionals.

The second goal is to increase the percent of infants placed to sleep in safe sleep environments (i.e., infants placed to sleep on their backs, in cribs without objects) (NPM 5). Strategies will address ways to increase safe sleep behaviors by all families, while also addressing the disparity for non-Hispanic Black families. In 2018, 151 infants in Michigan died of sleep-related causes (Centers for Disease Control and Prevention Sudden Unexpected Infant Death Case Registry, 2010 to 2018, Michigan Public Health Institute, 2020). Sleep-related infant deaths are a leading type of death for infants aged 1-12 months old (2016-2018 Michigan Resident Infant Death File, Division for Vital Records & Health Statistics, MDHHS). Local Child Death Review Teams have determined that 89% of sleep-related infant deaths in Michigan could have been prevented (CDC SUID Case Registry – 2010 to 2018, MPHI, 2020). When looking at data between 2016 and 2019, state level improvements in infants reported as sleeping with no soft objects and in a separate approved sleep surface have occurred (Michigan PRAMS). MDHHS strategies to impact safe sleep 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). In 2012, fewer children had preventive dental visits as compared to 2007 (National Survey of Children's Health (NSCH), 2011/2012). A key objective in Michigan's Title V plan is to increase the number of students who receive preventive dental screenings in a school-based dental sealant program. MDHHS will administer the SEAL! Michigan program and promote the program through school health professionals. To address disparities in access to care, MDHHS will also work with Detroit Public Schools Community District to increase dental screenings.

A second goal is to increase the percent of children less than 72 months of age who receive a venous lead confirmation testing within 30 days of an initial elevated capillary test (SPM 1). Between 1998 and 2020 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 48.1% in 2020. To continue to make progress, Michigan will screen for lead exposure risk factors in children; conduct provider education; and focus on blood lead testing for Medicaid-enrolled children.

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

Adolescent Health

The first goal in this domain is to decrease the percent of adolescents who are bullied or who bully others (NPM 9). 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 guidance on state laws and bullying prevention best practices; and identify anti-bullying campaigns for CSHCN.

A second goal is to increase the percent of adolescents who have received a completed HPV vaccine series (SPM 3). As of December 2018, 73.5% of adolescents ages 13 through 17 years were current with immunizations, but that percentage dropped to 39.1% when HPV series completion was included (Michigan Care Improvement Registry). However, Michigan has improved the percentage of adolescents receiving at least one dose of the HPV vaccine almost every year since 2012 (NIS-Teen). In 2019, NIS-Teen data showed 59.4% of Michigan adolescents were up to date with the HPV series. 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 generate letters to parents of adolescents who have initiated but not completed the HPV series; partner with the American Cancer Society to promote HPV vaccination as cancer prevention; and continue to 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, 32.3% of CYSHCN reported they received services necessary to transition to adult health care, which is higher than the US at 22.9% (NSCH 2018-2019). To improve transitions to adult care, key efforts will include increasing the percentage of CYSHCN receiving family-centered transition services through improved access and awareness; training health care professionals on transition; and increasing the number of partner organizations using Got Transition assessments.

Another goal is to increase the percent of CSHCN enrolled in CSHCS who receive timely medical care and treatment without difficulty (SPM 4). CSHCN often require and use more health care services than other children. Health care costs can pose significant burdens for families, even with private insurance. CSHCS helps to cover the costs of medical care and treatment. In FY 2020, 50,965 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 2019, nearly 23% 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 16.3% of mothers in 2018 (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 57.7% of CSHCN with a mental or behavioral health diagnosis received appropriate treatment in 2017 (NSCH). The Title V program will support the efforts of local health departments in addressing mental or behavioral needs; support perinatal screenings and telehealth among RPQCs; and increase collaboration between Title V and behavioral health partners.

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

The Title V block grant provides a critical source of funding for MCH priority needs in Michigan, in conjunction with state MCH funds and other federal funds. 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 as well as 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 access to 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, 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 ongoing, noncompetitive grants. LHDs serve as Michigan's local public health "arm" through community-based services and systems. Title V funding 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.

III.A.3. MCH Success Story

The SEAL! Michigan program is an evidence-based, school-based dental sealant program that increases access to oral health by providing preventive services and oral health education to school-age children. It is administratively housed in the Division of Child and Adolescent Health and is supported by Title V funding and other funding sources. The SEAL! Michigan program is offered to schools with more than 50% of students enrolled in the Free and Reduced Lunch Program. Once a school meets the qualifications, the program is available to students with a positive consent form enrolled in the 1st, 2nd, 6th, and 7th grades in lower Michigan, with the exception of Wayne County. All grades in Wayne County and the Upper Peninsula are served. The program includes an oral screening, placement of dental sealants on all erupted molar teeth, fluoride application, oral health education and referral for dental care.

Over the last three years (Fiscal Years 2018-2020), the SEAL! Michigan program provided 20,064 students with 19,274 fluoride varnish applications and 46,651 dental sealants. During the 2019-20 school year, the SEAL! Michigan program was comprised of nine partner sites with one additional site in a planning year to prepare to provide services in FY 2021. Four additional partners provide dental sealants in school settings through the SEAL! Of Approval program. In response to the COVID-19 pandemic, schools and preventive dentistry were closed due to an executive order from March 21, 2020 to May 29, 2020. Thus, SEAL! Michigan programs were unable to serve students via school-based care for several months.

While the pandemic may have disrupted school-based care, the SEAL! Michigan program worked hard to preserve dental health resources for students and families. Oral health packages were created for inclusion in free and reduced lunch distributions. The packages contained toothbrushes, toothpaste, and a message to remind families of proper daily oral hygiene habits that included not sharing toothbrushes and discarding toothbrushes after illness. This effort resulted in the distribution of 2,375 health packages with 9,200 toothbrushes to more than 25 school districts throughout Michigan.

To date, several oral health programs have been able to return to schools to deliver oral health services. Some programs unable to return to schools have provided services in an alternative delivery setting. For example, programs with a dental bus have set up in parking lots of local health departments (LHDs) or have provided dental sealants in the LHD dental clinic or Federally Qualified Health Center. To further adapt to the COVID-19 pandemic, all programs that can work in some capacity have been allowed to serve patients ages 1-21 and to treat both primary and permanent teeth, not just students in certain grades with only permanent teeth.

In 2020, the SEAL! Michigan program also signed a Memorandum of Understanding with the Detroit Public Schools Community District (DPSCD) to establish an oral health coordinator position that will promote the SEAL! Michigan program within the mobile dental programs assigned to DPSCD schools. This is a new position that will promote preventive dental services and education to over 40,000 DPSCD students.

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. Nearly 10 million people lived in the state in 2020. Michigan has seen a decrease in birth rates over the past 20 years, and according to the U.S. Census Bureau the state saw a 0.18% decline in population from 2019. Most of Michigan's population resides in the southern half of the Lower Peninsula, with approximately half of the population residing in Southeast Michigan. The state's largest cities are Detroit, Grand Rapids and Warren. Over 1.7 million people live in rural areas. The median age of the population is 39.7 years of age. Out of the total population, approximately 24% are ages 0-17 and 76% are ages 18 and over. Michigan's population is 78.4% Caucasian, 13.7% Black or African American, 3.1% Asian and Pacific Islander, 2.9% two or more races, 1.4% other races, and 0.5% Native American. Out of the total population, 5% identify as Hispanic or Latino.

Over the nine years leading up to 2020, Michigan's economy saw improvements. However, the COVID-19 pandemic had immediate impacts on Michigan's economy and the long-term impacts are unclear. While the seasonally adjusted unemployment rate decreased from 14.9% in June 2009 to 4.0% in January 2019, it varied throughout 2020 and was 5.7% in January 2021. Michigan's annual 2020 jobless rate was 9.7%, which is below the 13.7% jobless rate during the recession in 2008.

Prior to COVID-19, the state faced challenges that affect the maternal and child health (MCH) population. According to the 2020 ALICE (Asset Limited, Income Constrained, Employed) report, 43% of households in Michigan struggled to afford the basic needs of housing, childcare, food, technology, health care and transportation. In Michigan, 61% of jobs were low wage jobs, paying less than $20 per hour; two-thirds of those jobs paid less than $15 per hour. In addition to households below the federal poverty limit, this equates to more than 1.66 million households struggling to meet basic needs. According to the 2020 Kids Count, Michigan ranks 22nd in health, 30th in both economic and family wellbeing, and 40th 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, food and cash assistance, health care and childcare—are critical resources for Michigan families.

Roles and Priorities of the State Health Agency

The Title V program is administered by the Division of Maternal and Infant Health (DMIH) which is housed in the Bureau of Health and Wellness (BHW) within the Public Health Administration. DMIH includes Family Planning and reproductive health, the Maternal Infant Health Program, infant safe sleep, breastfeeding, and Early Hearing Detection and Intervention. In addition to DMIH, the BHW includes the Division of Child and Adolescent Health (DCAH); Women, Infants and Children (WIC) Division; Division of Chronic Disease and Injury Control; and Local Health Services.

For Michigan's Title V program, the DMIH works in partnership with the Children's Special Health Care Services (CSHCS) Division and DCAH. CSHCS includes the Family Center for CYSHCN, CSHCS customer support, policy and program development, and quality and program services. DCAH oversees Title V funding to Michigan's 45 local health departments for local MCH work. These Title V areas work collaboratively with an array of programs within the Michigan Department of Health and Human Services (MDHHS) which oversees programs including but not limited to public health; Medicaid; environmental health; emergency preparedness and response; communicable and chronic disease; food and cash assistance; migrant and refugee services; child support; juvenile justice; child and adult 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 six priorities:

- Improve maternal-infant health and reduce outcome disparities.
- Reduce lead exposure for children.
- Reduce maltreatment and improve permanency in foster care.
- Expand and simplify safety net access.
- Reduce opioid and drug-related deaths.
- Ensure administrations are managing to outcomes and investing in evidence-based solutions.

Michigan’s Title V program aligns with several of these priorities. 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. In September 2020, a Year One Update was released to highlight stakeholder success, acknowledge the commitment of partners, and update indicator data. Annual updates will be released to highlight progress made on achieving the collective vision of “Zero preventable deaths, Zero health disparities.”

As the MIHEIP was developed collaboratively by MDHHS and stakeholders, efforts to implement the MIHEIP are also informed by input and feedback 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; implementation of quality improvement efforts within RPQCs; and external implementation through community partners and maternal infant health providers. Further alignment and action occur through Maternal Infant Health (MIH) Action Committees. The Action Committees are aligned with MIHEIP priorities and aim to impact system change through policy and practice change. They are co-chaired by content experts within the respective priority(ies) of focus.

Improving maternal and infant health outcomes is a priority of Governor Whitmer. In early 2020, Governor 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 budget allocated funds to provide continuous Medicaid coverage to beneficiaries for 12 months postpartum, increase access for families to evidence-based home visiting programs, and provide increased access to behavioral health care. According to the Michigan League for Public Policy, initial proposals for the FY 2022 budget suggest similar allocations, with an increased emphasis on health equity.

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 health, development, and early learning investments for prenatal to age 8. MDHHS collaborates with OGS and other partners to support the development of early childhood systems that meet the needs of children and families.

One example of Michigan’s cross-systems early childhood work is the Great Start Operations Team (GSOT). The GSOT convenes state agencies and partners to provide strategic direction for early childhood services integration and coordination for programs that serve Michigan's families and young children. Several MDHHS program areas, including Title V, serve on the GSOT. The GSOT work is grounded in Michigan’s four key early childhood outcomes, which include “children born healthy” and “children healthy, thriving, and developmentally on track from birth to third grade.” In 2020, the GSOT served as the state systems hub to inform components of the Preschool Development Grant (PDG), reviewing priorities and activities developed during the initial grant in 2019 and guiding the next stage of planning. The GSOT also works with the BUILD Initiative to identify strategies to strengthen Michigan’s early

childhood systems. The BUILD Initiative partners with the GSOT to provide guidance, training and capacity building around early childhood systems building. The BUILD Initiative engages the GSOT in efforts to increase quality, alignment, and efficiency among systems serving children and their families.

Another example is the Home Visiting Advisory launched in 2019. The Advisory is charged with building an integrated home visiting system for Michigan's families. Michigan's evidence-based home visiting system currently 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. In 2020, the Advisory elected tri-chairs, designing the structure to include a state partner, a local program leader, and a parent leader.

Addressing and advancing equity is a priority both within the State of Michigan and MDHHS. At the state level, several new initiatives have been implemented to address implicit bias, racism, and racial disparities:

- Governor Whitmer issued an Executive Directive in July 2020 requiring implicit bias training for 26 licensed health professional classifications to address racial disparities. The Department of Licensing & Regulatory Affairs (LARA) has gathered information on best practices and implicit bias trainings to provide recommendations to the Michigan Legislature.
- In August 2020, Governor Whitmer issued an executive directive to all State Department Directors recognizing racism as a public health crisis. The directive establishes guidelines for state departments and their employees on data and analysis; policy and planning; engagement, communication, and advocacy; and training. State employees were required to complete an implicit bias training by the end of 2020. Contractual staff must complete the training by the end of 2021.
- In August 2020, the Governor issued an executive order to establish a Black Leadership Advisory Council to act in an advisory capacity to the governor to develop, review, and recommend policies and actions designed to eradicate and prevent discrimination and racial inequity in health care, housing, education, employment, economic opportunity, public accommodations, and procurement.

State-level initiatives to specifically address racial disparities witnessed during the COVID-19 pandemic are discussed later in this section.

At the departmental level, MDHHS is working to assess and change policies and programs to address discrimination and disparities in health outcomes. In 2020, MDHHS created the Race, Equity, Diversity, and Inclusion (REDI) Office to address racial, health, social and wealth disparities. The MDHHS Diversity, Equity and Inclusion Plan details the Department's "commitment to eliminating systematic inequities and promoting diversity, equity and inclusion." The MDHHS Office of Equity and Minority Health (OEMH) delivers an annual report to the state legislature on the Department's progress and health disparities among key populations within the state. The OEMH also provides training to the MDHHS workforce on unconscious bias, systemic racism, and community engagement. Other MDHHS equity activities include the following:

- A Diversity, Equity, and Inclusion (DEI) Council was created to promote and foster a culture that values diversity, equity, and inclusion throughout MDHHS and the diverse communities it serves. DEI Council activities include collaboration with OEMH to develop a Systemic Racism online training; administering the Government Alliance on Race and Equity Survey which was completed by 5,767 employees in Fall 2019 and will be used as a baseline for equity work; a DEI quarterly newsletter; and creation of a Countering Bias in the Interview training in 2020, which is now required for all interview panelists.
- To better support equity in hiring practices, starting in 2021 all MDHHS position postings require a Valuing

Diversity and Inclusion competency in the posting questions plus inclusion of DEI questions in the interview.

- The “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 Michigan and MDHHS produce and/or perpetuate inequitable outcomes and explains how national systems may produce inequities. The training is open to MDHHS employees, contractors, and the public.
- MDHHS and the Michigan Department of Civil Rights developed a two-day workshop entitled Inside Our Mind: Hidden Biases. During 2019-2020, four workshops were completed at MDHHS and four workshops were completed with the OEMH’s capacity building grantees.
- 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 plans to expand use and potentially roll out to other state departments. The EIA process can be used to inform decisions when developing budgets, programs, projects, procedures, and policies. OEMH is leading the pilot in 2021 within three MDHHS administrations.
- Each administration within MDHHS has been asked to identify a disparity that can be reduced for racial and ethnic minority populations served by their programs. OEMH will provide oversight and consultation. Administrations will participate in individual and cohort learning opportunities to identify policy and practice changes and to share achievements and solutions.

Strengths and Challenges that Impact the MCH Population

The 2020 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 Michigan’s local public health; a robust home visiting network; commitment to addressing health disparities and pursuing equity within MCH systems; educational 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 served include the impact of poverty coupled with system limitations to address poverty as a driver of health outcomes and 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 mental and behavioral health services; and racism and other drivers of health inequity.

Over the past 15 months, the most significant public health challenge to Michigan’s population has been the COVID-19 pandemic. As part of ongoing needs assessment activities, the Title V program conducted an assessment to gauge the impact of the pandemic on the MCH population. Findings are included in the Needs Assessment Update (Section III.C.).

Michigan’s first presumptive positive COVID-19 case was reported on March 10, 2020. Governor Whitmer declared a state of emergency on the same day. Comprehensive information on the State of Michigan’s COVID-19 response is available on the Coronavirus website. As of May 18, 2021, Michigan had 878,125 confirmed cases and 18,710 COVID-19 deaths. Cumulative data including trends, demographics, and testing information is available on the State’s COVID-19 Data Dashboard. The COVID-19 pandemic has disproportionately affected African Americans and individuals with pre-existing comorbidities and/or over the age of 60. For example, cases per million in Michigan are 71,433 for Black/African American in comparison to 62,310 for White (as of 05/18/21). Deaths per million by

race are also highest for Black/African American (2,660 per million compared to 1,573 per million for White) (as of 05/18/21). While cases per million by age group are currently highest among 20-29 years, deaths per million by age group are highest among 80+ years. According to Khazanchi, Evans and Marcelin[1], "Area-based studies have … revealed elevated COVID-19 infection and death rates in socially disadvantaged counties with larger racial and ethnic minority populations" (2020). Research by Lichtenberg and Tarraf (2021) indicates that the COVID-19 pandemic has also had a negative impact on Michiganders' mental health, especially for people of color[2].

The COVID-19 pandemic has been a rapidly evolving public health crisis. The MI Safe Start Map, which monitors COVID-19 indicators and risk levels by Michigan Economic Recovery Council (MERC) regions, provides the following overview as of May 15, 2021:

> Most metrics continue to show favorable trends but many metrics remain high. The State of Michigan percent positivity (8.5%) has decreased for five weeks. Positivity is down 21% since last week and is 54% lower than the previous high on April 8. Positivity in all MERC regions is decreasing. The state's 7-day average case rate is 210.3 cases per million and is decreasing for five weeks. The state case rate is down 34% since last week and 69% lower than the mid-April high. Case rates in all regions are decreasing for four or more weeks but remain more than 150 cases per million. Statewide hospitalizations for COVID-19 are decreasing for three weeks. *(MI Safe Start Map. (n.d.). Michigan Statewide Overview. Retrieved from https://www.mistartmap.info/.)*

The key strategy to prevent the spread of COVID-19 is through vaccination. The first COVID-19 vaccinations were administered in Michigan on December 14, 2020. According to the COVID-19 Vaccination Dashboard, 4,377,717 residents have initiated vaccination (i.e., one or more doses of any vaccine) as of May 18, 2021, which is 50.9% of eligible residents (i.e., 12 years and older); 43.3% have completed vaccination. In January 2021, MDHHS launched a paid media campaign to inform Michiganders about the safe and effective COVID-19 vaccines and is currently working on multiple initiatives to continue to increase vaccination rates.

The State of Michigan has 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. Other State-led actions to support Michiganders during the pandemic have included the following:

- Food assistance for 350,000 Michigan families has been extended.
- MDHHS launched a "Be Kind to Your Mind" campaign in October 2020 promoting free mental wellness counseling in response to COVID-19 related stress.
- The State's Stay Well counseling line offers emotional support 24/7 to anyone who calls the state's COVID-19 hotline.
- A statewide COVID-19 Exposure Alert App was rolled out in November 2020 and reached nearly half a million downloads in the first month.
- In December 2020, the Protect Michigan Commission was created by executive order to serve in an advisory capacity to the Governor and MDHHS and to provide leadership to elevate the COVID-19 vaccine.

State initiatives to address racial disparities during the COVID-19 pandemic include the following:

- Governor Whitmer signed an Executive Order on April 20, 2020, creating the Michigan Coronavirus Task Force on Racial Disparities. The task force investigates the causes of COVID-19 racial disparities to recommend actions to address those disparities, including increase transparency in data reporting; remove barriers to physical and mental health care; reduce the impact of medical bias in testing and treatment; mitigate environmental and infrastructure factors that contribute to increased exposure during pandemics; and

develop systems for supporting long-term economic recovery and physical and 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 trusted churches and colleges to establish neighborhood testing sites. As of April 2, 2021, more than 75,000 tests were administered at the sites.
- MDHHS partnered with Wayne State University/Wayne Health, Genesee Health Systems and three local health departments to serve communities at the highest risk of infection. Mobile test services include COVID-19 testing, vaccine administration, health care screenings, and social determinant assessments with linkage to social services and medical care (e.g., Medicaid, unemployment assistance, emergency food and shelter services). Since September 2020, the Mobile Health Units have visited more than 91 community locations and tested more than 7,000 people for COVID-19. WSU/WH have provided about 4,500 vaccinations. The most common service requests have been for food and unemployment assistance.
- Through the Rapid Response Initiative, the Task Force awarded 32 community organizations with almost $20 million in funding to implement community-based interventions to address critical service gaps. Awardee organizations employed a health equity lens to address needs associated with the disparate impacts of COVID-19 and other health conditions on African Americans, other racial/ethnic minorities, and marginalized populations. The initiative supported health services, food security, financial and housing stability, emergency shelter, and public health data improvements. As of April 2, 2021, approximately 1,146,458 people have been reached across the state.

The economic impact of COVID-19 in Michigan has been significant. According to the Michigan Department of Technology, Management and Budget, "Reflecting the impact of the COVID-19 pandemic, Michigan's annual jobless rate jumped from 4.1 percent in 2019 to 9.9 percent in 2020." The Carsey School of Public Policy "COVID-19 Economic Crisis: By State" reports that from March 2020 to February 2021, Michigan lost approximately 320,100 jobs (a decrease of 7.2%). From 2019-2020, Michigan's overall GDP also decreased by 5.4%. The immediate and long-term effects of the COVID-19 pandemic on Michiganders' physical, mental, and economic well-being will continue to be revealed.

Components of the State's Systems of Care

Health Services Infrastructure and Financing

Michigan's health care infrastructure includes 178 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 42 Federally Qualified Health Centers (FQHCs) with over 250 delivery sites; over 120 school-based/school-linked health centers; 33 Family Planning agencies providing services at 79 clinic sites; and 192 rural health clinics. Additionally, the public health infrastructure to protect and promote the health of communities is supported by 45 local health departments (LHDs) that serve all 83 counties in Michigan 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 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 federal poverty level.
- 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 May 3, 2021, 905,993 beneficiaries are enrolled in HMP (HMP County Enrollment Report). This is an increase over a 13-month period (from 674,853 beneficiaries on March 23, 2020). 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. To promote the health and well-being of HMP beneficiaries, MDHHS developed a Health Risk Assessment which 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 select 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 42 FQHCs provide care at over 250 delivery sites and are health care homes to more than 615,000 individuals.

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 2020 was 1,916 (MDHHS Health Services Data Warehouse, 5/5/2021). 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. As such, 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 across systems to improve health status and address individual or family needs. The COVID-19 pandemic has further highlighted the critical nature of behavioral health services and gaps in current systems. To better address behavioral and mental health needs, MDHHS initiatives include the following:

- In December 2020, MDHHS announced plans to pilot the Michigan Crisis and Access Line (MiCAL) through two pilot sites in the Upper Peninsula and Oakland County in 2021. MiCAL will be staffed 24/7 and will provide crisis and warm line services, informational resources, and coordination with local systems of care such as Community Mental Health Services Programs and Prepaid Inpatient Health Plans. MDHHS anticipates statewide rollout by the end of 2022.
- In February 2021, MDHHS announced an RFP to expand mental health services for youth in Michigan through the Expanding, Enhancing Emotional (E3) Health Program. E3 is managed by DCAH and provides on-site comprehensive mental health services in a K-12 school or on school grounds for children and adolescents 5-21 years. Currently 68 E3 sites reach 36 counties, with expansion plans underway. Services include assessments, brief intervention, ongoing therapy, referrals, tracking and follow-up. Services are available year-round in schools or on school grounds where access to behavioral health resources are limited or inaccessible in the community. In addition to existing sites, MDHHS anticipates issuing 12-15 new awards equaling $1.6 million through this RFP.
- In October 2020 MDHHS launched the statewide “Be Kind to Your Mind” campaign to promote the use of Michigan’s free, confidential Stay Well counseling line. The Stay Well initiative also offers free virtual support groups, wellness webinars, and behavioral health guides.
- In August 2020, MDHHS was approved for a two-year CMS Certified Community Behavioral Health Clinic (CCBHC) Demonstration. CCBHC demonstration sites are required to 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. Fourteen sites are eligible to participate in the demonstration.
- 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 full 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 services related to screening, diagnosis, prevention, and treatment of mental and substance use disorders, and co-occurring physical health conditions and chronic diseases. MDHHS partnered with three sub-grantees which serve adults with SMI, and two of which serve children with SED. All sub-grantees are focused on comprehensive care including reduction in BMI, smoking cessation, increased physical activity, and nutrition.
- The Michigan Child Collaborative Care (MC3) was expanded to all 83 Michigan counties to increase access to mental health treatment for underserved children, adolescents and high-risk perinatal women. The program expansion is significant given the shortages of specialty providers, especially in rural areas. The MC3 program provides psychiatry support to primary care providers who have patients with behavioral health issues including children, adolescents, and young adults through age 26. It also includes women who are contemplating pregnancy, pregnant or postpartum. Behavioral Health Consultants are linked with or embedded in pediatric primary care practices to ensure children are assessed and linked to appropriate mental health services. MC3 also provides education for primary care providers to increase their understanding of mental health issues for children and families. MC3 is supported by the MDHHS Behavioral Health and Developmental Disabilities Administration.

- In FY 2021, MC3 for MOMs was launched to engage and enroll a larger population of Michigan's perinatal providers and their patients in targeted areas of the state. 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). The need for universal psychiatric screening is great given that as many as 25% of perinatal women experience depression and anxiety. Perinatal providers report that it is difficult to adequately screen women for mental and behavioral health conditions and report feeling ill equipped to manage these conditions. Behavioral Health Consultants will be specially trained in brief 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 (e.g., WIC).
- Michigan supports over 25 Children's Multi-Disciplinary Specialty (CMDS) Clinics in seven tertiary care and teaching hospitals. These 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, support and referral services.
- CSHCS and Behavioral Health and Developmental Disabilities Administration (BHDDA) continue their collaborative work to identify challenges accessing services experienced by populations served by the mental/behavioral health, intellectual/developmental disabilities, and physical health systems. The collaboration is working to provide cross-sector education, create tools to assist families, and address systemic issues that cause access challenges.

These and other coordinated, collaborative efforts will be critical to support the mental health and wellbeing of all Michiganders.

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 April 2021, 2,122,135 Medicaid beneficiaries were enrolled in the Medicaid Health Plans (MHPs) and 552,894 beneficiaries were enrolled in fee for service. Medicaid employs a population health management framework to build a Medicaid managed care delivery system that maximizes the health status of beneficiaries, improves beneficiary experience, and lowers cost. Medicaid contracts with 10 Medicaid Health Plans (MHPs) to achieve these goals through evidence- and value-based care delivery models; health information technology; strategies to prevent chronic disease; and coordination of care along the continuum of health that includes assessing social determinants of health such as transportation, housing, and food access. The Managed Care Plan Division (MCPD) in MSA requires MHPs to annually report the Healthcare Effectiveness Data and Information Set (HEDIS) and employs a Pay for Performance Incentive Program that includes access, process, and outcome metrics for all managed care populations, including women and children. Each MHP's governing body must either have a minimum of 1/3 representation of Medicaid enrollees *or* the plan must establish a consumer advisory council that reports to the governing body. The council must include at least one Medicaid enrollee, one family member or legal guardian of an enrollee and one consumer advocate. In addition, MHPs must actively attempt to recruit CSHCS beneficiary

parents/guardians to participate in its non-compensated governing bodies or consumer advisory council.

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

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 2020, MIHP provided services to 12,187 women and 17,076 infants.

Another area of coordination is for CSHCN. In March 2021, program data for CSHCS indicate that 26,949 or 64.8% of 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 cross-system information between state health plans and the Community Mental Health/Prepaid Inpatient Health Plans. CC360 makes it possible to analyze healthcare program data, manage and measure programs, and improve enrollee health outcomes. Within DMIH, CC360 helps to improve communication within MIHP by sharing care elements that can aid in successful case management so that MIHP home visitors are part of the care team. CC360 enables access to comprehensive Medicaid claims and encounter data for patients of record to support care coordination services. It will also allow for comparison of population health data across counties or regions.

MI Bridges is another important component of the MDHHS service platform to better interface with customers through technology and to make the service delivery system more focused on customer needs. MI Bridges is an online site managed by MDHHS that enables users to apply for benefits (including healthcare coverage, food assistance, cash assistance, childcare, and state emergency relief) and to find resources such as transportation, food, and utilities assistance. MI Bridges users can review and access their benefits information; renew benefits; and share beneficiary information with their specialist. For example, WIC and the Supplemental Nutrition Assistance Program (SNAP) both provide resources for families experiencing food insecurity. In the fall of 2020, new functionality was built in MI Bridges to include home visiting. This will allow families in need of home visiting to receive a custom list of models that are available in their community and, if selected, a referral to a specific model. This new feature launched in December 2020 and already averages over 300 referrals each week. Additional features and functionality are being added in 2021 to make the system more user-friendly and to provide more

specific information on the home visiting models.

Lastly, 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 30, 2020)

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 2021, state funding for MCH and CSHCS programs was appropriated through Public Act 166 Enrolled House Bill 5396 Health and Human Services of 2020. CSHCS is mandated by the Michigan Public Health Code, Public Act 368 of 1978, in cooperation with the federal government under Title V of the Social Security Act and the annual MDHHS Appropriations Act. State general fund dollars for MCH programs are itemized in Sec. 116, Family Health Services, of Public Act 166 of 2020, whereas CSHCS is addressed in Sec. 117. Additional MCH details are provided in Sec. 1301-1305; 1308-1317; 1319-1320. These sections identify how funding shall be used; MDHHS and contractor requirements; and requirements that some appropriated funding be used to implement evidence-based programs to reduce infant mortality, rural home visiting, continue development of an outreach program on fetal alcohol syndrome services, enhance education and outreach efforts to seek early prenatal care, allocate funds to the Michigan Dental Association to administer a volunteer dental program that provides dental services to the uninsured, and the provision of high-quality dental homes for seniors, children, and adults enrolled in Medicaid and low-income uninsured. Statutory requirements in the FY 2021 Health and Human Services budget for CSHCS included criteria in Sec. 1360 for MDHHS to provide services; and in Sec. 1361, the authorization that some of the appropriated funding be used to develop and expand telemedicine capabilities and to support chronic complex care management.

---

[1] Khazanchi, R., Evans, C., & Marcelin, J. (2020). Racism, Not Race, Drives Inequity Across the COVID-19 Continuum. JAMA Network Open.

[2] Slootmaker, 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 2022 Application/FY 2020 Annual Report Update

The focus of Title V ongoing needs assessment activities in FY 2021 have been a COVID-19 Maternal and Child Health (MCH) Impact Assessment and a review of state action plans to assess health equity components. This section also discusses ongoing or emerging issues that impact the MCH population, including infant and maternal mortality, COVID-19 and pregnancy, health concerns specific to CSHCN, and the impact of COVID-19 on local health departments (LHDs).

COVID-19 MCH Impact Assessment

As part of Title V needs assessment activities, Michigan assessed the impact of the COVID-19 pandemic on women, mothers, infants, children, adolescents, and CSHCN. In addition to the immediate health threats posed by COVID-19, the pandemic required changes to many aspects of daily life to reduce rates of infection and death and to avoid overwhelming the healthcare system. As Michigan worked to control the spread of COVID-19 and save lives, employment became less stable, childcare options changed, school and other programs moved online, telemedicine was broadened, and healthcare access changed. These experiences illustrated both strengths and gaps in systems for meeting families' needs. While there is still much to learn about the immediate and long-term impact of COVID-19, Michigan's Title V program used several methods to identify the current impact on MCH. In coordination with the Michigan Public Health Institute (MPHI), these included an MCH program staff survey; key informant interviews; a focus group; and a literature review. Findings from each assessment are described below.

COVID-19 MCH Impact Survey

Through an online survey conducted in February 2021, MDHHS MCH program staff (including but not limited to Title V programs) shared feedback about the impact of COVID-19 on the populations served by their programs. Data (primarily open-ended questions) were analyzed by population domain.

Programs serving **infants and women during the perinatal period** identified several factors that threatened the well-being of this population during the pandemic. They noted that families have experienced inconsistent income and employment, making it difficult to meet basic needs. They also described challenges related to social isolation and mental health, as well as difficulties accessing childcare. Families with young children have also needed better guidance for safety protocols related to sanitation and mask wearing.

Program staff noted that accessing services and interacting with the healthcare system has been a source of stress for pregnant women and infants. For example, limiting the presence of support people during delivery was a source of anxiety for some women. Additionally, decreased hospital stays after delivery have limited time for safe sleep education and breastfeeding support. Program staff also described difficulty providing health screenings. Challenges related to WIC included a shortage of WIC-approved foods and the lack of an approved method for using WIC benefits online or for curbside or delivery services. Program staff also noted that staff shifts to respond to COVID-19 have limited the delivery of other programs and services, such as safe sleep outreach and education.

However, program staff also described several strategies for adapting service delivery that have been successful. Education and training programs have been adapted to an online format, including childbirth classes, breastfeeding, and lactation support. Use of social media to share resources and education has expanded on topics such as safe sleep. Programs were also able to support local shifts and innovations, such as delivering needed resources to families contact-free and supporting LHD staffing pivots to cover COVID-19 activities. Program staff noted that expanded reimbursement for telehealth services has benefited families, and WIC waivers allowed families to access nutrition resources. Michigan's Regional Perinatal Quality Collaboratives also supported local innovation. For

example, they provided blood pressure cuffs to high-risk hypertensive mothers to monitor blood pressure at home when access to clinical care was limited.

Program staff in programs serving **children** noted similar challenges faced by this population during the COVID-19 pandemic. They described how the pandemic has compounded the challenges that vulnerable communities across the state already face. Inconsistent income and employment and lack of access to basic needs created stress for families and impacted mental health and substance use. Families enrolled in WIC also had difficulty with food access, as noted above. Changes in service delivery created challenges, with the pivot to virtual services difficult for some programs. Preventive care screenings and education decreased (e.g., for lead exposure). Mental health services and several types of screenings (e.g., vision and hearing) can be more difficult to provide virtually. Programs that deliver services to students, such as school-based dental programs, temporarily could not reach children during school closures.

Despite these challenges, program staff noted that several innovations in service delivery were successful for some children and families. Virtual home visiting created increased accessibility for some families. Online health education programs also expanded reach of some health education services. As noted above, removal of the USDA/WIC in-person certification requirements and additional approved foods improved access to WIC.

Program staff who serve **adolescents** also identified challenges to adolescent mental and behavioral health due to the pandemic. They noted that the pandemic led to stress and trauma, as well as isolation and disconnect from peers. Staff noted that the stressors of the pandemic disproportionally affected adolescents in minority groups, reflecting and compounding health inequities, and some adolescents faced increased food insecurity, violence in the home, and transportation issues. Staff felt uncertain about the lasting impacts of virtual schooling for adolescents. However, they noted that the shift to remote learning impacted the delivery of public health programs and services that are typically provided in schools.

Telehealth and adapted curriculum for virtual learning have been successful strategies to mitigate these challenges. Additionally, allowing programs such as the SEAL! Michigan dental program to reach children and adolescents outside of the school setting allowed for expanded reach. Additional settings, virtual delivery of programs, and flexible use of funds have been beneficial to reaching adolescents.

The **CSHCN** population experienced a heightened level of fear of exposure to COVID-19 creating stress and isolation. Program staff indicated that fear impacted choices on who to allow into the home for care and if/when to participate in routine health care, which is necessary for disease prevention and management. Program staff identified barriers to delivering school-based programs, especially for children with intellectual/developmental conditions who need school-based services like physical, occupational, and speech therapies. Additionally, the health system that serves CSHCN has also suffered with the closure of many physician and dental services, reduced home visitation, and staff diversion to COVID-19 duties at LHDs.

Although these challenges exist, CSHCN policy and program adaptations enabled care delivery during the pandemic. Michigan issued policies to ease obtaining medications and durable medical equipment, personal protective equipment for some diagnoses, removing face-to-face requirements to enable telehealth, and modifications to prior authorization policies. The use of telehealth and removing prior barriers (such as needing time off from work/school, transportation logistics, and travel costs) have been successful strategies for the continuation of care for CSHCN.

Impact on MCH Capacity

A question on the COVID-19 survey was “How has the COVID-19 pandemic impacted the state’s delivery of MCH

services?" Some MCH programs were expanded, and many were adapted to support increased need during the COVID-19 pandemic. For example, the SNAP program was expanded to serve more families and children; home visitation services shifted to be offered virtually; and breastfeeding and childbirth education classes were provided virtually.

Another change in MCH program capacity resulted from shifting MDHHS staff and local public health staff to support contact tracing and vaccination efforts as part of the state's emergency response. An example was the shift of MCH epidemiology staff to support COVID-19 case and death reporting data. While this flexibility enabled public health to respond to critical needs and gaps from the COVID-19 pandemic, it also created challenges for existing MCH programs.

The lasting impact of these changes is yet to be determined. The pandemic revealed capacity gaps in programs and services not only in Michigan, but across the country. The development of lessons learned and capacity adjustments as states move out of the emergency response will be critical to ensure future MCH program capacity.

Key Informant Interviews & Focus Group

Three key informant interviews focused on women, children, and adolescents and one focus group focused on CSHCN were held with MCH leaders outside of MDHHS who could speak to the impacts of COVID-19 on these populations. For CSHCN, a focus group was held with the CYSHCN Family Leadership Network (a statewide group comprised of caregivers, family members, and parents of CYSHCN) to ensure family and caregiver voice were elevated for a population uniquely impacted by COVID-19. The key informant interviews and focus group lasted 60-90 minutes. The sessions were facilitated by an MPHI staff member and were recorded. Transcripts were analyzed for major themes using Nvivo software.

Participants identified many ways the pandemic impacted the MCH population. First, participants described how the pandemic exacerbated challenges families face in meeting their basic needs, which highlighted the importance of social determinants of health. Public health measures that were essential to the health and safety of residents, such as social distancing, remote learning, and working from home, led to social isolation and stress for some families. The pandemic also resulted in temporary closures of some businesses and services, which led to instability in employment and income, access to childcare, and access to transportation. These factors led to an increased need for concrete support, as well as social-emotional support.

Second, participants reported that telehealth programs were helpful and made access to care possible during times when in-person care was inaccessible. However, some participants noted concerns about the quality of care since tactile treatments could not occur via video and some changes in health may not be as visible when not in person. Participants noted that families delayed care due to concerns about exposure to COVID-19 and therefore experienced gaps in preventive care, such as immunizations, lead testing, hearing and vision screening, and dental care.

Third, participants noted that health information and guidance were extremely important during the pandemic. Participants identified challenges accessing reliable information that was culturally relevant, science-based, and up to date for all MCH populations. Participants also emphasized the need to continue to build trust with communities most impacted by the pandemic and in relation to vaccine hesitancy.

Literature Review

MPHI staff conducted a review of recent peer reviewed research, grey literature, and news articles about the impacts of COVID-19 on Title V populations at national, state, and local levels. Criteria for the search were those that

referenced COVID-19 and one or more Title V population domains, with specific focus on articles that impacted Michigan directly. Additional key terms included service delivery, health equity, pregnancy, breastfeeding, vaccine, insurance, response and preparedness, mental health, housing, and substance use. Key findings from the review are highlighted below (see Supporting Document for full citations).

The review shed light on the severe economic and social impacts of the pandemic across all Title V population domains, resulting in increased "rates of poverty, food insecurity, homelessness, intimate partner violence, and child abuse and neglect" (NIHCM, 2020). Increased mental health concerns were also highlighted across population domains (NAMI, 2020), ranging from mothers experiencing trauma due to giving birth alone (Mayopoulos, 2021), to children and adolescents experiencing social isolation (St. George, 2021), and CSHCN struggling without their usual supports (Children's, 2020). Other challenges include securing childcare, addressing medical needs or having to delay care, and securing stable internet for work or distance learning (Martin, 2021; Waxman, 2020; RWJF, 2020). These challenges have exacerbated existing disparities as they disproportionately impact Latino, Black, and Native American communities; people with disabilities; rural populations; and the LGBTQ community (RWJF, 2020; The Trevor Project, 2021). Research also suggests that while most providers are using patient portals to disseminate vaccine information and schedule vaccination appointments, the age, race, and socioeconomic groups most affected by COVID-19 are least likely to use these portals (Malani, 2021).

To address these disparities, the literature emphasizes the critical first step of collecting and monitoring COVID-19 data by race, ethnicity, and other demographic characteristics (CDC Data, 2021). The State of Michigan created the Michigan Coronavirus Task Force on Racial Disparities to engage diverse stakeholders in combating structural racism across Michigan, with special focus on improving testing infrastructure, primary provider connections, centering equity, telehealth access, and environmental justice (MDHHS, 2020). At the national level, the U.S. Strategy for the COVID-19 Response and Pandemic Preparedness also outlines goals related to advancing equity (Office of President, 2021), and Medicaid has allowed states to temporarily expand eligibility and lift rules to serve more women and children (AMCHP, 2021).

The review also highlighted insights for each MCH domain. Early studies suggest **pregnant women** have an elevated risk of severe illness from COVID-19 and that those with severe illness have a greater risk of adverse pregnancy and birth outcomes (CDC Investigating, 2021; NIH, 2021). However, transmission from mother to infant seems to be rare, so enhancing breastfeeding supports is critical during this time, as well as continuing life-saving interventions for the most vulnerable infants (NIH, 2021; Perrine, 2020; Rao, 2021).

Research on **children** revealed widespread mental health issues and a significant drop in reports of child abuse due to less access by mandated reporters (St. George, 2021). A recent COVID-19 modeling study indicated that school reopening was associated with a slight increase in COVID-19 infections and deaths, but most of the transmission could be attributed to adults aged 20-49 and could be mitigated by vaccinating this age group (Monod, 2021). Administration of standard immunizations for other diseases has decreased nationally during the pandemic (Martin, 2021), a trend consistent with data on Michigan's child and adolescent vaccination rates (MDHHS).

Adolescents have faced unique challenges in receiving services for substance use, with less referrals from schools, and with providers having capacity barriers and needing to shift to address basic needs (Freese, 2021). Sexual health providers for adolescents and adults have also had to shift service delivery, including using telehealth visits, at-home specimen collection, and referrals to pharmacists to avoid clinic visits (CDC Guidance, 2020).

Resources focused on **CSHCN** described sub-populations that should be prioritized once vaccinations have been approved for children, such as children living in congregate settings, those at higher risk of illness due to COVID-19, and those experiencing greater difficulties with distance learning (Randi, 2021). Guidance for local health

departments in Michigan urged those working with CSHCN to update Plans of Care to incorporate pandemic planning and outlined other supports that may be needed, including home health care concerns; telehealth support and safe clinical visits; childcare options; and distance learning support (Children's, 2020).

Overall, this review emphasized the importance of meeting basic needs and providing mental health supports during this time. Data show that marginalized groups are disproportionately impacted by the pandemic, so continuing to collect and act on the data will allow for an equitable approach, especially for vaccine distribution. Unique needs of the MCH population include continuing postpartum supports for birthing people and infants, addressing distance learning challenges for children and adolescents, and providing equitable access to resources for CSHCN and their caregivers.

Conclusion

This assessment began to uncover the most immediate implications of the COVID-19 pandemic for the MCH population. COVID-19 created an unprecedented threat to the health and well-being of Michiganders, with trauma and loss experienced by many families. Additionally, the public health measures required to reduce the spread of COVID-19 and save lives changed how we work and live. Fear and isolation were experienced across communities. However, the most vulnerable communities experienced deeper impacts. The findings of this preliminary assessment highlighted the systemic gaps in safety nets for children and families, as well as inequities in policies and systems. Systems were often unprepared to quickly pivot and ensure income stability and access to basic needs in a severe crisis, especially at the onset of the pandemic; parents experienced serious challenges focusing on their essential role; and reliance on schools and childcare programs to support the economy has never been clearer. Moreover, this crisis illustrated the implications of defunding or underfunding governmental public health such that it does not have the surge capacity necessary to expand capacity and continue normal operations within a pandemic. These challenging times have also presented opportunities for innovation and evolution and will continue to present learning opportunities to strengthen public health and MCH infrastructure in service of families and children.

Health Equity Action Plan Review

The five-year needs assessment identified the need to "achieve equitable health outcomes" for the MCH population, which was established as a Title V pillar across population domains. To further operationalize this pillar, in FY 2021 all Title V state action plans were reviewed to provide feedback to program staff on resources and recommendations for strengthening health equity efforts and strategies. MDHHS partnered with MPHI to develop a rubric to review the plans. The rubric was designed to provide concrete examples from research literature to adapt objectives or strategies to tackle root causes and strengthen the focus on health equity, diversity, and inclusion.

MPHI completed a review of each state action plan and provided written feedback that detailed strengths, opportunities for improvement or expansion (both immediate and long term), and links to research and/or best practices. Completed health equity rubrics were shared with Title V program staff and one-on-one virtual review sessions were offered. Program staff then updated state action plans for the FY 2022 application. Transforming state action plans to increasingly focus on equity and root causes of disparities will be an iterative process. Additionally, not all equity-focused work within programs is included in the Title V application due to the specific focus of the plans. It was also a challenging year to make extensive revisions to state action plans, as many MCH staff were involved in COVID-19 response efforts.

Ongoing and Emerging Issues that Impact MCH

Infant and maternal mortality remain two critical public health issues. Other current issues include COVID-19 and

pregnancy, substance use, issues that impact CSHCN, and the impact of COVID-19 on local public health.

Infant and Maternal Mortality

MDHHS continues to closely monitor infant and maternal mortality and has seen the following trends and emerging concerns. The infant mortality rate in Michigan for 2019 was 6.4 deaths per 1,000 live births, which is the lowest infant mortality on record for Michigan. This decrease in the statewide infant mortality rate can be attributed, in part, to a corresponding decrease in the infant mortality rate in the City of Detroit. From 2018 to 2019, the infant mortality rate in the City of Detroit dropped from 16.7 infant deaths per 1,000 live births in 2018 to 11.0 infant deaths per 1,000 live births in 2019. Although improving, racial and ethnic disparities remain a major contributor to Michigan's reported infant mortality rates. The Black infant mortality rate has continued to be nearly three times that of the White infant mortality rate (most recently, 12.5 versus 4.9 per 1,000 live births in 2019). The pregnancy-related mortality ratio in Michigan for 2017 was 9.9 maternal deaths per 100,000 live births[1]. As with infant mortality, disparities between Black and White mothers are striking, with the Black pregnancy-related mortality ratio more than two times that of the White rate (21.3 versus 8.9 per 100,000 live births based on 2013-2017 data). In addition to maternal deaths caused by pregnancy-related issues, addressing pregnancy-associated mortality[2] remains an important component of Title V work: 32.0% of all pregnancy-associated, not related deaths from 2013-2017 were caused by accidental poisoning/drug overdose. Michigan's maternal mortality committees have focused efforts on developing recommendations to help prevent current and expecting mothers from developing opioid use disorders.

COVID-19 and Pregnancy

Michigan is participating in the CDC COVID-19 Pregnancy and Neonate Surveillance Project. For this project, women who have received a confirmed diagnosis of COVID-19 during pregnancy are identified through the Michigan Disease Surveillance System (MDSS). This list is then linked monthly 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 further details regarding the impacts of COVID-19 on the health of mother and infant.

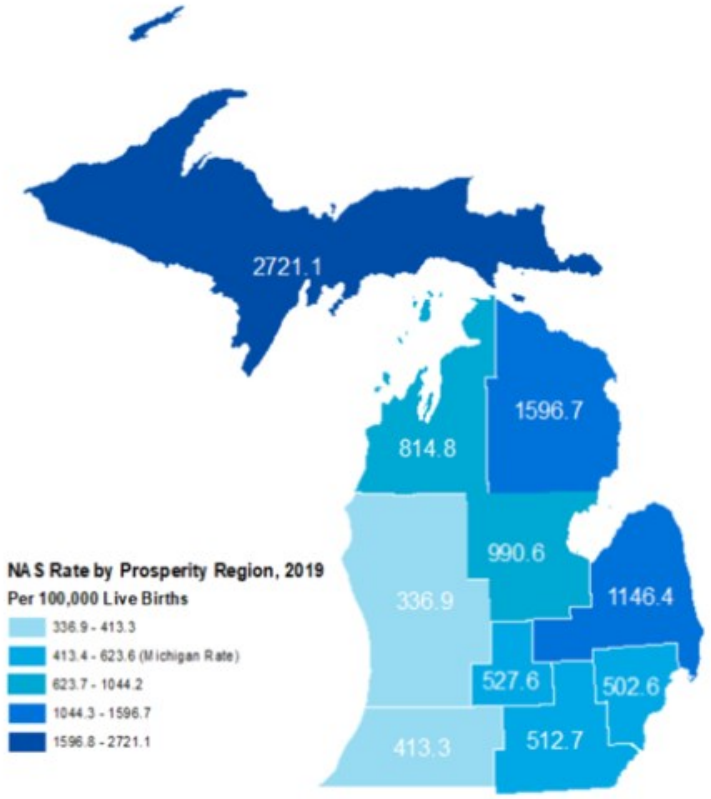
As of early December 2020, 1,111 Michigan women were identified with a confirmed COVID-19 diagnosis during pregnancy. 564 (50.8%) of these women had a pregnancy outcome thus far. The majority of pregnancy outcomes were to White mothers (53.8%), while 28.5% were to Black mothers. All pregnancy outcomes were live births, with 16.5% of these live births classified as preterm births. The preterm birth percentage among this group is higher than the state average which is normally around 10%. Furthermore, the NICU admission percentage among this group is currently at 11.7%, which is higher than Michigan overall at 7.6%. Lastly, the infant COVID-19 positive rate is currently very low at 1.8% of live births to COVID-19 infected mothers. Additional statistics will be available as mothers who were infected within COVID-19 during their 1st trimester begin to have pregnancy outcomes.

In addition to this surveillance project, the Michigan Pregnancy Risk Assessment Monitoring System (MI PRAMS) has added several COVID-19 questions to the survey. These questions were added shortly after COVID-19 surfaced in Michigan and will continue to be included within the 2021 MI PRAMS survey.

Substance Use

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

Figure 1. Map of 2019 NAS Rates by Prosperity Region



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

The number of drug exposed infants increased by 49% from FY 2010 to FY 2013, from 2,589 to 3,866 infants[3]. Additionally, infants hospitalized and treated for drug withdrawal symptoms has increased[4]. In 2010, 478 infants in Michigan had a diagnosis code of 779.5 (ICD-9-CM) and needed treatment for withdrawal from a drug, not specifically identified as opioids. In 2019, the number of infants with a diagnosis code of P96.1 (ICD-10-CM) increased to 673 infants. This represents a jump from 41.7 per 10,000 live births in 2010 to 62.4 in 2019. The opioid epidemic has also impacted maternal deaths. In 2011, 9% of maternal deaths were opioid related compared to 19% of maternal deaths in 2016[5].

MDHHS remains committed to supporting opioid use disorder prevention for pregnant and parenting women and women of childbearing age; increasing screening and identification; maintaining data collection and reporting; optimizing resource allocation to target resources to those in greatest need; developing a quality improvement system; and improving workforce development and training programs. MDHHS also has created many Opioid Resources to provide assistance and to decrease stigma related to opioid use and treatment.

The DMIH has also partnered with the MDHHS Office of Recovery Oriented Systems of Care to provide funding to three health systems to implement 'rooming in' programs in their birthing units. The rooming-in program is a family-centered model that encourages mother-infant bonding and utilizes non-pharmacological care of infants born substance-exposed, ensuring they remain with their mother or caregiver in a private hospital room that is less stimulating for the infant (i.e., room-darkening shades, softer flooring, etc.). 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 mother and family (e.g., for breastfeeding, skin-to-skin contact, calming techniques, and referrals to services like home visiting). The rooming-in program supports bonding between mother and infant,

decreases the length of stay for babies diagnosed with NAS, and promotes positive parenting and recovery from substance use disorder.

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. Using population, claims and encounter data, CSHCS is conducting an assessment within its program population to identify the number of children who meet this definition and would potentially benefit from a more intensive service array to improve their care coordination and quality of life. The Advancing Care for Exceptional (ACE) Kids Act should create opportunities for states to improve systems of care for CMC.

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. It is estimated that between 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 clinical services and enhance the system of care serving clients with SCD. The proposal was accepted and included in the Governor's FY 2022 budget recommendation. The proposal will expand CSHCS coverage to adults, resulting in improved continuity of care and transition to adult providers, and will establish clinical pathways that address inequities in access to care.

Impact of COVID-19 on Local Public Health

Michigan's 45 LHDs all reported challenges in 2020 related to the COVID-19 pandemic. Many LHDs had temporary closures for months during the state's stay home order, others operated with reduced hours. Staff were shifted from their program areas to pandemic response such as testing, contact tracing, case investigation, hotline staffing, and addressing exposure sites. This shift in focus resulted in a domino effect. LHDs have reported projects or programs halted, less children immunized and screened for lead, decreased medical appointments, and decreased call volume for program assistance. School buildings closed which also limited the reach of LHD programs to children and adolescents. LHDs worked during the pandemic to adjust logistics and restructure programs and services to virtual platforms. LHD staff provided assistance through telephone calls, virtual platforms, and telehealth visits when possible.

---

[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, 2013-2017 Data Update. MDHHS. Michigan Maternal Mortality Surveillance Program.
[2] Includes maternal deaths while pregnant or within 1 year of the end of a pregnancy due to a cause unrelated to pregnancy.
[3] Data from Michigan's Services Worker Support System.
[4] Data from Michigan Inpatient Hospitalization Files.
[5] Division for Vital Records and Health Statistics, MDHHS.

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

III.C.2.a. Process Description

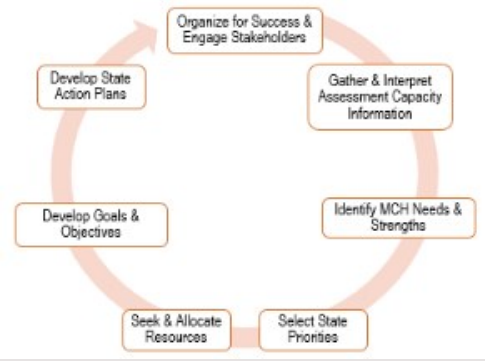
Goals, Framework, and Methodology

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

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

The Public Health Planning Cycle (see Figure 1) from the Title V Guidance was adapted and used to organize the assessment process. Many methods and tools were adapted from the Mobilizing for Action Through Planning and Partnerships (MAPP) framework developed by the National Association of County and City Health Officials (NACCHO). Details on the MAPP assessments as well as findings across population domains are included in the needs assessment report, which is included as a Supporting Document.

Figure 1. Needs Assessment Process



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

Figure 2. MAPP Phases

Stakeholder Involvement

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

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

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

Quantitative and Qualitative Methods and Data Sources

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

Health Status Assessment

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

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

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

System Assessment

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

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

Forces of Change Assessment

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

Community Themes and Strengths Assessment

This assessment gathers the perspectives of community members, including thoughts, experiences, and opinions about their health and quality of life. It is designed to gain a deeper understanding of the strengths, assets, and barriers that exist in communities. Data for this assessment were collected through provider surveys, encounter surveys, focus groups, and listening sessions with both service providers and community members across Title V population domains. The provider survey was an online survey administered to participants (n=526) through the survey platform Qualtrics. The encounter survey was administered to recipients of MCH services (n=307) in one of two formats, an online survey or paper survey. Trained facilitators facilitated 18 focus groups and listening sessions to gather experiences and perspectives on health. Quantitative survey data were analyzed in SPSS and qualitative data were thematically analyzed to identify reoccurring strengths, barriers, and opportunities for improvement.

Identifying Priority Needs

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

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

Following the population domain workgroups, over 50 priority need statements were reviewed to identify areas of commonality. Where the groups identified a similar need, a consolidated need statement was developed. Those needs that

best aligned with Title V were identified and linked to a relevant NPM or SPM. The needs assessment findings were then used to inform state action plan development. Originally, an in-person workshop was planned with MCH staff to develop strategies, objectives, and ESMs. Due to the COVID-19 pandemic, the meeting was shifted to a webinar format during which guidance and resources for developing state action plans were provided. State action plans were developed with virtual technical assistance from Title V staff.

III.C.2.b. Findings

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

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

Strengths and Needs

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

Women, Maternal, & Infant Health

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

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

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

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

Child & Adolescent Health

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

Focus group and encounter survey participants reported environmental health concerns such as lead and PFAS contamination. They noted that socioeconomic status and race drive inequities in childhood exposure to lead contamination. Housing stock free of environmental contaminants was identified as a challenge, especially in lower-income neighborhoods.

Focus group participants noted the need for greater investment in safe, livable communities and quality housing. This concern was echoed in the provider survey, and providers also noted that structural racism impacts exposure to unsafe living conditions.

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

Children with Special Health Care Needs

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

Multiple Population Domains

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

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

- Michigan's caring and compassionate providers offer high-quality care with limited resources;
- Federally Qualified Health Centers, local health departments, and school-based health centers fill gaps in access to care;
- Community-based, culturally and linguistically appropriate organizations provide quality support services;
- A strong home visiting system that spans the state and provides numerous programming options to align with family needs;
- Michigan's CSHCS program and its long-standing history of providing quality supports and helping families afford care; and
- Longstanding relationships, collaborative bodies, and MCH expertise at the state and local level.

Major Health Findings

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

Women, Maternal, & Infant Health

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

The assessment highlighted factors driving maternal and infant health outcomes. Michigan has persistently lagged the US in

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

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

Child & Adolescent Health

One strategy to support child and adolescent health is through access to a medical home. The assessment found a disparity between white and black children, with 53.3% of white children having a medical home compared to 29.0% of black children in 2017-2018 (National Survey of Children's Health, 2016-2018). Similarly, Michigan found disparities in access to preventive dental visits, with black children (71.5%) being less likely than white children (79.2%) to receive a preventive dental visit (NSCH, 2016-2018). Michigan also lags in vaccination rates. Children in Michigan ages 19-35 months have been less likely than children in the US to complete the seven-vaccine series every year from 2013 and 2017, and only 69.9% completed the series in 2017 (National Immunization Surveys). Children in Michigan's large, urban centers have significantly higher rates of elevated blood lead levels among children under age six as compared with the state. For example, in 2016, 8.8% of children under six years old who received testing in Detroit had a blood lead level greater than or equal to 5 micrograms of lead per deciliter of blood, as compared with 3.6% in Michigan (Childhood Lead Poisoning Prevention Program, MDHHS). Finally, rates of bullying in Michigan have remained high with 29.6% of high school students reporting bullying in the past 12 months in 2017. Rates of bullying are higher among American Indian high school students, 43.6% of whom reported bullying in 2017 (Youth Risk Behavior Surveillance System, 2011-2017).

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

Children with Special Health Care Needs

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

Multiple Population Domains

The Health Status Assessment identified findings across population domains related to mental health. In 2017, 19.2% of Michigan women 18-44 reported more than 14 days of poor mental health in the past 30 days, as compared to 16.2% in the US. Moreover, 24.2% of black women reported poor mental health (BRFS). Similarly, the prevalence of postpartum depression for black women was reported to be almost twice that of white women in 2018 (23.6% compared to 13.6%) (MI PRAMS). Among adolescents, 37.3% reported feeling sad or hopeless for two weeks or more in 2017, a dramatic increase from the 26.0% who reported feeling sad or hopeless in 2011 (YRBS, 2011-2017). Michigan has also seen a disturbing

upward trend in suicide mortality among adolescents from 6.5/100,000 in 2012 to 7.5/100,000 in 2016 (Vital Records & Health Statistics, MDHHS, 2013-2017). Finally, access to mental health care is problematic across all population groups, including CSHCN. Compared with a US average of 22.9%, 27.4% of CSCHN in Michigan sometimes or never had the insurance coverage they need for mental/behavioral care (2016-17) (NSCH, 2016-17).

MCH Efforts to Address Needs

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

Women, Maternal, & Infant Health

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

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

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

Child & Adolescent Health

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

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

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

Children with Special Health Care Needs

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

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

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

Multiple Population Domains

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The *Child and Adolescent School Health Section* oversees federal teen pregnancy prevention programs including the

Personal Responsibility & Education Program (PREP), the State Abstinence Education Program, and Pregnancy Assistance Funds used to implement the Michigan Adolescent Pregnancy and Parenting Program. These programs work collaboratively with state and local partners including the Michigan Department of Education (MDE), faith-based and health organizations, schools, LHDs, parents, and early childhood partners. The section oversees Michigan's Child and Adolescent Health Centers (CAHCs), funding 100 health centers and related programs in medically underserved, high-need communities. CAHCs provide primary care and behavioral health services, health education, Medicaid outreach and enrollment, and screening to K-12 students and young adults up to age 21. The section also oversees the state's school nurse program and mental health in schools initiative; Michigan Model for Health, the state's comprehensive school health education program; and Hearing & Vision Screening Program.

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

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

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

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

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

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

- ***Dawn Shanafelt, MPA, BSN, RN, Director, Division of Maternal and Infant Health*** has 23 years of clinical and administrative public health experience at local and state levels. Ms. Shanafelt has served as the Title V MCH director since 2019. She administers Michigan's maternal and infant health programs including Title X Family

Planning, the Maternal Infant Health Program, and statewide initiatives to reduce maternal and infant mortality.

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

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

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

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

- ***Candida Bush, Director,*** is a Certified Family Life Educator through the National Council on Family Relations***.*** She is a parent of two young adults with special health care needs and has worked over 25 years to support, empower, and increase access to services for CSHCN.
- ***Lisa Huckleberry, Megan Mezel, Aleisha Leavitt, Ayanna Eggleston, Kate Jones (Parent Consultants)*** are parents of children with special health care needs or chronic health conditions. They have 40 years of combined experience advocating, educating, supporting, and providing direct care to individuals with special health care needs and their families. Parent consultants encourage, engage, and help to empower families to know the value and impact of their voice and their story.
- ***Dawn Adkins, Program Assistant,*** is a parent of two adult children with chronic health issues and continues to advocate for their health and the health of others.
- ***Christina Davis and Brenda Blair (Family Phone Line Representatives)*** are parents of children with special health care needs or chronic health conditions. They have 17 years of combined experience supporting and advocating for those with special health care needs.

The Title V needs assessment identified MCH workforce capacity and gaps. A provider survey was sent to individuals across

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

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

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

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

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

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

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

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

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

The Title V needs assessment utilized and built upon a wide range of partnerships and collaboration. Long-standing relationships between MDHHS and public and private organizations, service providers, and advocacy organizations were identified as a strength in the needs assessment. These relationships allow for collaborative and coordinated work which strengthens the ability to meet MCH population needs. For example, MDHHS provides Title V funding to local health

departments to address MCH needs through local program implementation. MDE is also a close partner in programs supporting early childhood, school health, and child and adolescent health. MDE and MDHHS have a long history of integrated funding for early childhood, Child and Adolescent Health Centers, Hearing and Vision school-based screenings, and shared state-level positions.

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

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

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

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

The findings from Michigan's needs assessment drove identification of seven state priority needs which were used to select seven NPMs and six SPMs. The alignment between NPMs/SPMs, state priority needs, and population domains is illustrated in the NPM/SPM chart included as a Supporting Document. The needs assessment also identified three "pillars" that apply across Michigan's state action plans.

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

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

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

1. Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity.
2. Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play.
3. Ensure children with special health care needs have access to continuous health coverage, all benefits they are

eligible to receive, and relevant care where they learn and live.
4. Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems.
5. Improve oral health awareness and create an oral health delivery system that provides access through multiple systems.
6. Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities.
7. Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person.

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

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

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

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

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

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

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

In both cycles, the needs assessments suggested gaps in access to healthcare, including physical, mental, behavioral, developmental, and oral health care. They also highlighted the need to expand or enhance key components of the service system for families, including preventive services, early intervention, and services for children with special needs. Both sets of priority needs also highlighted the need to partner with schools and communities to foster safety and wellbeing.

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

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

III.D. Financial Narrative

	2018		2019	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$18,959,000	$18,718,089	$19,193,200	$19,238,763
State Funds	$45,199,700	$33,539,006	$46,999,800	$41,868,576
Local Funds	$0	$0	$0	$0
Other Funds	$500,000	$394,249	$500,000	$763,473
Program Funds	$68,201,100	$62,748,608	$68,309,200	$58,013,859
SubTotal	$132,859,800	$115,399,952	$135,002,200	$119,884,671
Other Federal Funds	$373,642,410	$257,083,069	$381,595,500	$312,150,786
Total	$506,502,210	$372,483,021	$516,597,700	$432,035,457

	2020		2021	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$19,316,300	$18,757,073	$19,415,900	
State Funds	$48,158,300	$45,760,081	$42,008,500	
Local Funds	$0	$0	$0	
Other Funds	$500,000	$560,970	$790,000	
Program Funds	$68,599,500	$54,711,675	$7,868,700	
SubTotal	$136,574,100	$119,789,799	$70,083,100	
Other Federal Funds	$344,942,800	$342,780,969	$315,888,100	
Total	$481,516,900	$462,570,768	$385,971,200	

	2022	
	Budgeted	Expended
Federal Allocation	$19,474,600	
State Funds	$51,089,300	
Local Funds	$0	
Other Funds	$790,000	
Program Funds	$7,897,800	
SubTotal	$79,251,700	
Other Federal Funds	$365,627,200	
Total	$444,878,900	

III.D.1. Expenditures

Financial Narrative Overview

Title V federal funding, in conjunction with non-federal state monies and other federal funds, are obligated and expended to support Michigan's MCH priority needs and Title V requirements. Over one-third of Title V funding supports Children with Special Health Care Needs (CSHCN) and over one-third supports the MCH work of all 45 local health departments across the state. 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), Fetal Infant Mortality Review and BRFSS. 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 2020 and budget plans for FY 2022 are discussed in Sections III.D.1 and III.D.2, respectively.

Expenditures (FY 2020 Annual Report Year)

In FY 2020, 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 81% of Michigan's state match is comprised of state general funds for CSHCS medical care and treatment. The remaining 19% 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 2020 was $560,970. Program Income (Form 2, line 6) includes WIC rebates and newborn screening follow-up.

As illustrated in Form 2, line 9, "Other Federal Funds," Michigan's MCH work was supported by a variety of other federal funds in FY 2020 including: Women, Infants and Children (WIC); State Systems Development Initiative; Title XIX (Medicaid); Oral Health; Vaccines for Children; Epilepsy; and Title X (Family Planning). MCH priorities across the Title V population health domains were supported by federal and state dollars in FY 2020. For example, in the Title V child health domain, a state priority was to foster safer homes, schools and environments with a focus on prevention. Michigan's performance measures for this state priority need focused on safe sleep environments and lead poisoning prevention. Other federal awards helped to support this Title V priority such as the CDC Childhood Lead Poisoning Prevention Program (CLPPP), PRAMS, DHHS Support for Expectant and Parenting Teens, and USDA WIC funding. In the perinatal/infant health domain, a state priority was to support coordination and linkage across the perinatal to pediatric continuum of care. Federal grants such as the CDC Early Hearing Detection and Intervention (EHDI) State Program; HRSA Maternal, Infant and Early Childhood Home Visiting Program (MIECHV); and HRSA Universal Newborn Hearing, Screening and Intervention help support this priority and related work.

30/30/10 Requirement

Michigan tracks expenditures to comply with the Title V 30/30/10 legislative requirements. That is, a minimum of 30% of total funding must be expended for CSHCN; a minimum of 30% of total funding must be expended for preventive and primary care for children ages 1-21; and a maximum of 10% of total funding can be expended for Title V administration. In FY 2020, expenditures were tracked by CSHCN; preventive and primary care for children ages 1-21; pregnant women, mothers and infants; and other. Expenditures track the required amount, variance, percent of total and percent required to assure legislative compliance. In FY 2020, 37.2% of Title V expenditures were for services for CSHCN; 32.2% of expenditures were for preventive and primary care for children 1-21; and 3.2% of expenditures were for Title V administrative costs. The remaining 27.4% 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 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 MCH Pyramid of Services, the LMCH program has specific budget project titles in the Electronic Grants Administration & Management System (EGrAMS). The FY 2020 budget project titles included the following five categories:

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

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

For the 30% children requirement, Michigan tracks related expenditures at the state and local level including immunizations for children and adolescents, oral health services for school-age children, family planning and reproductive health for adolescents 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 were greater or less than 10% of the Annual Report Budgeted, due to the following reasons:

- Line 1C, Title V Administrative Costs, FY 2020 Annual Report Expended, was greater than anticipated due to increase in the indirect rate.
- Line 5, Other Funds, FY 2020 Annual Report Expended, was higher than budgeted because the Children with Special Needs Fund earnings were above the budgeted amount.
- Line 6, Program Income, FY 2020 Annual Report Expended, was lower than budgeted due to WIC rebate earnings less than the appropriation amount.

Local MCH

Title V funding is allocated to each of the 45 local health departments (LHDs) in Michigan through the LMCH program. Each LHD receives a fixed amount of funds, with allocations ranging from $15,490 to $1,709,654. LMCH funds are available to support one or more of the Title V national and state performance measures plus locally identified needs. Each LHD completes a work plan for each selected national, state and/or local performance measure. Activities within the work plan are categorized by the MCH Pyramid of Services.

Table 1 summarizes spending by 45 LHDs in FY 2020 by the MCH Pyramid of Services (i.e., direct, enabling, and public health services and systems). For purposes of reporting to the Michigan legislature, “Children” in Table 1 is defined as children birth-9 years plus adolescents 10-19 years.

Table 1. LMCH Spending by MCH Pyramid of Services

MCH Category	Number of LHDs Selecting	Amount Expended	Number of Clients Served
Direct Services Children	15	$1,248,945	61,702
Direct Services Women	5	$265,511	3,310
Enabling Services Children	27	$998,420	46,787
Enabling Services Women	33	$2,002,492	16,604
Public Health Functions & Infrastructure	33	$1,825,673	32,510
Total		**$6,341,041**	**160,913**

For FY 2020, each LHD was encouraged to select at least one NPM in addition to SPMs and/or locally identified measures. Eight LHDs chose one performance measure, 16 chose two performance measures; 9 chose three performance measures, 4 chose four performance measures; 6 chose five performance measures; 1 chose six performance measures; and 1 chose seven 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 1 (Well-woman Visit)	6	$347,325	2,252
NPM 3 (Risk-appropriate Perinatal Care)	4	$59,074	360
NPM 4 (Breastfeeding)	17	$682,882	5,856
NPM 5 (Safe Sleep)	9	$515,366	3,490
NPM 10 (Adolescent well-visit)	4	$183,930	1,647
NPM 12 (Transition)	4	$80,211	427
NPM 13 (Preventive Dental Visit)	7	$125,196	10,801
SPM 1 (Lead Poisoning Prevention)	14	$648,164	5,497
SPM 2 (Children immunizations)	12	$613,741	19,641
SPM 3 (Adolescent immunizations)	11	$417,613	22,672
SPM 4 (Provision of Medical Services and Treatment for CSHCN)	3	$99,235	497
Local Performance Measure defined by LHD	22	$2,279,577	65,681
COVID-19 response	12	$288,727	22,092
TOTAL		**$6,341,041**	**160,913**

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 418,411. 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 2020 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), a postpartum Long-Acting Reversable Contraceptive (LARC) project, and CSHCS medical care and treatment. Form 5b provides an estimate on the total percentage of populations who received a Title V supported service in each of the MCH population groups across all three levels of the MCH Pyramid of Services (i.e., direct, enabling, and public health services and systems). This estimate includes all individuals and populations served by the total federal and state match as reported in Form 2, line 8. As reported on Form 5b, the Title V program served an estimated 98% of pregnant women, 100% of infants, 41% of children, 41% of CSHCN and 2% of others which includes males and non-pregnant women of childbearing age. CSHCN are reported as a subset of all infants and children, per Title V Guidance, so the same percentage estimated for all children is used for CSHCN. For more details, see Form 5 field notes.

Michigan is exploring ways to expand the reach of Title V. For example, Regional Perinatal Quality Collaboratives (RPQCs) began work in one region of the state in 2015. Currently, nine RPQCs represent all ten Prosperity Regions in Michigan. In FY 2020, seven RPQCs received financial support from Title V and/or state match funds. The RPQCs supported NPM 3 activities and served as regional leaders for implementation of the Mother Infant Health and Equity

Improvement Plan.

Payer of Last Resort

Michigan supports Title V regulations to use Title V funds as the payer of last resort. The comprehensive contract for each local health department includes contractual language which emphasizes this payment structure for programs that provide direct or enabling services to individuals such as LMCH, lead poisoning prevention, 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 2022 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 2022. Funding projections are based on the state's legislatively approved Executive Budget.

Table 1. Title V Appropriations

Appropriation Name	FY 2022 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	$647,200
Administration	$489,300
Dental Programs	$335,400
Sudden Infant Death Syndrome Prevention	$321,300
Pregnancy Prevention Services	$185,500
Bequests for Care and Services	$105,200
Indirect	$90,900
Total	**$19,474,600**

As previously discussed, Michigan's 2020 Title V needs assessment identified a new set of state priority needs and performance measures. Through state-level work and/or local health department activities, it is anticipated that Title V appropriations will be used to directly support activities related to the state-selected National Performance Measures (NPMs) in FY 2022:

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

At the state level, NPMs 4 and 12 do not have direct Title V allocations in FY 2022. These two NPMs—which are housed within the Division of Maternal and Infant Health (NPM 4) and CSHCS Division (NPM 12)—currently have program staff designated to the associated state-level work, supported by state general funds and other federal funds. Therefore, Title V is active in a leadership and implementation role for these NPMs. The Title V program will continue to monitor these NPMs to determine whether additional Title V support is needed in the future.

The annual LMCH Plans for FY 2022 are not available at the writing of this application. In FY 2021, 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. The format of the LMCH plan and workplan changed in FY 2021 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 both the state and local level, Title V funds will also be used to 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 (Pregnancy Intention)
- SPM 6 (Developmental, Behavioral, and Mental Health)

At the state level, these SPMs are supported through the FY 2022 Title V budget and activities discussed in state action plans. It is anticipated that local health departments will also be implementing work on all six SPMs, as indicated in FY 2021 LMCH workplans and expected to be continued in FY 2022 workplans.

The programs and activities that will support work on the above NPMs and SPMs in FY 2022 are detailed in the individual state action plans. LHDs use an MCH Needs Assessment to inform the creation of FY 2022 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 2022 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 2022, this commitment is again reflected in Form 2 (Lines 1A, 1B, and 1C) in the Application Budgeted. For FY 2022, 32.7% 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 3.1% 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 $51,089,300, which is considered the state's applied Maintenance of Effort for Title V, is composed of state general funds for the following appropriations: medical care and treatment for CSHCN; health and wellness initiatives; Family Planning local agreements; prenatal care and outreach; pregnancy prevention services; CSHCS and Family, Maternal and Child Health administration; and non-emergency medical transportation. Most of this match (approximately 80%) is related to medical care and treatment for CSHCN and other CSHCS-related funds. Along with other federal funds, these state MCH dollars provide a critical component of

Michigan's MCH infrastructure. In Form 2, line 5, "Other Funds" reflects income from the Children with Special Needs (CSN) Fund. Michigan's "Program Income" (Form 2, line 6) includes Newborn Screening follow-up. Other federal funds anticipated in FY 2022 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 Title V 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, which focuses on medical care and treatment for CSCHN. The state priority need to "Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities" aligns with the 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, and gender identity." Systems level work is being implemented through the Regional Perinatal Quality Collaboratives and other systems work that focuses on core public health services.

Form 5

The total Federal-State partnership funding is carefully 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 Medical Services Administration, serves as the Title V CSHCN program. The Title V leadership team includes the Title V MCH director, the Title V CSHCN director, the Child and Adolescent Health Division director, and Title V administrative staff. A Title V steering committee includes managers and program staff who represent each of Michigan's national and state performance measures. Title V activities and services in Michigan align with the broader national purpose of Title V, including:

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

To achieve these and other MCH goals, Michigan's MCH programs serve as coordinators and conveners of initiatives and partnerships that support and guide the MCH work. 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. Michigan's Title V MCH director also serves on the AMCHP Health Equity Committee to help advance health equity work at both the state and national level.

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

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

Leadership Network; and administers the Family Phone Line, which provides support and information to families of children with special health care needs.

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, mental health and substance use, chronic disease, communicable disease, injury prevention, child welfare, public health preparedness and others. Title V is also part of the interdepartmental Great Start Operations Team (GSOT) to address early childhood services integration and coordination. The GSOT convenes MDHHS, the Department of Education, the Early Childhood Investment Corporation and other partners to provide strategic direction and systems-building expertise for programs that serve Michigan's young children and their families.

Title V Framework

Michigan’s Title V program recognizes that a wide range of factors shape health outcomes, including health and social context. Therefore, 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” and are 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. For example, 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 of further strengthening health equity strategies within plans. 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 identified in 2020, which include improving maternal and infant health outcomes; reducing childhood lead exposure; expanding the state's safety nets; addressing social determinants of health; integrating services to serve the whole person; reducing opioid and substance use-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 current 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 content expertise, as well as strong program management skills. Michigan's MCH programs include a range of personnel, including public health consultants, epidemiologists, departmental specialists, and program managers, who carry out the state's MCH work. Assessment of workforce trends and the evolving MCH landscape help to identify areas of need. For example, expertise in health equity and outcomes-based programming is a critical component of MCH. Additional information related to the MCH workforce, as gathered through the 2020 needs assessment, are included in the Five-Year Needs Assessment Summary.

From March 2020 until January 2021, a hiring freeze was in effect for state positions due to the COVID-19 pandemic. Since the hiring freeze was lifted in January 2021, MCH program managers have been working to backfill critical MCH positions. For example, in the Division of Maternal and Infant Health (DMIH), three positions have been filled including the Women and Maternal Health Section manager, Reproductive Health Unit manager, and DMIH Contract Specialist.

Recruitment and Retention of MCH Staff

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

- **Director, Division of Maternal and Infant Health**, serves as Title V MCH director and 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 Family Center, CSHCN program and policy, and provision of medical care and treatment for CSHCN.
- **Director, Family Center for Children and Youth with Special Health Care Needs,** leads a statewide comprehensive family resource center utilizing a family-centered care model, in which all Family Center staff are parents of a child(ren) with a special health care need.
- **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, 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 and coordination of Title V local MCH funding to 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 funded completely 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 due to a retirement and is expected to be filled in 2021.

In addition to positions that provide administrative support to the block grant, Title V funding also supports positions that provide programmatic support to MCH and CSHCN programs. Title V supports part of an Oral Health 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, 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 and aligns with the MDHHS core values of (HOPE) Human Dignity, Opportunity, Perseverance and Ease. REDI will inclusively lead with race and intersectionality to identify and address the policies and practices that have resulted in systemic oppression that impacts all marginalized groups” (MDHHS Intranet). 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.

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

Training and 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 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 (neuroscience, epigenetics, ACEs and resilience) 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 frequently available to staff. MDHHS launched “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. CSHCS was accepted into the 2020 MCH Workforce Development Center's learning cohort opportunity. As part of the cohort, CSHCS leadership, staff and an expanded MDHHS team obtained access to a range of tools to help CSHSC apply a health equity and family-centered lens to the comprehensive CSHCS program evaluation project. 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 also continued its participation in Boston University's Care Coordination Academy in FY 2021. 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.

In FY 2021, three CSHCS staff members participated in the MCH Leadership Lab. The Leadership Lab provides a unique 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. A Family Center staff member participated in the Family Leaders Cohort; a Quality Program Services staff member participated in the MCH Epi Peer-to-Peer Cohort; and a Policy and Program Development staff member participated in the Next Generation MCH Leaders Cohort.

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 have been made available for DMIH staff as well as Title V affiliated programs through a contract with the MPHI Center for Health Equity Practice. Trainings focus 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.
- 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).
- Maternal Infant Health and Equity Updates are shared on a regular basis (at least twice monthly) via a listserv that is distributed to over 6,800 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 also occur through the quarterly Mother Infant Health and Equity Collaborative meetings. Recent meeting topics have focused on efforts of individual birthing hospitals and 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 2020 Summit included presentations on Racism and Birth Disparities, Perinatal Mental Health, Addressing Addiction in Pregnant Women, and the Mandate for Maternal Equity and Justice. The 2021 Summit will be held in June 2021 on a virtual platform, with the theme “Raise Your Voice!”.

- In 2020, the Division of Child & Adolescent Health formed an internal Health Equity and Social Justice (HESJ) Workgroup that meets 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.

Beyond these trainings, MCH staff participate in a wide range of conferences and professional development opportunities. For example, MDHHS hosts annual conferences attended by MCH staff and statewide partners, including the CASH Conference, WIC 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 continues to host an annual meeting for the Family Leadership Network. Each year, the CSHCS Division also invites a parent to attend a Division meeting to share their family’s story with staff, which is a powerful way for staff to see the impact of their work. CSHCS provides regular workforce development opportunities for LHDs through annual meetings, regular technical assistance, monthly calls and the CSHCS LHD Advisory Committee.

Staffing Structures and Workforce Financing

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

MDHHS also has a unique partnership with the Michigan Public Health Institute (MPHI). MPHI is a non-profit corporation established by Public Act 264 of 1989 to advance health in the state. Services include project management, program development, evaluation, and research. Several of Michigan’s MCH programs work closely with MPHI, especially via the Center for Healthy Communities and the Center for Health Equity Practice. Projects have included the 2020 Title V needs assessment, the 2020 Maternal Infant Early Childhood Home Visiting (MIECHV) needs assessment, the 2017 local health department 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 3,602 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 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 solutions which was in turn 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 and language and considering those factors in program development and service provision. Ultimately, understanding unique family and community needs helps to improve outcomes and eliminate service barriers.

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

- The Early Hearing Detection and Intervention (EHDI) program utilizes the Michigan Hands and Voices (MHV) Guide By Your Side™ (GBYS) program. GBYS enables families who recently learned of an infant's or child's hearing loss to meet with parents of a child who is deaf or hard of hearing. Arabic and Spanish speaking guides are also available to meet with families. MHV recently initiated Deaf/Hard of Hearing (D/HH) mentor and family guide programs. Families are involved in updating EHDI materials, which are available in Spanish and Arabic. Efforts to promote health equity include diverse parent representation on advisory committees and members who are D/HH, along with parents of infants and children who are D/HH. Parents share their family stories at EHDI hospital site visits, trainings and early intervention meetings. Parents are engaged with two EHDI learning collaboratives to share their unique perspectives. EHDI also sponsors an annual scholarship for 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 routinely involve parents as parent educators and speakers. MDHHS is convening Action Committees aligned with the priorities of the Mother Infant Health and Equity Improvement Plan. The Infant Safe Sleep Action Team has four parent members. The ISS Program is also supporting a project being implemented by First Candle. First Candle is convening Community Task Forces comprised of public health providers, social service agencies, doulas, WIC, religious leaders and parents to host listening sessions to explore families' barriers to adopting safe sleep guidelines.
- The Parent Leadership in State Government (PLISG) initiative is an interagency effort to recruit, train and empower parents to be change agents who help shape programs and policies at the state and local level. When parents are engaged as partners and leaders, programs and services better meet family needs, make services more effective, increase fiscal responsiveness and lead to more equitable outcomes. Since 2007, several state agencies (including MDHHS) have collaboratively funded the PLISG, which includes Title V funding. The PLISG Advisory Board includes representatives from funding agencies plus at least 51 percent parents of children ages birth-18 who have been or are eligible to utilize specialized public services. A primary role of the PLISG is to deliver the "Parents Partnering for Change" leadership training (PPC). Training topics include leadership skills; how to use your voice to tell your story; effective meetings; and handling conflict. Since 2008, 1,405 parents have participated in the training. In 2019, PPC participants reported utilization of the following MCH-related services: WIC 60.7%; food assistance 52.4%; Healthy Kids 27.4%; Healthy Kids Dental 34.5%; MI Child 46.4%; and home visiting 14.3%. Due to the COVID-19 pandemic, updates were made to the training to ensure that the curriculum could be delivered in an online platform. To date, three online trainings have been provided.
- The MDHHS Home Visiting Unit has integrated parent and caregiver involvement into federally funded

(Maternal, Infant, and Early Childhood Home Visiting) and state-funded home visiting initiatives. Communities convene a home visiting Local Leadership Group (LLG) which is comprised of representatives from Head Start, substance abuse, child abuse and neglect councils, public health, mental health, education, Great Start Collaborative staff, and parents, who have participated in home visiting. Parents participate in quality improvement teams within LLGs and local home visiting programs to help ensure the consumer voice is part of decision-making and policy development. Michigan has also recently initiated and convened a Home Visiting Advisory, a broad stakeholder group, designed to advise on building a comprehensive and coordinated home visiting system. At least 20% of members must be parents of children ages five or younger who have or who are currently receiving evidence-based home visiting services. Michigan is building parent voice into state level home visiting initiatives to ensure parents are partners in policy and programming decisions, beginning with discussions on a statewide centralized access system kicking off in spring 2021.

- 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 but are not limited to the following: Children's Special Health Care Services Advisory Committee; Early Hearing Detection and Intervention (EHDI) Advisory Committee; Family Leadership Network; Infant Safe Sleep Action Committee; Michigan Maternal Mortality Surveillance Committee; Michigan Oral Health Coalition; and Regional Perinatal Quality Collaboratives.

Children's Special Health Care Services (CSHCS) uses a multifaceted approach to ensure services reflect the needs of the children with special health care needs (CSHCN) population. A critical component of administering services is the intentional involvement of families of children and youth with special health care needs (CYSHCN) in decision making. To achieve this goal, CSHCS works closely with the 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 the CAC comprised by 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 physically housed in the CSHCS Division, the Family Center provides a real and tangible reminder to program staff of the importance of its mission and goals. As such, the family perspective is integrated at all levels of the program. The Family Center has supported family members from the CAC and the CSN Fund to attend AMCHP's annual conference. Sharing and promoting leadership opportunities within Michigan is an important role of the Family Center. 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 CSCHS Division Director will also attend AMCHP's Annual Conference which is being held virtually in 2021. Additionally, the Division Director (who is also the Title V CSHCN Director) is an active member on the AMCHP Family Leadership, Education, and Development (Family LEAD) Committee.

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 also 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, which enables the Family Center to have a broader reach when seeking out mentor matches for parents in Michigan. Our 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. These parent-to-parent connections provide emotional and informational support to parents throughout Michigan.

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. Michigan Family to Family and the Family Center are exploring the implementation of the Telehealth Curriculum created by the national Family Voices.

In addition, 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. In FY 2021, the Family Center is 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.

These include 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. Families that attend and participate in the meetings make decisions on 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.

For the first few months of the COVID-19 pandemic, much of the MCH Epi workforce was pulled away from regular duties to assist with the state's COVID-19 response. Most staff have since returned to normal job duties and have learned new skills due to the pandemic response (e.g., testing coordination with providers, contact tracing, and the use of ArcGIS to determine testing sites and vaccination clinics) which have strengthened the MCH Epi workforce and can be used in the future.

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 national and state 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, and COVID-19 mortality. 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 Program, 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 the Title V program, providing data analysis and support for needs assessments, annual reports/applications, performance measure reporting, 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)

The Infant Health Epidemiologist position is currently being filled. This position 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. 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. Data from these reports are also 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. 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. Many ACE indicators that are generated through this work may be included in future Title V work plans for the Child and Adolescent Health Domains. 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. Both 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)

Cristi Bramer, MPH, started as the VPD Epidemiologist in January 2009. Cristi received her MPH from Eastern Virginia Medical School in 2007. As the VPD Epidemiologist, Cristi is responsible for analyzing, interpreting, and disseminating data from the Michigan Care Improvement Registry (MCIR) to identify pockets of need; immunizations levels by antigen; and other analyses or produce 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. Hannah received her PhD from Michigan State University in 2018. As a MCIR Epidemiologist, Hannah 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 Kunyangna, 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 sources.

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)

Elizabeth Vickers, MPH, started as a CLPPP Epidemiologist in April 2018. Elizabeth received her Master's in Public Health from the University of Michigan in 2014. As the CLPPP Epidemiologist, Liz 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)

As of March 2021, the WIC Epidemiologist position is vacant, but interviews are being conducted to fill this vacancy. This position 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

Continuing to identify and develop new data sources, improve data quality, effectively measure health outcomes, and develop stronger MCH performance metrics remain important components of Michigan's MCH work. 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 epi 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.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 regularly with core Title V staff to ensure that epidemiologic needs are being met. Epidemiologists within the MCH Epidemiology Section work closely with Title V staff to provide epidemiologic support to ongoing Title V needs assessment activities and regularly review and update performance measures and annual objectives.

The MCH Epidemiology Section took on an expanded role for the Title V five-year needs assessment that was completed in 2020. The CASH Epidemiologist pulled current data for a multitude of MCH indicators, developed criteria for prioritizing indicators, and presented data for these prioritized indicators at the Title V needs assessment population domain workgroup meetings. These activities helped to lay the groundwork for establishing Michigan's new Title V state priority needs, national performance measures, and state performance measures for the current five-year grant cycle. The data presented at the population domain workgroup meetings can be found within the Michigan Title V Maternal and Child Health Needs Assessment Report that was submitted with the Title V MCH block grant in 2020. 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 a data sharing agreement with DVRHS which allows for direct access to these data files. The Michigan Pregnancy Risk Assessment Monitoring System (PRAMS) is housed within the MCH Epidemiology Section and is routinely used for performance monitoring within Title V, as well as the Mother Infant Health and Equity Improvement Plan. Furthermore, access 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. Barriers that currently prevent these linkages from being established are documented and discussions with data owners are conducted to resolve barriers.

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 infant mortality, preterm birth, low birthweight, prenatal care, and neonatal abstinence syndrome statistics for the State of Michigan.
- The Preventable Mortality Epidemiologist is responsible for the 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 different 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.
- 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 activities.

Shortly after the COVID-19 pandemic hit Michigan, the MCH Epidemiology Section was tasked with setting up a COVID-19 mortality review process for the State of Michigan. SSDI funds are being used to 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 is being used to support the COVID-19 Project Coordinator and Case Abstractors in their case abstraction, case summary development, and review committee coordination activities.

The MCH Epidemiology Section 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

Medicaid, CSHCN, and PRAMS as well as 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. 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 lead to 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.

Over the years, Michigan has been able to develop a very strong MCH epidemiology workforce but 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.

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

The State of Michigan and the Michigan Department of Health and Human Services (MDHHS) recognize the importance and necessity of strong emergency planning. Over the past year, the COVID-19 pandemic has illuminated 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; 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.

Recently, 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 has included contact tracing and vaccine distribution.

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 also worked within the Medical Services Administration on the formulation of policies

and procedures that assured 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 assure 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 assure 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.

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.

CSHCS also reached out to the Emergency Preparedness and Response Division. As part of the Risk Communications Team, the Whole Community Inclusion Plan for LHDs was created for the purpose of expanding their reach to at-risk populations within their jurisdiction, including CSHCS. The goal is to bring these at-risk groups to the table regarding emergency preparedness planning and to develop an exercise to test the system's capabilities. In addition, to assure that CSHCS clients are addressed at the local level, CSHCS is working with the Emergency Preparedness and Response Division to draft an emergency plan which is modelled after the WIC plan to help provide LHD local partners with important information about CSHCS processes and priorities during an emergency. This plan will be vetted through the local network.

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. Most Title V programs are administered by the DMIH, DCAH, and CSHCS. Collectively, these three divisions provide health services across the Title V population domains and work with internal and external partners to support a statewide system of services to deliver comprehensive, community-based care. Internal MDHHS partners include the following:

- Behavioral Health
- Child Welfare Services
- 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
- MCH Epidemiology
- Medicaid
- MIECHV
- Newborn Screening
- State System Development Initiative
- Substance Abuse Prevention
- Support for Pregnant and Parenting Teens
- Title X Family Planning
- Vital Records
- WIC

Many of these partnerships are described throughout 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 target populations with 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 Michigan Department of Licensing and Regulatory Affairs. MDE is a close 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, Child and Adolescent Health Centers, Hearing and Vision school-based screenings, and shared state-level 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 evaluation, pilot projects, training, and linkages to service recipients. They are described in the Needs Assessment Summary.

Strengthening Integration of Health Care Delivery

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

Maternal and Infant Health

- The High Touch, High Tech (HT2) program provides an electronic screening tool based on evidence-based Screening, Brief Intervention and Referral to Treatment (SBIRT) implemented in prenatal care clinics. The tool is used for universal screening prior to obstetric intake appointments, with subsequent linkage to services and treatments. 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 has been developed using current literature. The 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 reduce and 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 currently 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 within the hospitals' birthing units. This family-centered model encourages mother-infant bonding and utilizes non-pharmacological care of infants born substance-exposed, ensuring they remain with their mother and/or caregiver in a private hospital room that is less stimulating for the infant. Hospital staff provide support related to breastfeeding, skin-to-skin contact, calming techniques, and referrals.
- In September 2020, a Data Sharing Agreement was established between Fetal Infant Mortality Review (FIMR) and WIC for local FIMR abstractors to obtain WIC appointment records for FIMR cases. The records are abstracted and included in de-identified case summaries to be reviewed by the local FIMR Case Review Team. The records provide a better understanding of the care received and circumstances surrounding a death.
- 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.

Child and Adolescent Health

- MIECHV and state funded home visiting programs are expanding to address state priorities including

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 programs. 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.

- The Expanding, Enhancing Emotional Health (E3) model helps to address the state's substantial need for mental health services. E3 programs provide on-site comprehensive mental health services from mild to moderate severity of need. Services include assessments, brief intervention, ongoing therapy, referrals, and follow-up. E3 sites are open year-round and provide tele-health 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. The E3 program currently reaches 36 counties through 68 sites, with expansion plans underway.

CSHCN

- In partnership with Michigan Medicine's Partners for Children program and the Michigan Health Endowment Fund, CSHCS is exploring a palliative care benefit to improve health outcomes and decrease costs associated with children with medical complexity (CMC). The Advancing Care for Exceptional (ACE) Kids Act is anticipated to create opportunities to enhance this partnership and improve systems of care for CMC.
- 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.
- The Family Center launched two virtual series in FY 2021: one for families that provides information on challenges such as transition to adult providers, and one for professionals that provides information on the Family Center and its support services.
- In FY 2021, CSHCS and the Family Center launched a bullying prevention initiative aimed at decreasing bullying toward CSHCN. The initiative will offer a grant opportunity to local school districts to implement a peer-to-peer support program for CSHCN. Focus groups with caregivers of CSHCN will be held through the Family Leadership Network.
- In response to the Title V Needs Assessment and feedback from the CSHCS Advisory Committee, CSHCS convened an interagency collaboration to identify challenges to accessing services by populations served by CSHCS and mental/behavioral health. A work plan will guide development of tools for families, education for staff, and resources for CSHCS LHD staff to improve care coordination.

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

MCH programs and the Medical Services Administration (MSA), 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. Example of MCH collaborations with Medicaid, Medicaid Health Plans (MHPs), local health departments (LHDs), and community providers include the following: maternal and infant care and services; child and adolescent health; perinatal and postpartum care; Children's Special Health Care Services (CSHCS); foster care; dental care; and home visiting programs. Key partnerships are discussed in this section.

The Managed Care Plan Division (MCPD) in MSA 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 2020, MIHP provided services to 12,187 women and 17,076 infants. The goal of MIHP is to promote healthy pregnancies, positive birth outcomes and healthy infant growth and development with the long-term goal of reducing infant mortality and morbidity. MIHP is jointly managed by the Division of Maternal and Infant Health (DMIH), the MCPD, and the Medicaid Policy and Program Division (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.

Since FY 2013, most individuals with both CSHCS and Medicaid coverage are enrolled in an MHP. In March 2021, CSHCS program numbers indicate that 26,949 (64.8%) of CSHCS beneficiaries are enrolled in an MHP. 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 Children's Multidisciplinary Specialty 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 2019, CSHCS's contract with MHPs included new language encouraging MHPs to discuss medical transition with clients transferring from pediatric to adult health care. In 2020, CSHCS completed virtual site reviews focusing on transition, family engagement, durable medical equipment, and grievance and appeal.

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. In July 2018, MDHHS expanded managed care dental coverage for non-Healthy Michigan Plan Medicaid eligible pregnant women through a Comprehensive Health Care Program 1915(b) waiver amendment. This benefit provides greater access to dental services and comprehensive prenatal care. MCH and MSA 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 dental provider networks.

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

- *Adult Medicaid Quality: Improving Maternal and Infant Health Outcomes in Medicaid and CHIP.* This grant collects and reports data on the "Use of Contraceptive Methods in Women" measure. The goal is to increase

the use of effective methods of contraception among all women in Medicaid and CHIP to improve pregnancy planning and birth spacing.

- *Medicaid Low Birth Weight (LBW) Health Equity Pay for Performance Project*. In 2017, Medicaid identified racial disparities in LBW as a multi-year MHP Pay for Performance Project. The MCPD identified that LBW rates for black women and babies in Medicaid managed care were higher than for white women and babies in Medicaid managed care in the same regions. The initiative requires MHPs in specified regions to address the racial disparity, regardless of health plan membership of the beneficiaries.
- *Maternal Infant Health Program* (*MIHP) Evaluation:* Researchers from the University of Michigan Youth Policy Lab are evaluating alternate payment methodologies for MIHP to determine if additional resources, support and focused effort to address the social determinatns of health will lead to improved outcomes for enrolled families.
- *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.
- *Perinatal Opioid Use Disorder*: Beginning in January 2020, Regional Perinatal Quality Collaborative (RPQCs) efforts related to perinatal substance use disorder (PSUD) were funded by Blue Cross Blue Shield (BCBS) Foundation. These 18-month projects focus on innovative approaches to the prevention of and response to PSUD, including rooming-in programs for babies born with Neonatal Abstinence Syndrome; creating a resource webpage for pregnant and parenting people with SUD; incorporating SUD resources into CenteringPregnancy models of care; and expanding universal prenatal screening for mental and behavioral health. While the projects are funded by BCBS, the resulting services and resources can be utilized by and will benefit individuals regardless of insurance type (including Medicaid beneficiaries, privately insured families, and uninsured families).
- *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 created a work plan to develop tools for families, provide education, and create system navigation resources for LHDs and community mental health staff. Current work includes developing a webinar to explain both systems, publishing a glossary for families to assist in health care literacy, and exploring policy priorities.
- *Lead Poisoning Prevention Projects:* Medicaid and CLPPP partner on three 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.

The Title V/Medicaid agreement is contained within the Medicaid State Plan (Section F. Medical Assistance and Title V Projects). Based on discussion between Title V leadership and MDHHS legal counsel, it was determined that the existing document broadly outlines the relationship between the two entities which are both housed within MDHHS.

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—on Michigan's Title V MCH priority areas. Per Title V requirements, the state action plans are organized within five population domains: women/maternal health; perinatal/infant health; child health; adolescent health; and children with special health care needs (CSHCN). Michigan also created 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 2022 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. States are also required to provide FY 2020 annual reports on all "continuing" measures as well as "retired" measures (the latter are indicated below with an asterisk) from the previous five-year cycle. Therefore, FY 2020 annual reports are provided for the following NPMs and SPMs:

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

Annual reports are based on previous state action plans and may contain different objectives and strategies than current plans. Methodologies for the NPM annual objectives are included in the Supporting Documents.

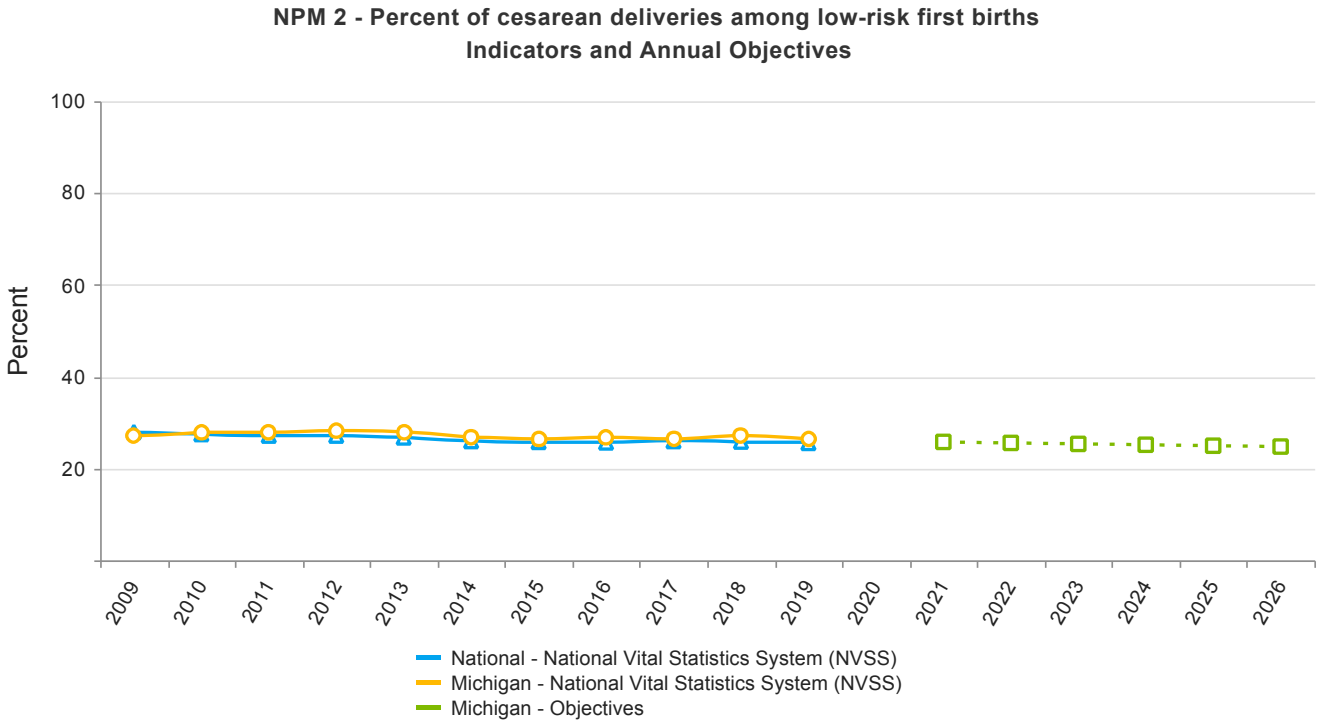
Lastly, each domain includes a brief introduction that provides broader context to the domain; population health data related to the domain; and information on how local health departments (LHDs) utilized Title V funding in FY 2020 to address national and state performance measures. In addition to Michigan's identified NPMs and SPMs, 21 LHDs selected a local performance measure which collectively accounted for 40.4% of total LMCH expenditures. Additionally, in FY 2020 many LHDs had to divert or postpone some planned activities to respond to the COVID-19 pandemic and/or operated under varying capacity during the pandemic.

Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2018	76.2	NPM 1 NPM 2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2015_2019	16.7	NPM 1 NPM 2
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2019	8.7 %	NPM 1
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2019	10.3 %	NPM 1
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2019	26.2 %	NPM 1
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.2	NPM 1
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.2	NPM 1
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.0	NPM 1
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	2.2	NPM 1
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	230.8	NPM 1
NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy	PRAMS-2015	6.2 %	NPM 1
NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations	SID-2018	6.8	NPM 1
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2018_2019	10.6 %	NPM 13.1
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	17.2 %	NPM 13.1
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	89.4 %	NPM 13.1
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2019	15.1	NPM 1
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth	PRAMS-2019	14.8 %	NPM 1

National Performance Measures



Federally Available Data		
Data Source: National Vital Statistics System (NVSS)		
	2019	**2020**
Annual Objective		
Annual Indicator	27.3	26.5
Numerator	9,510	9,054
Denominator	34,845	34,117
Data Source	NVSS	NVSS
Data Source Year	2018	2019

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	25.8	25.6	25.4	25.2	25.0	24.8

Evidence-Based or –Informed Strategy Measures

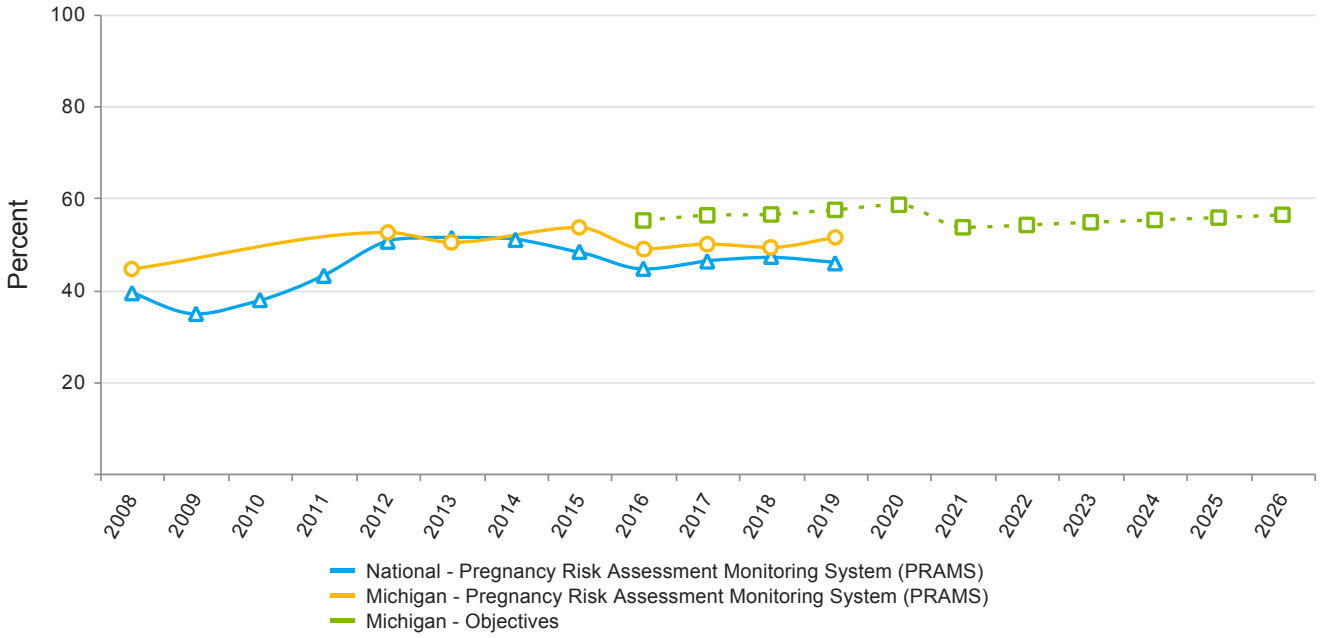
ESM 2.1 - Number of birthing hospitals participating in Michigan AIM

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	68	50
Numerator		
Denominator		
Data Source	Michigan AIM/Michigan Hospital Association	Michigan AIM/Michigan Hospital Association
Data Source Year	2019	2019
Provisional or Final ?	Final	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	72.0	74.0	76.0	78.0	80.0	79.0

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



Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	55.1	56.2	56.4	57.4	58.5
Annual Indicator	50.3	53.6	49.8	49.2	51.3
Numerator	54,731	57,883	53,356	51,874	53,228
Denominator	108,763	108,083	107,079	105,470	103,825
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2013	2015	2017	2018	2019

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	53.6	54.1	54.7	55.2	55.7	56.3

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

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	430.0	450.0	470.0	490.0	510.0	520.0

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

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	40.0	41.0	42.0	43.0	44.0	45.0

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
Annual Objective		
Annual Indicator	57.2	59.8
Numerator	59,915	61,665
Denominator	104,673	103,197
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	59.8	60.9	61.9	63.0	64.0	65.0

State Action Plan Table

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

Priority Need

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

NPM

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

Objectives

A) By 2025, reduce the percentage of cesarean deliveries among all Michigan low-risk births to 27%

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

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) Partner with MPHI to train 100 clinicians on bias and equity B3) Provide ongoing bias and equity training to MI-AIM Steering and Operations Committee members B4) Launch Maternal Infant Health (MIH) Health Equity Action Committee B5) Provide ongoing education and training regarding bias and equity for the Michigan Maternal Mortality Surveillance 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 women and infants to equitable oral health care services

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

Strategies

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

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

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

NOMs

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

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

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

SPM

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

Objectives

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

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

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

Strategies

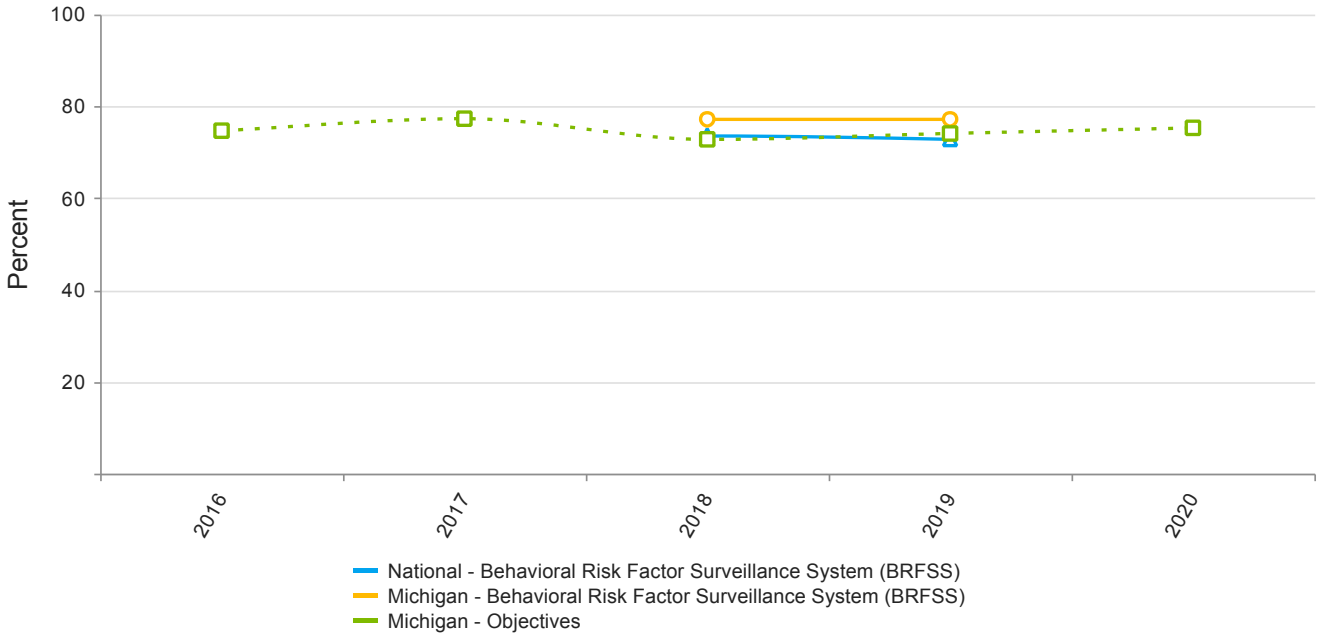
A1) Support the provision of contraception to low-income, uninsured, and underinsured women in the Family Planning Program A2) Facilitate long-acting reversible contraceptive (LARC) training opportunities for Title X and other health care providers A3) Support the integration of telehealth as a service delivery tool across Family Planning's network A4) Translate regional learning session findings into action for women of reproductive age A5) Convene at least one training for 50 health care professionals on systemic racism and reproductive health

B1) Support at least 10,000 minors' and young adults' (i.e., 18 to 21 years old) access to publicly funded contraception B2) Translate regional learning session findings into action for minors and young adults B3) Obtain youth input on Family Planning's website content

C1) Discuss reproductive life planning with at least 25,000 women in the Family Planning Program C2) Support the Maternal Infant Health Action Committee aimed at optimal birth spacing and healthy weight babies C3) Apply a reproductive justice framework within Family Planning and related maternal and infant health projects

2016-2020: National Performance Measures

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



Federally Available Data					
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective					75.2
Annual Indicator				77.2	77.2
Numerator				1,288,214	1,282,777
Denominator				1,668,506	1,661,307
Data Source				BRFSS	BRFSS
Data Source Year				2018	2019

Previous NPM-1 BRFSS data for survey years 2015, 2016 and 2017 that was pre-populated under the 2016, 2017 and 2018 Annual Report Years is no longer displayed since it is not comparable with 2018 survey data.

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

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

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		61.3	62.3	63.3	64.3
Annual Indicator	60.3	64.3	66.2	58.4	59.9
Numerator	846,111	914,885	936,099	830,851	841,079
Denominator	1,404,213	1,423,068	1,413,029	1,422,036	1,404,555
Data Source	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

Women/Maternal Health Overview

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

At the local level, in FY 2020 LHDs expended Title V funds on activities to support well-woman visit (NPM 1), oral health for women (NPM 13) and former SPM 3 (depression across the life course). Six LHDs worked on NPM 1 by providing gap-filling direct services for reproductive services, cancer screening, STD testing and reproductive education. LHDs also completed outreach, media campaigns and surveys to community partners related to postpartum visits prior to the COVID-19 pandemic. LHDs expended LMCH funds on oral health services for women by educating clients on oral health benefits and referring for services. Three LHDs expended funds on mental health initiatives including staff development and gap-filling depression screening for women.

Michigan's approach to women's health emphasizes improving access to health services for this population, including reproductive and oral health services, based on the concept that access to care can be preventative across a variety of health needs. In 2019, Black mothers in Michigan experienced twice the risk of severe maternal morbidity (321.1 per 10,000 delivery hospitalizations) as White mothers (158.1 per 10,000) (MDHHS, 2019). Similarly, pregnancy-related mortality (11.3 per 100,000 live births, MDHHS, 2017) is lower in Michigan than the national average (17.3 per 100,000, CDC, 2017) but the risk among Black women (21.3 per 100,000) is much higher than among White women (8.9 per 100,000). The disparity in the rate that Black and White Michigan mothers undergo low-risk cesarean births has moved from parity (in 2013) to 11% higher in Black mothers (MDHHS, 2018). Black mothers were also 1.8 times as likely as White mother to report their most recent pregnancy was mistimed or unwanted (PRAMS, 2018). These disparities have led Michigan to place greater focus on understanding and addressing the conditions that place non-Hispanic Black women at greater risk for adverse health outcomes, including disease and death before and after childbirth.

Although surveillance data tends to focus on indicators of a healthy pregnancy and healthy infant, wellness in pregnancy and at birth reflect women's health status prior to conception. While 8.3% of US infants (NVSS) and 8.8% of Michigan infants born in 2019 were born with a low birth weight, 14.5% of babies born to non-Hispanic Black mothers in Michigan had a low birth weight (MDHHS, 2019). Similarly, while 10.2% of US infants (NVSS) reported in 2019 were born preterm, the percentage was much higher among Michigan's non-Hispanic Black mothers (14.4%) (MDHHS). These data suggest that Michigan is far from achieving equity in health among women; improving women's health status must focus on addressing the conditions that lead to disparate outcomes for Black women and their infants. Another trend in Michigan is the dramatic rise in rates of infants born with neonatal abstinence syndrome, which increased from 2.0 per 1,000 in 2008 to 7.6 per 1,000 in 2016 (which represents a slight decline from the 2015 peak of 8.5 per 1,000) (MDHHS). Partners at the state and local level have been designing and implementing strategies to understand and address this crisis.

Well-Woman Visit (FY 2020 Annual Report)

In 2020, MDHHS focused on strategies to maintain access to reproductive health services and improve the quality of family planning counseling and access to long-acting reversible contraceptives (LARCs). Michigan's Family Planning network used telehealth services to ensure access to contraception while limiting exposure to COVID-19 for staff and clients. Telehealth visits were delivered directly to clients by telephone, video, or messaging technologies. Telehealth by telephone was more widely used to support client access to reproductive health care because it removed the need for high-speed internet access and a smartphone. Following a telehealth visit, clients could receive their birth control by mail (i.e., pill, condoms), "curbside pick-up" (i.e., pills or shot), or at a local pharmacy. Offering telehealth allows in-person clinic visits to be prioritized for provider dependent methods such as LARCs and high-risk clients needing examination. COVID-19 has adversely impacted Michigan's Family Planning Program by stalling provider recruitment efforts and delaying new sub-recipient implementation of Title X services. Similarly, MDHHS was unable to host its annual LARC clinical practicum due to COVID-19 health and safety guidelines. The Michigan Collaborative for Contraceptive Access (MICCA) demonstration project was able to improve LARC access with five of the eight hospital sites successfully launching immediate postpartum LARC services. MICCA emphasized the importance of patient-centeredness and equity in contraceptive quality improvement efforts.

The Family Planning Program engages consumers by soliciting their feedback through state and local client satisfaction surveys and participation on state and local Advisory Boards. Youth voice is incorporated into policies, programs, and practices by collaborating with Michigan Youth Voice, a statewide youth council coordinated by the Michigan Organization on Adolescent Sexual Health. 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 81% to 84% by 2020.

Having access to a broad range of effective contraceptive methods allows each woman the opportunity to choose the method that is right for her to successfully delay or prevent pregnancy. In 2020, 79.6% of female Family Planning clients aged 15 to 44 years old chose a most (i.e., sterilization, vasectomy, or LARC) or moderately effective (i.e., pills, patch, ring, cervical cap, or diaphragm) method, with 14.7% choosing LARC. MDHHS did not meet its ambitious target of 84%. The integration of approximately half of Family Planning and STD clinics has resulted in more comprehensive services for clients, while at the same time, has increased the number of females aged 15 to 44 who report male condoms as their primary method of contraception. In FY 2020, 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 women who often face multiple barriers (e.g., financial, transportation, paid leave, etc.) to contraceptive care (which was exacerbated by COVID-19) is critical for women to be able to make informed decisions about their reproductive health. In FY 2020, MDHHS's Family Planning Program served 24,908 clients, 91% were female, 61% were low-income (≤100% federal poverty level (FPL)), 86% were working poor (≤100% - 200% FPL, underinsured), and 35% were uninsured.

To promote Michigan's Title X network, MDHHS implemented a statewide outreach/media campaign from January 2020 to March 2020. The statewide media campaign was designed to raise awareness of Family Planning clinics and to direct individuals to MDHHS's Family Planning website to find a clinic location near them. The campaign was administered in high infant mortality communities (above the state rate) and prioritized low-income, uninsured, men and women aged 20-35 years old, with an emphasis on reaching Latinx and African American populations. Multiple modalities were used such as audio streaming (e.g., Spotify), Digital (e.g., mobile web/Hispanic mobile), social (i.e.,

Facebook, Instagram), and Google Adwords. Based on Google Analytics, MDHHS's Family Planning website traffic increased significantly during the campaign period. Social media posts using the family graphic drove 53% of click traffic. The click-thru-rate for most of the modalities exceeded industry standards.

During FY 2020, Title V funds supported the Michigan Collaborative for Contraceptive Access (MICCA), a statewide learning collaborative formed in partnership with MDHHS, the University of Michigan and the Michigan State University's Institute for Health Policy with an overarching goal to accelerate the integration of evidence-based peripartum contraceptive services into routine clinical practice in Michigan. This two-year demonstration project assisted eight Michigan hospitals to implement immediate postpartum LARC services. MICCA employed techniques from the field of implementation science to help hospitals select evidence-based implementation and evaluation strategies using an evidence-based implementation toolkit, technical assistance, and infrastructure for peer mentorship to support hospitals' local efforts. Additionally, MICCA emphasized the importance of patient-centeredness and equity in contraceptive quality improvement efforts. Five of the eight sites successfully launched immediate postpartum LARC services and four sites were able to report utilization data with an average utilization of 8%. Common implementation barriers were non-reimbursement by commercial payers, difficulty engaging operations staff, and inadequate infrastructure. Facilitators of success were effective clinical champions and implementation planning and evaluation tools. The MICCA demonstration report and Implementation Toolkit are available at the Michigan Contraceptive Access Project MCAP website.

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 federal and state COVID-19 health and safety guidelines, MDHHS moved the 2020 Family Planning Update from an in-person to a virtual event on September 16-17, 2020. As such, implementing the hands-on component of the clinical practicum was not feasible. The Conference Planning Committee cancelled the LARC clinical practicum and moved to assessing its provider network's training needs for Calendar Year (CY) 2021. MDHHS surveyed its 33 local agencies for an 85% response rate. Approximately half (50%) of respondents reported an interest in a virtual LARC clinical practicum in CY 2021, equating to at least 30 providers in need. Respondents reported training needs for all LARC devices in particular Paragard, Liletta, and Nexplanon. MDHHS is working to develop a CY 2021 LARC clinical practicum training schedule that is responsive to the needs of its network and adheres to current health and safety guidelines. MDHHS intends to promote its LARC training schedule with providers outside the Title X network such as community health centers, school-linked health centers, private offices, and hospital-based systems to encourage utilization of contraceptive access best practices across the state.

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

This objective is also Michigan's ESM for the well-woman visit performance measure. Based on data from the Behavioral Risk Factor Surveillance System (BRFSS), Michigan's FY 2020 reporting data indicates 59.9% of women discussed reproductive life planning during a visit with a doctor, nurse, or other health professional. This was a slight increase from the previous reporting year, which was 58.4%; however, MDHHS did not meet its ambitious target of 65%. To support progress toward this objective, MDHHS's Family Planning Program discussed reproductive life planning with 22,614 women, falling short of its service delivery estimate of 60,000 due to the Governor's 'Shelter in Place' Executive Order (late March thru June 2020), COVID-19 implementation delays for new Title X agencies, and losing Michigan's largest Title X sub-recipient (42,000 Title X users), Planned Parenthood of Michigan, in 2019.

During FY 2020, MDHHS continued to promote its Contraceptive Counseling modules to providers from Maternal and Infant Health, Home Visiting, and Adolescent Health programs. During FY 2020, 61 users viewed and 52

completed the Contraceptive Counseling modules, with a total of 17 continuing education credits requested. Of those that completed the modules during FY 2020, 43 completed the course evaluation and provided the following feedback: 90% felt the course was well-organized, 84% thought the course was helpful, and 76% found the course relevant to their job. MDHHS's Family Planning Program partnered with Medicaid to assist with pay-for-performance client-centered contraceptive counseling for Health Plans, which focused on incentivizing Medicaid Health Plan contracted providers to enhance their contraceptive knowledge and skills using Family Planning's Contraceptive Counseling Modules. During FY 2020, six providers received pay-for-performance credits from Medicaid Managed Care by completing this course.

During FY 2020, the Family Planning Program expanded the use of client-centered reproductive life planning and contraceptive counseling among programs that serve at-risk women. MDHHS Family Planning staff facilitated a recorded breakout session on July 29 during the Home Visiting Conference's Maternal Infant Health Program's Model Day, on assessing pregnancy intention and client-centered contraceptive counseling using the **P**arenthood/Pregnancy **A**ttitude, **T**iming, and **H**ow 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. This breakout session allowed reproductive health counseling best practices to be shared with MIHP home visitors who routinely discuss pregnancy intention and contraception with program beneficiaries. The breakout was viewed by 157 or 95% of MIHP Model Day participants. MDHHS Family Planning staff also facilitated a recorded PATH breakout session on September 22 at the virtual Maternal Infant Health Summit. This breakout session allowed reproductive health counseling best practices to be shared with provider groups that do not specialize in women's health, such as primary care providers, emergency room physicians, and family practice providers. The breakout session evaluation was completed by 17 conference participants. Session evaluations indicated the presenters were knowledgeable (90%), their teaching methods were effective (86%), and the presentation was performed without bias (82%).

Pregnancy intention and preconception health messages were disseminated on MDHHS's Facebook and Twitter accounts in FY 2020. Messaging during national health observances such as Minority Health Month, Maternal Health Awareness Week, and Women's Health Week were promoted on MDHHS's Facebook (114,900 followers) and Twitter (26,900 followers) accounts. National health observance and other program-specific messaging has at times been halted or greatly reduced given that the general public is turning to state/local health department social media platforms to stay abreast of COVID-19 health and safety guidelines, community testing sites, and other pertinent pandemic resources.

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

This objective is Michigan's National Performance Measure for the Women/Maternal Health domain. Based on the Behavioral Risk Factor Surveillance System (BRFSS), Michigan's FY 2020 reporting data indicates that 77.2% of women aged 18-44 years old had a preventive visit in the past year. This was an increase from the previous reporting year, which was 69.1%; however, it did not meet MDHHS's ambitious target of 85%.

In FY 2020, MDHHS utilized multiple state-level surveillance data sources (e.g., BRFSS, PRAMS) and reports, like *Michigan Health Equity Status Update Report*, to assess racial/ethnic health care access disparities in Michigan. Timely reports such as MDHHS's *COVID-19 Response & Mitigation Strategies for Racial & Ethnic Populations & Marginalized Communities* were used to glean short- and long-term strategies for improving health care access to Michigan's Black, Indigenous, and people of color. As a result, MDHHS's Family Planning Program will develop an encounter-level data analyses plan to assess and monitor client health disparities and inequities in quality of care once its provider network has transitioned from aggregated- to encounter-level data collection and reporting in CY

2022. Additionally, MDHHS plans to conduct multiple listening sessions across the state in FY 2021 to gather the lived experiences of Michiganders navigating their sexual and reproductive health needs to inform health education, clinical, and case management services. Achieving equitable health outcomes for Michiganders begins with incorporating their knowledge and expertise into the programs designed to support them.

Annually, local Family Planning agencies are reviewed and monitored on the development of medical and social service referral agreements and collaboration at the local level, as well as their assessment of client needs for primary care or other services. Agencies are required to assess client access to a primary care provider and make appropriate referrals, as needed. COVID-19 has impacted the number of local Family Planning agencies reviewed and monitored in FY 2020; however, MDHHS plans to resume monitoring and oversight activities in FY 2021.

During FY 2020, MDHHS used several avenues to educate local Family Planning providers on routine and emergent Medicaid and Medicaid Health Plan policy issues. Policy education efforts focused on receiving regular Medicaid updates, including COVID-19 policy updates; providing input on Medicaid's common formulary; and providing 340B prices on medications (i.e., antibiotics and contraceptives) to set reimbursements. In FY 2020, regular Medicaid updates were received during Family Planning's state-level Advisory Council and annual coordinator meetings. Local Family Planning agencies had the opportunity to provide input on applicable COVID-19 policy changes (e.g., telehealth) as issued, the common formulary on a quarterly basis, and 340B medications prices were provided to Medicaid on a quarterly basis. A Family Planning Program Consultant participates on the Telehealth Access Work Group, part of Michigan's Coronavirus Task Force on Racial Disparities, where the future of telehealth services and Medicaid policy are routinely discussed.

Well-woman and preventive health messages were disseminated on MDHHS's Facebook and Twitter accounts in FY 2020. Messaging during national health observances such as Cervical Health Awareness Month, Teen Health Week, STD Awareness Month, Sexual Assault Awareness Month, and National Breast Cancer Awareness Month were promoted on MDHHS's Facebook and Twitter accounts. The COVID-19 challenges noted above also apply to well-woman and preventive health messaging.

Oral Health – Women/Maternal Health (FY 2020 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. Despite significant COVID-19 related challenges—which included a preventative dental care shutdown, cancelled workshops and educational opportunities, and the reallocation of staffing and resources—the OHP has continued to increase its collaborations with community partners to improve oral health through prevention activities and direct access programs. This remains evident in the activities of NPM 13 in FY 2020.

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

During FY 2020, the Perinatal Oral Health Action Plan continued to be implemented to support a better health status for women and girls. A main strategy continued to be the training and education of Michigan health professionals, particularly those who practice in and serve communities and women adversely impacted by health disparities. The number of medical and dental professionals who receive perinatal oral health education through MDHHS is the ESM for this NPM. Despite significant COVID-19 related challenges in FY 2020, the Perinatal Oral Health Program trained 423 health professionals in the medical and dental fields through lectures, webinars, conference calls and other training events. This number does not include the hundreds of additional professionals trained by partners, coalitions, and other Michigan entities. Many events and trainings were cancelled due to the pandemic which negatively impacted the number of providers trained, but virtual opportunities remained. A large Home Visiting virtual

training session included a combined presentation with the Medicaid dental policy specialist to share information about the Medicaid pregnancy benefit with great success.

In addition, Michigan-specific Perinatal Oral Health Guidelines continue to be promoted, along with other educational materials. Efforts began to update this document in the reporting year. A partnership to teach a lecture on perinatal oral health to Nurse Midwifery and Nurse Practitioner students continued with the University of Michigan School of Nursing, with lectures occurring each semester as part of the curriculum. These lectures were moved to a virtual format due to COVID-19. This course had to be altered due to the inability to have a hands-on component but continued to include application in how to integrate oral health within your future practice. In addition, an interactive piece called “Why is Grace in the Emergency Room” helped initiate discussion on the social determinants of health and health equity. Positive student feedback continues to be measured at 99% with over 361 advanced practice nurses trained to date.

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

In FY2020, the OHP was able to enact perinatal oral health related PRAMS questions which will be critical in determining the long-term impact of programs and policies, specifically among different racial and ethnic groups. Development and analysis of recent PRAMS data was delayed due to COVID-19 but will be completed in the next fiscal year. A plan is in development for an in-depth and longitudinal look at data trends, with data briefs to be developed for public and stakeholder use.

In FY 2017, MDHHS awarded grant funds to the University of Detroit Mercy (UDM) School of Dentistry to implement a dynamic medical dental integration program. The project officially launched in FY 2018 and established itself with expansion in FY 2019 through funds from external partners. This partnership with the UDM School of Dentistry, the Michigan Primary Care Association (MPCA) and the OHP currently had 11 operating sites during FY 2020 but faced significant challenges. Due to a cessation of all preventative dental care for several months in the spring of 2020 due to COVID-19, many sites (6) were forced to close. This model of care, which places a dental hygienist directly within an OBGYN unit in an FQHC has provided 8,589 patient encounters during this reporting period. These services include 2,504 education visits by the hygienist and 813 cleanings for pregnant women. Although these numbers indicate a decrease from FY 2019, a significant number of women have received much needed care through this project. Evaluation began in 2019 with key informant interviews as well as interviews with participating patients and consumers. The evaluation continues into 2020 as significant delays occurred regarding the inability to conduct in-person interviews or have access to project sites since many closed during the preventive care shutdown. Additional efforts are underway to utilize electronic medical health records to track referrals and determine if the “referral loop” is being closed. Due to this project occurring within federally qualified health centers, a diverse population is being serviced in both rural and urban areas and includes women and children of all ethnicities and socioeconomic backgrounds.

In FY 2020, the wichealth.org module was continued to be utilized not only in Michigan but other states that participate with wichealth.org. Wichealth.org provides stage-based, client-centered, WIC nutrition education and an anticipatory guidance model in which WIC clients could complete educational lessons in English or Spanish to receive their WIC benefits. During the FY 2020 reporting period, 15,866 lessons were completed nationwide. WIC serves a diverse population and targets those within a lower social economic demographic. By developing education in partnership with WIC, the Oral Health Program has been able to reach populations that may have the most need and may experience the most health disparities. The module has also been developed in Spanish to better serve WIC clients and continues to be utilized by Spanish speaking clients.

Women/Maternal Health - Application Year

Low-risk Cesarean Delivery (FY 2022 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 care 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 2013-2017, 14.8% of pregnancy-related deaths were due to hemorrhage and 14.8% were due to infection or sepsis. Overall, 54.1% of pregnancy-related deaths in Michigan from 2013-2017 were deemed preventable[1]. In 2019, there were 28.2% low-risk cesarean deliveries among all live births[1] in Michigan. The 2019 percentage of low-risk cesarean deliveries (28.2%) is above both the Healthy People 2030 goal of 23.6% and the 2019 average for the United States (US) which was 25.6%[2].

As with other birth outcomes, racial disparities are evident in low-risk cesarean births. In 2019, of all live births, 29.8% of black women had low-risk cesarean deliveries, as did 30.3% of American Indian women and 30.9% Asian/Pacific Islander women, compared to 27.7% of white women[1,3]. In addition to the data portraying disparities in low-risk cesarean deliveries, anecdotal qualitative data suggest that black and brown women 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 and 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 since inception.

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

The second strategy addresses continual updates to RPQC membership by regional representatives related to the Obstetrics Initiative (OBI) and the Alliance for Innovation 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 a great 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 in the Michigan AIM (MI AIM) is the third strategy in reducing the number of primary low-risk cesarean deliveries. Partnering with stakeholders and professional organizations has allowed Michigan to work toward improved maternal morbidity and mortality outcomes, as well as reduction in disparities of adverse maternal outcomes. Several staff from the Michigan Department of Health and Human Services are working directly with MI AIM, including the Michigan Title V Director who actively participates on the MI AIM Executive and Steering Teams. Currently, 50 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 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 women, American Indian women, and Asian/Pacific Islander women 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 women, which equates to 28%, 29.3% and 28.4%, respectively. Five strategies, via different avenues, 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, an on-demand web-based training is available on the MDHHS Division of Maternal & Infant Health webpage for hospital use. Every year Michigan birthing hospitals are assessed for their level of participation and commitment to implementing the AIM safety bundles and thus, improving maternal birth outcomes. Including bias and equity training in the criteria ensures it becomes and remains a priority area of focus for birthing hospital staff, eventually creating sustained change in policies and care for women of all races and ethnicities.

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

these topics with the intention to create change within individual clinical practices, as well as within health systems and hospitals.

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

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

The fifth strategy will focus on providing ongoing education and training for Michigan Maternal Mortality 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 released recommendations specific to the broad categories of maternal deaths. The intention is that if these recommendations are followed, and changes are made by providers and health systems, more maternal deaths will be prevented. To ensure unconscious bias and health equity remain at the forefront of this committee when reviewing cases and creating recommendations, committee members were required to complete online bias training prior to their participation.

Oral Health – Women (FY 2022 Application)

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

Leadership for Michigan's MCH oral health programs and initiatives is located within the Oral Health Unit. The Oral Health Unit and Perinatal Oral Health Initiative is housed 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 women.

In FY 2022, the Perinatal Oral Health Initiative will continue to maintain educational efforts for the health community and expecting mothers while also exploring additional data to help implement new programs that further address oral health disparities and access to care issues. Current PRAMS data indicate that disparities exist, with new data now to be fully disseminated in FY 2022, due to COVID-19 related delays. The current proportion of women having their teeth cleaned before pregnancy decreases nearly 10 percent during pregnancy. Over half of mothers (60.3%) who did not have a cleaning during pregnancy had dental insurance, indicating that education and awareness remain challenges. Due to a COVID-19 related dental shutdown in 2020, new data indicates that preventative care numbers have further dropped. In addition, significant racial inequalities persist. African American or Latino women are less likely to have a dental visit than white women. Existing strategies that educate providers as well as new strategies that focus on alternative practice models and recent Medicaid enhancements will 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 women and infants to equitable oral health care services.

In FY 2022, the MDHHS Oral Health Program will continue to expand efforts to train and educate the medical and dental communities on the importance of perinatal oral health, as well as methodologies and best practices to integrate perinatal oral health into practice. Due to COVID-19, many of these trainings may occur virtually. 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. 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. 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 an emphasis on virtual programming, due to COVID-19.

Another strategy is dissemination of the Perinatal Oral Health Guidelines in conjunction with 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 2022, the Perinatal Oral health Initiative will utilize and promote AAP resources in partnership with new perinatal materials. Additions to the guidelines will focus on health equity, specific health disparities by region, and proposed recommendations as to how to begin to address health inequities and access to care issues with providers. The AAP offers branding on their materials and includes new resources and promotional materials in

multiple languages and at a lower grade level.

MDHHS will continue to develop and distribute promotional and education materials that promote dental visits during pregnancy and infant oral health to health entities across the state. These materials will continue to be developed in partnership with community stakeholders and distributed to local health departments, Federally Qualified Health Centers (FQHCs), WIC clinics, dental offices, medical offices (including obstetric providers) and other entities. The promotion of these materials has been a successful strategy and with consistent requests for more materials, this strategy will continue in FY 2022. Due to COVID-19, efforts may focus on virtual methods of dissemination. Any new materials created will be reviewed with a health equity lens and will aim to be inclusive.

The final strategy will include the continuation of communication efforts for dental health providers surrounding changes in Medicaid benefits for pregnant women. MDHHS allotted funds to increase the adult dental Medicaid benefit for pregnant women within the state. This increase in benefit carved dental benefits into Medicaid health plans and increased the availability of dental providers, addressing a critical need in access to care and increasing the number of pregnant women with a dental visit. The number of pregnant women on Medicaid who have at least one dental encounter during the perinatal period is an ESM for this strategy. Through a data use agreement and IRB with CHEAR (Child Health Evaluation and Research Center at the University of Michigan) the oral health program will be able to obtain data 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 2021 will be crucial to measure the impact of the benefit and guide further educational efforts in FY 2022. 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 women receiving oral health care services.

In FY 2022, the OHP will analyze PRAMS data to assess disparities in healthcare access by race and ethnicity. After being delayed by COVID-19, PRAMS data is now available. These data will be examined by geographic area which will help to determine targeted interventions. The targeted interventions will be viewed through a health equity lens and will be adjusted according to the population and groups they address. Efforts will be made to integrate community voice as data efforts move forward. This strategy aligns with the statewide focus on data integration and population identification components.

In FY 2022, 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 under-served areas and to examine alternative models of care. The MDHHS grant-funded effort began as a one-year project at six sites in partnership with the University of Detroit Mercy School of Dentistry and the Michigan Primary Care Association, with the aim to examine the feasibility and impact of placing a registered dental hygienist in an OBGYN medical clinic. 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 provide an important opportunity to create more culturally and linguistically appropriate educational materials and outreach strategies. FY 2022 will see results analyzed and disseminated, with further plans developed based on the results of the comprehensive evaluation. In FY 2021, Title V funds were allotted for a small project to help with educational supplies for participating sites, targeted at children and pregnant teens. The supplies will be disseminated in participating FQHC sites and data collected on the number of patients served. FQHC's serve a socioeconomically and racially diverse population in some of Michigan's highest need communities, and this project was developed as a response to medical and dental staff expressing a need for additional materials for children and pregnant teenagers.

In FY 2022, the MDHHS Oral Health Program will continue to provide education to women via the Perinatal Oral Health WIC Module. This module (delivered through wichealth.org) has served as a training mechanism to mothers across Michigan and on a national level. Wichealth.org provides stage-based, client-centered, WIC nutrition education and an anticipatory guidance model in which WIC clients can successfully complete educational lessons in English and Spanish, with women completing lessons to receive their WIC benefits. Women receive personalized feedback and educational materials as well as nurse follow up on any questions raised during the training. This model allows for consumer engagement and feedback from participants. By partnering with WIC, the Oral Health Program can target a diverse range of women who may experience health disparities. This strategy will continue to be evaluated through the number of women 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.

Pregnancy Intention (FY 2022 Application)

The percent of women who had a live birth and reported their pregnancy was intended was selected to address the priority need to "develop a proactive and responsive health care system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity" in the Women/Maternal Health domain. According to Michigan's Pregnancy Risk Assessment Monitoring System (PRAMS), 57.2% of pregnancies were intended in 2018. All Michigan women deserve access to high-quality, client-centered care that is free from bias, racism, and coercion.

For most women, their first encounter with the health care system is driven by reproductive health needs, with nearly three decades spent making decisions about pregnancy, including whether or not to become pregnant (Sonfield, Hasstedt, & Gold, 2014). Equipping women and their partners, regardless of life circumstances or ability to pay, with knowledge and access to reproductive health services can improve health outcomes and reduce health care costs over the life course when delivered equitably. Title V needs assessment results indicated Michiganders' health outcomes are negatively affected by systemic racism, poverty, and trauma. Transportation impeded access to health care systems and services (e.g., routine, follow-up) particularly for low-income and rural individuals. Quality of care was found to be influenced by health care providers' implicit or explicit bias of clients' race, class, insurance status/type, and sexual orientation. Maternal and child health service systems were found to assume need rather than intentionally seek input from the entire community to inform programs, policies, and practices. Stakeholders also indicated that women's health policy is oftentimes contentious and routinely restricts or removes access to needed health education and services.

FY 2022 objectives are concentrated on improving 1) contraceptive access and 2) preconception and interconception health. Strategies seek to address the Title V needs assessment findings noted above and Michigan's Title V pillars: 1) equitable health outcomes, 2) seeking the knowledge and expertise of communities and families, and 3) delivering culturally, linguistically, and age-appropriate health education. Strategies that can drive improved performance include translation of regional listening sessions into practice; telehealth as a service delivery tool; provider training on systemic racism and family planning; supporting minors' and young adults (i.e., 18 to 21 years old) access to publicly funded contraception; supporting the Maternal Infant Health Action Committee on optimal birth spacing and healthy weight babies; and applying a reproductive justice framework to program decision-making. Additionally, this state action plan directly supports related key priorities indicated in the MDHHS 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 women in achieving their reproductive health goals, such as choosing whether or not to become pregnant and achieving healthy spacing of births. While there is no single method of contraception that is right for everyone, the type of contraceptive method used by a woman is strongly associated with a higher chance of becoming pregnant. Having access to a full range of effective contraceptive methods allows each woman the opportunity to choose the method that is right for her to successfully delay or prevent pregnancy. In 2020, 79% of female Family Planning clients aged 15 to 44 years old chose a most (i.e., sterilization, vasectomy, or LARC) or moderately (i.e., pills, patch, ring, cervical cap, or diaphragm) effective method, with 15% choosing LARC.

The first strategy—support the provision of contraception to low-income, uninsured, and underinsured women in the Family Planning Program—will focus on providing client-centered counseling and a broad range of FDA-approved contraceptive methods to reproductive aged women at no-cost or low-cost. A focus will be working to ensure that Michigan's Family Planning network of 33 local agencies and 79 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 2022, MDHHS will monitor local agency provision of contraception through semi-annual Family Planning Annual Report (FPAR) submissions. MDHHS collects Family Planning client input annually through a statewide consumer survey administered at each clinic site. The results of the statewide survey will be presented at the program's Advisory Council meeting and shared with partners. Local Family Planning agencies routinely collect consumer input for continuous quality improvement.

The second strategy—facilitate LARC training opportunities for Title X and other health care providers—will focus on supporting on-site access to provider-dependent FDA-approved contraceptive methods while in a public health emergency. Stocking all methods, such as LARC, is necessary to ensure full access to care, even more so during a public health emergency (such as the COVID-19 pandemic) when demand for more effective reversible methods may increase and in-person visits may be delayed or spaced out for client and staff safety. 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 2022, MDHHS's Family Planning Program will assess providers' LARC training needs and coordinate event marketing, logistics, and evaluation. Additionally, MDHHS's Family Planning Program will promote virtual training opportunities offered by the National Clinical Training Center and pharmaceutical companies. Individual and/or regional trainings will be provided to local Title X and other health care providers when pharmaceutical safety protocols and state Executive Orders allowing for in-person gatherings (in relation to the COVID-19 pandemic) can be met.

The third strategy— support the integration of telehealth as a service delivery tool across Family Planning's network —will focus on scaling up telehealth amongst Michigan's Family Planning providers to enhance safety and service delivery, while working to mitigate the unique challenges telehealth presents for ensuring equitable access to care. The role of telehealth, including benefits and potential barriers, has been underscored during the COVID-19 pandemic. In FY 2022, MDHHS will widely disseminate its telehealth toolkit within its Title X network and amongst national colleagues, provide technical assistance to local agencies, and actively work to reduce equity barriers that are unique to telehealth.

The fourth strategy—translate regional learning session findings into action for women of reproductive age—will focus on creating actionable strategies to meet identified needs and remove barriers that impede access to sexual and reproductive health care across Michigan. Achieving equitable health outcomes for women begins with

incorporating their knowledge and expertise into the programs designed to serve them. In FY 2022, MDHHS will develop short- and long-term strategies to guide program decision-making, continuous quality improvement, and collaborative efforts with state and local partners and stakeholders, as appropriate.

The fifth 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 FY2022, MDHHS will coordinate event marketing, logistics, and evaluation.

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

In Michigan, sexually active adolescents encounter multiple barriers to accessing affordable contraception. Contraception is critical because it protects against unintended pregnancy, disease transmission, and future reproductive health. An estimated 171,780 sexually active women <20 years old need publicly supported contraception (Guttmacher Institute, 2014). In 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 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 mothers worsened over 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, 38% of Family Planning clients were teens (i.e., <15 to 19 years old), with 81% of female clients aged 15 to 19 years old choosing a most or moderately effective method and 15% choosing a LARC.

The first strategy to achieve this objective—support at least 10,000 minors' and young adults' access to publicly funded contraception—will focus on providing client-centered counseling and a broad range of FDA-approved contraceptive methods to sexually active adolescents (i.e., ≤15 to 21 years old) at no-cost or low-cost. Removing financial barriers to contraception assists young people in deciding if, when, and under what circumstances to get pregnant and have a child. In FY 2022, 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— translate regional learning session findings into action for minors and young adults—will focus on creating actionable strategies to meet identified needs and remove barriers that impede access to sexual and reproductive health care across Michigan. Achieving equitable health outcomes for young people begins with incorporating their knowledge and expertise into the programs designed to support them. In FY 2022, MDHHS will develop short- and long-term strategies to guide program decision-making, continuous quality improvement, and collaborative efforts with state and local partners and stakeholders, as appropriate.

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 2022, MDHHS will work with the Michigan Organization on Adolescent Sexual Health's youth advisory council to review current website content, suggest website enhancements for content and visual appeal, and review revised content and graphics.

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, how pregnancy will be prevented, with the primary focus on increasing the overall health and well-being of the individual regardless of reproductive intentions. Intentionally including male partners and fathers in systems of care and decision-making—such as when and if to have a child—actively considers men's health needs and priorities, improves their health awareness, and increases partner support all of which has the potential to foster healthier relationships. According to the 2018 Michigan BRFSS, 58.4% of Michigan women aged 18 to 44 reported ever having discussed reproductive life planning during a visit with a doctor, nurse or other health professional.

The first strategy—discuss reproductive life planning with at least 25,000 women in the Family Planning Program—will focus on determining clients' needs for contraception and preconception health services by assessing when they would like to become pregnant, the number of children they would like to have, and how long they want to wait to become pregnant. Clients are asked a version of these questions at each encounter as documented in the medical record. In FY 2022, MDHHS will monitor local agency assessment of clients' reproductive life plans through onsite or virtual monitoring.

The second strategy—support the Maternal Infant Health (MIH) Action Committee aimed at optimal birth spacing and healthy weight babies—will focus on assisting with the implementation of the Committee's identified priorities, which will be aimed at impacting system change by informing policy and putting proven practices into action to improve the health and well-being of Michigan's mothers, infants, and families. MDHHS's Mother Infant Health & Equity Improvement Plan (MIHEIP) serves as this MIH Action Committee's guide. This Committee is integral to achieving the strategic vision of zero preventable deaths and zero health disparities. In FY 2022, Division of Maternal & Infant Health staff will support co-chairs and committee member content experts in achieving identified short-term action priorities, conducting topical research, and meeting convening.

The third strategy—apply a reproductive justice framework within Family Planning and related maternal and infant health projects—will focus on identifying 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 2022, 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 (e.g., Tennessee) to identify 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 2. Birth: Final Data for 2019.
[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

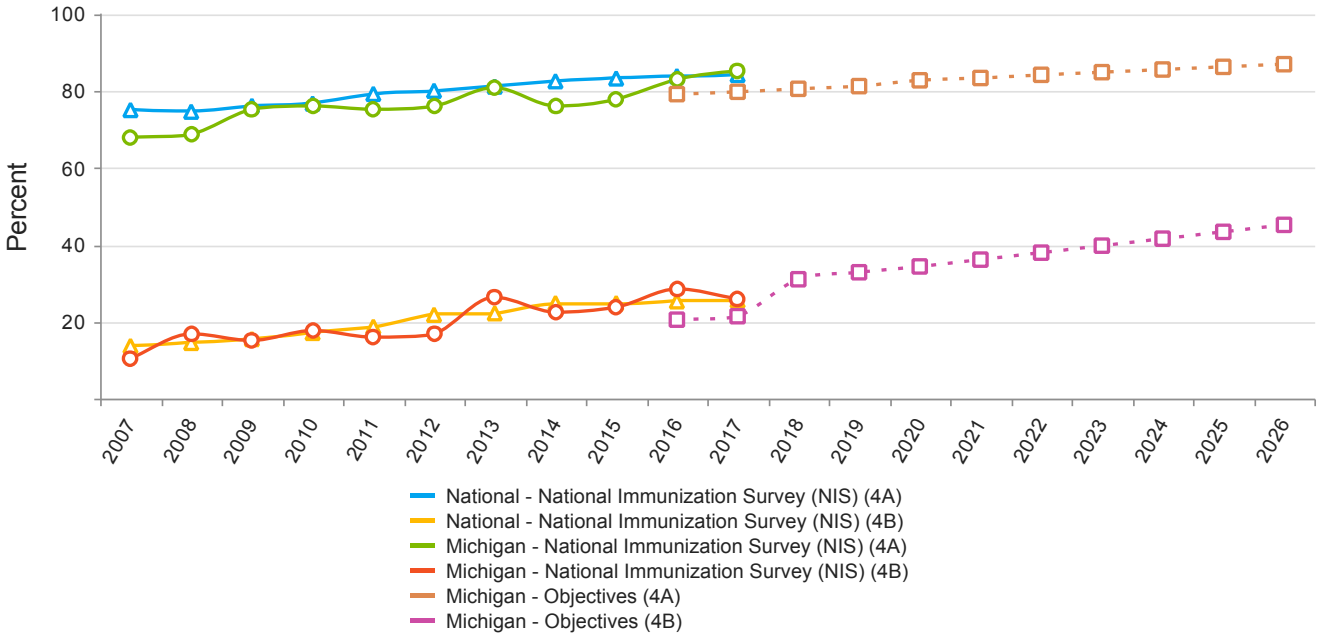
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.2	NPM 3
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.2	NPM 3 NPM 4 NPM 5
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.0	NPM 3
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	2.2	NPM 4 NPM 5
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	230.8	NPM 3
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	113.6	NPM 4 NPM 5

National Performance Measures

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

Indicators and Annual Objectives



NPM 4A - Percent of infants who are ever breastfed

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	79.1	79.7	80.5	81.2	82.7
Annual Indicator	80.8	75.9	77.7	83.0	85.3
Numerator	82,892	86,976	88,168	86,380	88,053
Denominator	102,591	114,556	113,401	104,098	103,283
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	83.3	84.1	84.8	85.5	86.2	86.9

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

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	20.6	21.5	31.1	32.9	34.4
Annual Indicator	26.6	22.6	23.9	28.4	25.8
Numerator	25,900	25,415	25,921	28,764	25,629
Denominator	97,537	112,351	108,464	101,206	99,495
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	36.2	38.0	39.8	41.6	43.4	45.2

Evidence-Based or –Informed Strategy Measures

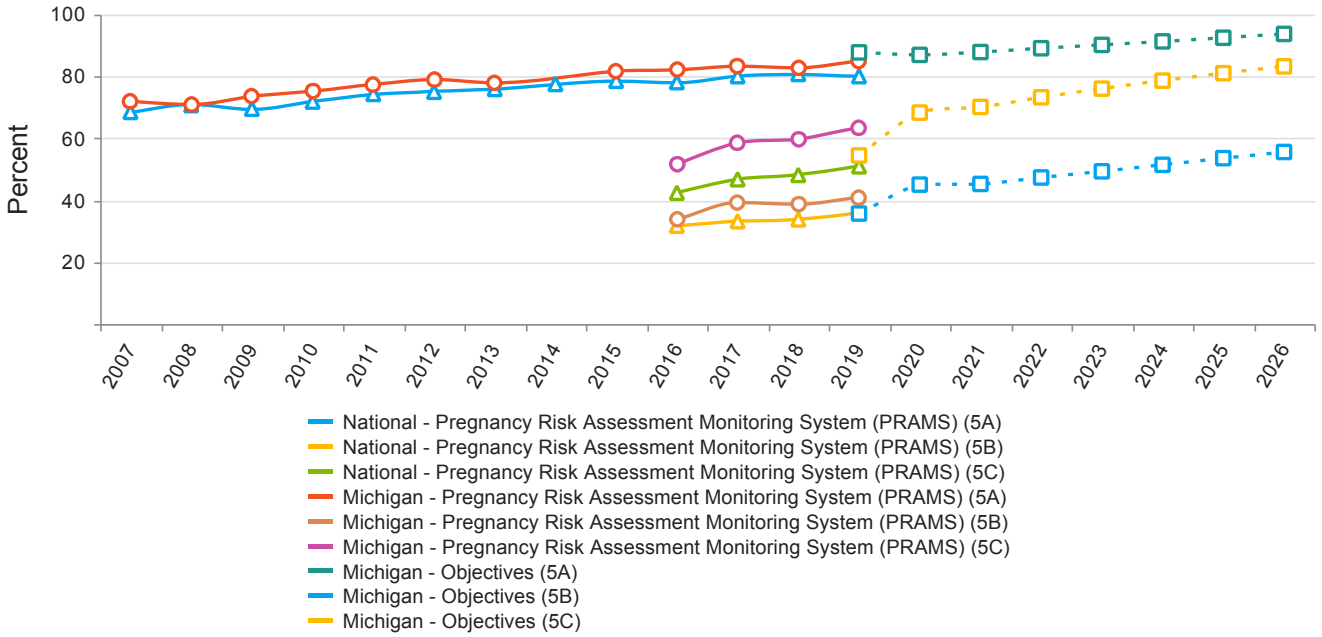
ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		17	20	23	26
Annual Indicator	14.3	14.5	19.5	18.8	18.8
Numerator	12	12	16	15	15
Denominator	84	83	82	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	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	29.0	18.0	19.0	20.0	21.0	22.0

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

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

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	87.7	88.9	90.0	91.1	92.3	93.5

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**
Annual Objective		35.7	45
Annual Indicator	39.2	38.9	40.6
Numerator	39,142	38,781	39,451
Denominator	99,861	99,669	97,218
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	45.2	47.3	49.3	51.4	53.5	55.5

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**
Annual Objective		54.4	68.2
Annual Indicator	58.3	59.8	63.1
Numerator	58,277	59,314	61,216
Denominator	99,994	99,167	96,949
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	70.0	73.1	75.9	78.5	80.9	83.1

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

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	83.0	83.0	83.0	83.0	83.0	83.0

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

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	10.0	20.0	30.0	40.0	50.0	60.0

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

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	2.0	4.0	6.0	8.0	10.0	12.0

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) Facilitate implementation advisory work group to promote Michigan's State Breastfeeding Plan A2) Provide MDHHS Maternal Infant Health staff with breastfeeding education which includes systemic racism as a root cause of breastfeeding inequities A3) Support and promote increased access to breastfeeding support professionals and peer counseling services in programs serving families A4) Increase the percent of Baby Friendly Hospitals in Michigan from 18.8% to 20%
B1) Increase training opportunities to improve the number, availability, and racial and cultural diversity of breastfeeding professionals B2) Normalize and promote culturally responsive breastfeeding messages for MDHHS and local agency use B3) Celebrate and promote breastfeeding social events with state, local, and tribal partners B4) Facilitate community efforts in one community to impact low breastfeeding rates among women of color

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

NOMs

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

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

NOM 9.5 - 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) Explore legislative/regulatory change to increase the number of babies that are safely sleeping

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

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

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

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

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

2016-2020: National Performance Measures

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

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

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective	89.4	90.1	91.6	91.5	92.1
Annual Indicator	89.2	88.9	86.7	89.5	89.8
Numerator	1,547	1,511	1,462	1,315	1,401
Denominator	1,735	1,699	1,687	1,470	1,560
Data Source	2015 Michigan Resident Live Birth File	2016 Michigan Resident Live Birth File	2017 Michigan Resident Live Birth File	2018 Michigan Resident Live Birth File	2019 Michigan Resident Live Birth File
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

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

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

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		12	12	12	12
Annual Indicator	14	12	14	15	12
Numerator					
Denominator					
Data Source	Centering Health Institute	Centering Health Institute	Centering Healthcare Institute	Centering Healthcare Institute	Centering Healthcare Institute
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Perinatal/Infant Health Overview

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

At the local level, LHDs expended Title V funds in three performance measures in FY 2020. Four LHDs selected NPM 3 (risk-appropriate perinatal care) with activities that included collaborating with local birthing hospitals to coordinate care and refer to local programs, staff training and participation in regional perinatal collaboratives. Breastfeeding (NPM 4) activities among 17 LHDs included breastfeeding support through groups, lactation consultants and phone consultations, and virtual staff development. Nine LHDs provided safe sleep education (NPM 5) in a variety of creative, socially distanced ways.

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 6.6 per 1,000 births (MDHHS) in 2018. A similar trend has been documented nationwide. However, the risk more than doubles to 15.1 among non-Hispanic Black babies and is substantially greater (10.2) for babies born to mothers who are under 20 year of age. These data suggest that while the needs of women and children are being better prioritized in general, the needs of Black families and young families remain unmet. Another critical signal of wellbeing in the perinatal period and a factor in the health of infants is postpartum depression. From 2012 through 2017, the proportion of mothers reporting postpartum depression symptoms has remained constant at 13.5%, but this number jumped to 16.4% in 2018 (Michigan PRAMS). However, 20.1% of women with Medicaid prenatal care experienced depression symptoms postpartum compared to 12.7% for those without Medicaid, suggesting that women living with limited incomes face stressors around childbirth that women with greater resources are more protected from experiencing (PRAMS).

Risk-appropriate Perinatal Care (FY2020 Annual Report)

Although FY 2020 was marked by many challenges created by the COVID-19 pandemic, Michigan continued to build upon and support its existing perinatal care system. These efforts included ongoing Regional Perinatal Quality Collaborative (RPQC) efforts in all ten prosperity regions in Michigan. RPQC efforts have served as the key drivers in addressing risk-appropriate care for mothers and infants and in improving prevention and screening of perinatal substance use. In FY 2020, Title V federal funding was used to support a portion of the Statewide Perinatal Quality Collaborative (PQC), as well as additional statewide maternal and infant health efforts. Focus remained on linking families to evidence-based prenatal and postnatal care models of CenteringPregnancy and CenteringParenting, as

well as evidence-based home visiting, all of which are proven to improve birth outcomes.

The importance of comprehensive system linkages and quality improvement remained the driving force in Michigan's efforts to improve maternal, infant, and family health. In FY 2020, partnerships and collaborations were solidified and strengthened with many maternal and infant health partners, such as: Healthy Start projects; WIC clinics; Maternal, Infant and Early Childhood Home Visiting (MIECHV) Programs; local health departments (LHDs) receiving Title V funding; families; and Community-Based Organizations (CBOs), such as Focus:HOPE.

Objective A: By 2020, support the implementation and evaluation of Regional Perinatal Care Systems in all ten regions.

By FY 2020, all ten Michigan-designated Prosperity Regions were represented by nine Regional Perinatal Quality Collaboratives. Each RPQC receives moderate 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. The RPQCs are charged with utilizing data driven decisions and quality improvement (QI) methodology aimed at improving maternal and infant health. All regions are required to review their respective birth outcome data (stratified by race, ethnicity, age, and socioeconomic status) to identify inequities and gaps in care; both of which shape the focus of their quality improvement project(s). Additionally, in alignment with MDHHS priorities, every region is to address the social determinants of health as the root cause of health inequity and actively address disparate outcomes.

Establishing authentic engagement of families and community members is another priority area of the RPQCs. Families residing in each region are the most important stakeholders of an RPQC and therefore each region is dedicated to garnering family input on regional efforts, as well as barriers and inequities experienced, through focus groups and participation in regional Collaborative meetings. In addition to family and community member engagement, RPQCs are to convene diverse cross-sector partners and continually build and foster relationships with stakeholders and partners vested in improving maternal and child health outcomes. Birthing hospitals, LHDs, Medicaid Health Plans, Healthy Start programs, evidence-based home visiting programs, Great Start Collaborative representatives, clinical care providers, doulas, family representatives and community-based organizations are just a sample of the stakeholders and members of the RPQCs.

With each fiscal year, the RPQCs assess for additional QI efforts and ensure that those efforts align with statewide maternal infant health strategies. Included are brief examples of the RPQCs, their QI efforts and birthing statistics. Southeast Michigan (inclusive of Wayne, Oakland, and Macomb counties) is home to 23 of Michigan's 79 birthing hospitals, ten of which have neonatal intensive care units (NICUs). This represents just under half of all NICUs in Michigan. In calendar year 2019, 44,570 (41%) of Michigan births occurred in this region. This RPQC continues to focus on addressing areas of high infant mortality through increasing referrals and utilization of evidence-based home visiting. The initial pilot sites included two prenatal care clinics and a NICU. In FY 2020, the team worked to expand efforts to other counties in the region. The pandemic caused implementation to be delayed, but it is expected efforts will resume in FY 2021.

West Michigan has 13 rural and urban counties, nine LHDs, 11 birthing hospitals, two NICUs and a reported 18,404 births in 2019. Efforts of this RPQC remain focused on increased response to perinatal substance use disorder (PSUD) and increased utilization of evidence-based home visiting. In FY 2020, the team had two simultaneous projects: creating a resource page for pregnant and postpartum women on a regional substance use resource/treatment webpage and piloting co-locating home visiting staff in a DHS office as a strategy to increase home visiting referrals.

Northern Lower Michigan is made up of 21 counties, eight birthing hospitals, and one NICU. In calendar year 2019,

4,391 live births were reported. As a continuation of previous years' work, in FY 2020 the region expanded use of the electronic screening tool for pregnant patients, ensuring pregnant patients with PSUD are linked to appropriate providers and resources for treatment, increasing the number of obstetric providers trained in medication assisted treatment (MAT) and expanded utilization of universal referrals and utilization of home visiting programs.

The Upper Peninsula is 16,377 square miles, has 15 counties, eight birthing hospitals, and one NICU. In calendar year 2019, 2,499 live births were reported. Recent data reflects that NAS rates in this region are still the highest in Michigan. Therefore, in FY 2020, efforts focused on increasing substance use screening in pregnant women; increasing care coordination of PSUD treatment and obstetric care; reducing stigma related to care of babies with NAS; and implementing nonpharmacologic treatment of babies with NAS within birthing hospitals.

Southwest Michigan is comprised of seven counties, eight birthing hospitals, and one NICU. In calendar year 2019, 8,711 live births were reported. A gap in care related to birthing education was identified due to the pandemic and the inability to hold in-person classes. To address this need, the RPQC purchased an educational curriculum and worked with staff from a local hospital to provide virtual birthing education courses. These courses were provided to different cohorts over the course of several months and have received positive feedback from pregnant clients. The region is planning to continue to offer the courses throughout FY 2021.

The Saginaw/Bay area is made up of eight counties, five birthing hospitals and one NICU. In calendar year 2019, 5,653 live births were reported. The team began planning a CenteringPregnancy cohort for pregnant patients with substance use disorder. One of the partnering clinics has an established CenteringPregnancy program and recently began offering the CenteringParenting program as well. The other partnering clinic was to begin offering CenteringPregnancy in FY 2020, but training for clinic staff was postponed due to the pandemic. Efforts are expected to resume in FY 2021.

The Thumb area is made up of seven counties, eight birthing hospitals and two NICUs. In calendar year 2019, 8,810 live births were reported. This region historically has had high NAS rates, between 2nd and 3rd highest in the state. These rates were a deciding factor in the RPQC's efforts to implement an electronic screening tool in two prenatal clinics. Implementation of the screening tool began in early FY 2020 but were halted due to staffing shortages and other challenges related to the pandemic.

The Mid-Michigan area and Lower Southeast Michigan are the two newest RPQCs. Mid-Michigan is comprised of three counties, two birthing hospitals and one NICU. In calendar year 2019, 4,928 live births were reported. In FY 2020, the region partnered with one of the birthing hospitals to offer obstetric and gynecologic care via a mobile care unit to pregnant and postpartum clients of three MAT clinics in the region. The pandemic has created some challenges with this project, but the team is determined to find alternative and innovative ways to ensure these patients receive care. Lower Southeast Michigan is made up of six counties, six birthing hospitals and two NICUs. In calendar year 2019, 9,947 live births were reported. In FY 2020, efforts included creation of a pocket guide titled 'Stress, Emotions and Pregnancy' and plans to create an infographic detailing different options during pregnancy (i.e., types of providers, birth locations, etc.).

Objective B: By 2020, increase Risk Appropriate Care for mothers and infants from baseline data indicators by 20%: Very Low Birth Weight (VLBW); Low Birth Weight (LBW); and prematurity.

The ESM for this NPM, which aligns to this objective, is the number of CenteringPregnancy sites in Michigan. Ongoing support of this evidence-based strategy measure is a key component to assuring risk-appropriate care for Michigan mothers and infants. CenteringPregnancy is an evidence-based prenatal model that has proven health outcomes including reductions in preterm and low birth weight infants. The CenteringPregnancy model is patient-

driven, resulting in a patient/clinician partnership that values the voices of women during pregnancy and interconception. MDHHS continues to be supportive of CenteringPregnancy, evidenced by the inclusion of the program into the state's Mother Infant Health and Equity Improvement Plan (MIHEIP). Currently, Michigan has 12 CenteringPregnancy sites and three CenteringParenting sites.

MDHHS also continues to support and promote utilization of programs like evidence-based home visiting to provide case management and care coordination for 'at-risk' pregnant people in Michigan. This is evident not only by the support of these programs at the state level, but also through efforts of the RPQCs. Regions are focused on improving referrals, enrollment, and retention of pregnant people in their respective regions. RPQCs have piloted co-locating home visiting staff in prenatal care offices, a Department of Human Services (DHS) office and a WIC clinic to facilitate a 'warm handoff' between home visitor and client; expanded a hospital-based universal home visiting program to several birthing hospitals within the region; and created universal referral hubs in which all pregnant people would be referred, creating a streamlined process for clinical staff and ensuring that all pregnant people receive appropriate services.

Risk Appropriate Care was further increased through participation in Michigan's chapter of The American College of Obstetricians and Gynecologists (ACOG) Alliance for Innovation on Maternal Health (AIM). In addition to several MDHHS staff participating in Michigan AIM (MI AIM), FY 2020 marked increased requirements for the RPQCs to strengthen alignment of efforts and partnership with MI AIM. These efforts are ongoing and will continue in FY 2021.

In calendar year 2019, 89.5% of low birth weight (LBW) babies were born at hospitals offering NICU or special care nurseries (SCN). In 2019, 9,184 babies were born with LBW at a hospital and of those, 8,217 were born at a facility with a NICU or SCN. In the same year, 89.8% of very low birth weight (VLBW) babies were born at hospitals offering a NICU. There were 1,560 babies born with VLBW in 2019 at a hospital, and of those, 1,401 were born at a facility with a NICU. Additionally, in 2019, 89.5% of babies born less than 37 weeks gestation were born at hospitals with a NICU or SCN. There were 10,768 babies born less than 37 weeks gestation at a hospital, and of those, 9,636 were born at a facility with a NICU or SCN.

NICUs of Michigan most closely correlate with Level III nurseries and SCNs of Michigan most closely correlate with Level II nurseries. Based on data received from MDHHS Vital Statistics, the majority of LBW and VLBW babies, and babies born less than 37 weeks gestation, were born at hospitals that best medically meet their needs.

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

The MDHHS-supported Michigan Collaborative Quality Initiative (MICQI) is a voluntary quality collaborative of approximately 20 Michigan birthing hospitals. In FY 2020, the MICQI held monthly webinars to share best practices; discuss collaborative efforts; and collect data to monitor improvements with breastmilk utilization for VLBW infants, as well as treatment of infants with NAS cared for in NICUs, including utilization of non-pharmacologic treatment. In late 2020, the group also released guidelines related to non-pharmacologic treatment of babies with NAS/NOWS in the NICUs. It is expected that the MICQI will continue tracking data related to NAS in FY 2021.

As mentioned above, several RPQCs have been working to implement and expand utilization of the innovative electronic screening tool technology. The RPQC of Northern Lower Michigan has planned further expansion to three additional prenatal clinics and two Family Planning clinics in FY 2021. The Thumb area will continue to 'recruit' additional clinics to utilize the technology, as well re-implement use in the clinic affected by the pandemic. Two prenatal clinics in the Upper Peninsula successfully began implementing the screening technology in FY 2020 and will continue those efforts in FY 2021.

West Michigan's RPQC began efforts in FY 2020 to revise a regional website that houses information related to substance use treatment and supportive services. The website previously lacked information and resources related to PSUD. All RPQC projects have also been instrumental in ensuring that education and outreach efforts to address PSUD have occurred in the forms of SOPHE SCRIPT training, use of nonpharmacologic treatment for infants with NAS and linking to supportive resources, such as evidence-based home visiting programs.

MDHHS continues to align maternal and infant health efforts with internal and external partners. These efforts have resulted in increased communication and streamlined efforts to positively impact the lives of those affected by PSUD. Specifically, this partnership led the MDHHS Office of Recovery Oriented Systems of Care (OROSC) to provide funding for the RPQC in the Saginaw/Bay region, with the caveat that QI efforts must focus on PSUD. An additional partnership with OROSC in FY 2020 led to a funding opportunity to support rooming-in programs for babies diagnosed with NAS at three birthing hospitals in Michigan. The funding will also support expansion of the screening technology to eight more prenatal clinics. The framework for these efforts was set in FY 2020 and implementation is planned for FY 2021.

Breastfeeding (FY2020 Annual Report)

Breastfeeding is identified as the normative standard for infant feeding and nutrition. Breastfeeding data indicate that breastfeeding provides short- and long-term benefits for mother and baby that include but are not limited to health, economic and community benefits. Michigan remains dedicated to promoting and funding breastfeeding education, programs, and initiatives. Michigan is proud that initiation is continuing to grow; however, the state remains diligent on improving the persistent duration disparity gap that continues to exist.

Michigan PRAMS data indicate in 2004, 73.6% of Non-Hispanic White (NHW) Mothers initiated breastfeeding. In 2018, the percentage increased to 89.1% (+15.5%). Michigan PRAMS also indicates that the initiation rate for Non-Hispanic Black Mothers (NHB) has increased over time. In 2004, the NHB initiation rate was 57.6% and in 2018 the rate increased to 74.4% (+16.8%). Over the past 14 years, there has been an overall decline in the initiation disparity gap. PRAMS indicates that from 2010 to 2018 the initiation gap between Non-Hispanic White mothers and Non-Hispanic Black mothers narrowed from 19.0% to 14.7%.

Breastfeeding duration continues to have a persistent disparity gap. From 2014-2018, duration at three months among NHB mothers remained relatively unchanged (35.2% to 36.9%) and for NHW mothers increased 5.2% (55.7% to 60.9%). MDHHS continues to seek ways to better support breastfeeding and to increase both initiation and duration among Non-Hispanic Black Mothers. Starting in 2016, PRAMS asked mothers why they did not initiate breastfeeding. Among mothers who chose not to initiate, the top reasons included not wanting to breastfeed, not liking breastfeeding, and having other children to care for. Mothers completing the survey could choose multiple reasons. Non-Hispanic Black mothers reported more reasons for not initiating than non-Hispanic White mothers. While the PRAMS survey illuminates individual reasons for not breastfeeding, MDHHS is also committed to working on systems level issues that prevent breastfeeding.

MDHHS is phasing into the newest version of the Michigan Breastfeeding Plan which will be released in early 2021. Michigan's first statewide Breastfeeding Plan was released in 2017. The updated plan sets a common agenda necessary for a collaborative approach among an array of stakeholders: state, local and tribal government; health care professionals and organizations; employers; childcare providers and educational institutions; community organizations; and most importantly, individuals and families. The newest version of the plan includes and builds upon strategies listed in the previous plan: the elimination of disparities; advancing breastfeeding rights through education of policy makers and support of policies that protect breastfeeding families; building community support through the work of breastfeeding coalitions and increased access to breastfeeding support; changing

organizational practices; and strengthening individual skills. The 2021 plan separates these strategies into three perinatal phases: Before Pregnancy/ Preconception; During Pregnancy/Prenatal; and After Pregnancy/Postpartum.

MDHHS strives to give families and consumers opportunities to provide input in breastfeeding education, programs, and initiatives. Michigan residents were able to provide feedback on the Michigan Breastfeeding Plan through a survey and public comment received from over 40 community members or organizations. MDHHS prioritizes working with community-based breastfeeding organizations and coalitions to remain aware of breastfeeding needs and barriers in the community.

Challenges toward implementing the strategies outlined in the FY 2020 breastfeeding state action plan included the COVID-19 pandemic (beginning in March 2020) and a medical leave from December 2019 to June 2020 of the State Breastfeeding Coordinator position which is primarily responsible for implementing the plan. The coordinator continued to prioritize professional orientation; worked to complete the newly revised State Breastfeeding Plan; and promoted breastfeeding awareness, education and community involvement for National Breastfeeding Awareness Month and Black Breastfeeding Week. The COVID-19 pandemic impacted breastfeeding support activities and presented challenges including difficulties accessing breastfeeding support in hospitals with staffing and visitor restrictions; confusing early guidance about breastfeeding and COVID; and challenges obtaining in-person breastfeeding support at home or in group settings. In response, breastfeeding organizations throughout Michigan pivoted and continued to support families by using innovative solutions such as virtual support sessions, warmlines, and delivering needed supplies to homes.

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

Michigan's evidence-based strategy measure (ESM) is the percent of Baby-Friendly designated hospitals. The purpose of the Baby-Friendly Hospital Initiative (BFHI) is to assist hospitals in providing mothers with information, confidence and skills needed to start and continue to breastfeed their babies. Progress toward meeting this objective has slowed. While the percent of Michigan birthing hospitals with Baby-Friendly status increased from 14.3% in 2016 to 18.8% in FY 2019, the Baby-Friendly status remained at 18.8% in FY 2020. While there is general support for the Baby-Friendly initiative in Michigan, our birthing hospitals struggled to move forward on the Baby-Friendly pathway due to time, cost and competing priorities including COVID-19. Additionally, the percent of hospitals to achieve Baby-Friendly status does not reflect the important steps Michigan hospitals are taking to improve breastfeeding-friendly practices outside of the designation.

The first strategy to achieve our goal was to determine each Michigan birthing hospital's individual goal to continue movement along the Baby-Friendly pathway. Working toward this strategy, MDHHS shared Maternity Practices in Infant Nutrition and Care (mPINC) scores with all birthing hospitals and provided technical assistance in obtaining scores and how to be included in scoring for the following year. Achievement of this strategy was influenced by COVID-19 and competing hospital priorities; however, the State Breastfeeding Coordinator continues to identify opportunities to connect with birthing hospitals and provide helpful resources. The second strategy was to continue and expand breastfeeding practices by providing trainings and/or materials to 15 birthing hospitals. MDHHS works alongside the safe sleep program to provide breastfeeding and safe sleep trainings to birthing hospitals in the state. MDHHS participated in the Mother Baby Summit in November 2019 which brought together Michigan birthing hospitals. In October 2019, Michigan WIC hosted a group of maternal newborn nurse professionals to promote WIC services and encourage referrals. Michigan WIC connected with the Association of Women's Health Obstetric and Neonatal Nurses (AWHONN) to seek possible collaboration between WIC and birthing hospitals.

The third strategy was to encourage key partners to develop one specific strategy to support efforts to increase the number of Baby-Friendly hospitals. Several statewide partners elevated the importance of and positive outcomes

from breastfeeding. The Michigan Council for Maternal and Child Health (MCMCH) which has long advocated for breastfeeding support, continues to recognize its importance via its policy agenda. MCMCH and the Michigan Chapter of the American Academy of Pediatrics produced a maternal and infant health fact sheet which acknowledged the positive impact of breastfeeding. MDHHS continues to share and invite key partners to professional development opportunities related to breastfeeding including the MDHHS Maternal Infant Health Summit, Black Mothers Breastfeeding Association Conference, and the Michigan Breastfeeding Network's Great Lakes Webinar Series.

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

According to PRAMS data, Michigan's gap in breastfeeding initiation between Non-Hispanic White women and Non-Hispanic Black women has decreased over time from an average of 19.0% (in 2010) to 14.7% (in 2018). While the decreasing disparity rate indicates progress on this objective, the initiation gap is still higher than the original goal of 11.9%, which indicates persistent challenges in reducing the disparity. 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 support in Black Indigenous People of Color (BIPOC) communities. The webinars continue to be popular with WIC, hospitals, health departments and home visitors. On average, 35 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. Michigan WIC offered a Certified Lactation Specialist (CLS) training that prioritized persons serving and identifying as BIPOC.

The second strategy was to facilitate collaborative community efforts in two communities to impact low breastfeeding initiation rate among women of color. While the COVID-19 pandemic affected MDHHS's ability to target specific communities, MDHHS was successful in collaborating with communities on this strategy. The State Breastfeeding Coordinator convened a statewide collaborative group to focus on promoting and educating the public on the importance of breastfeeding in communities of color by commemorating Black Breastfeeding Week. Members of this group included hospital systems, health plans, nonprofit organizations, grassroot organizations, coalitions, skilled lactation professionals, doulas, and others. Items discussed in the group included statewide celebratory events commemorating Black Breastfeeding Week, policy priorities, and the importance of the historical trauma associated with black breastfeeding. MDHHS and the collaborative obtained funding from a Michigan health plan to provide scholarships for aspiring black lactation professionals in Michigan. Michigan WIC supported the ability of communities of color to provide breastfeeding support during COVID-19 by providing supplies for breastfeeding families in partnership with Southeast Michigan IBCLC's of color and establishing a statewide breastfeeding warmline in partnership with Black Mama's Breastfeeding Association.

The third strategy was to learn approaches to address disparities in breastfeeding rates by meeting annually with statewide groups that specifically support breastfeeding for women of color. As discussed above, the Breastfeeding Coordinator convened a statewide group that focused on commemorating Black Breastfeeding Week. This group included community organizations that explicitly supported BIPOC. The State Breastfeeding Coordinator worked to

bring organizations dedicated to supporting BIPOC communities to the group and fostered an environment for the group to collaborate on state and local events. MDHHS is continuing to build partnerships with community organizations that are based out of communities that have lower breastfeeding rates among Non-Hispanic Black Mothers. Due to the COVID-19 pandemic, a shift was made to not only meet virtually but to provide virtual support as well. MDHHS is hoping to explore projects to provide more virtual support to specific communities in FY 2021.

Safe Sleep Environments (FY 2020 Annual Report)

In Michigan's original FY2016-2020 five-year plan, the priority area to "Foster safer homes, schools and environments with a focus on prevention" was linked to promotion of infant safe sleep environments through the following two-part SPM:

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

The original NPM previously only measured the percent of infants placed to sleep on their backs. Michigan did not choose this NPM as a performance measure because Michigan exceeded the Healthy People 2020 goal. In FY 2019, HRSA added two Pregnancy Risk Assessment Monitory Survey (PRAMS) measures to the original NPM (that addressed infants sleeping alone and without objects). Given this change, Michigan converted its original SPM to the new NPM starting in FY 2019.

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 2020, Title V federal funding was used for activities that support Michigan's safe sleep work, including PRAMS, infant mortality communication, Fetal Infant Mortality Reviews, and funding to local health departments to support community-based safe sleep prevention efforts.

After increasing steadily from 2004 through 2014, the proportion of mothers placing infants to sleep on their back has remained unchanged since 2014. In birth year 2018, 82.5% of Michigan mothers placed their infants to sleep on their back. Data from PRAMS for birth year 2018 show no significant change in either the percentage of mothers putting infants to sleep without soft objects, or the percentage of mothers placing infants to sleep alone in their crib, bassinet, or pack and play. The proportion of infants sleeping with no soft objects (pillows, bumpers, blankets, toys) remained stable from 58.3% in 2017 to 59.8% in birth year 2018. In birth year 2018, 38.9% of infants were placed to sleep on a separate approved sleep surface, which has remained stable compared to 2017. Starting in 2016, this measure is based on the combination of five different sleep risk factors: always or often 1) sleeps alone in own bed; 2) in a crib, bassinet or pack and play; 3) does not sleep on a twin or larger mattress; 4) does not sleep on couches, sofas, armchairs; and 5) does not sleep in a car set or swing. Asking whether infants sleep in a car seat or swing—a new question—has had an especially large impact on this measure.

In FY 2020, MDHHS continued its work to ensure professionals and families were educated on safe sleep and that professionals had the tools and knowledge to support families. To reach professionals, MDHHS continued to identify the touchpoints where a family could and should receive infant safe sleep information. MDHHS 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 Maternal Infant Health Program), child welfare, the Regional Perinatal Quality Collaboratives, MDHHS Tobacco and connected with additional partners such as MDHHS Emergency Medical Services and Trauma and MDHHS Immunizations. MDHHS continued to explore ways to engage families directly in the work, but with limited success.

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

Objective A: Increase percent of infants put to sleep on a separate approve sleep surface to 37.5% by 2020.

Objective B: Increase percent of infants placed to sleep without soft objects or loose bedding to 57.1% by 2020.

In FY 2020, activities occurred within five strategies for Objectives A and B:

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

To continue and further expand a program initiated in 2013, funding in the form of mini-grants was provided to 15 local health departments (LHDs) and the Inter-Tribal Council of Michigan in FY 2020. The LHDs and Inter-Tribal Council of Michigan represented Michigan communities with the highest numbers of Sudden Unexpected Infant Deaths (SUIDs). Grant funding was provided in the amount of $22,500 for all grantees, except for Wayne County ($45,000) and the City of Detroit ($90,000) due to the higher number of SUIDs in these communities. The mini-grants allowed communities to develop programming that was culturally relevant and 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 (PSAs); and promoting protective behaviors such as breastfeeding and smoking cessation. A portion of the grant funds were used to purchase pack and plays or sleep sacks. In FY 2020, the COVID-19 pandemic had a significant impact on grantees; LHDs had to prioritize their COVID response. However, grantees were able to quickly transition to virtual safe sleep classes and contact-free distribution of pack and plays and other items. Grantees were able to provide infant safe sleep education to over 3,600 individuals (parents, caregivers, professionals, and community members) through virtual classes, an increase of about 16% from FY 2019. There was a big drop in the number of people provided infant safe sleep information at community events due to the pandemic, decreasing by about 75%.

The second strategy was to support providers who educate families on infant safe sleep, including continuing to facilitate collaborations with non-traditional partners. For example, the faith-based collaboration that was initiated in FY 2016 in Detroit continued to be supported and expanded into other counties. However, the number of faith-based organizations reached was limited due to the pandemic. At the end of FY 2020, a small number of faith-based organizations in Detroit and Genesee, Calhoun, Macomb and out-Wayne Counties were involved in these efforts which included a variety of activities such as hosting infant safe sleep educational sessions, distributing safe sleep messages in church bulletins, and distributing and/or displaying infant safe sleep educational materials.

The third strategy was to develop and disseminate safe sleep messages that are based in best practices and families' experiences. Much of this work began with a Michigan Health Endowment Fund grant awarded in December 2016. The work included focus groups with parents and individuals that provide support (e.g.,

grandmothers, aunts, uncles, and other caregivers); surveys with providers as well as families; market testing of materials; and other community advising. The new print materials were finalized and released in FY 2020.

The fourth strategy, to develop and disseminate tools for providers to have effective, non-judgmental, and culturally sensitive conversations about safe sleep, were part of ongoing programmatic efforts. Program staff were providing in-person training at conferences and professional trainings but transitioned to virtual events due to the pandemic. All trainings addressed challenges families have with following the safe sleep guidelines and how professionals can have open, non-judgmental conversations to support their efforts. An in-person and online version of a "Safe Sleep 201" training for home visitors and child welfare workers continued to be available. The training is based on the principals of motivational interviewing and teaches professionals how to have more effective conversations with families around safe sleep. The training also encourages professionals to include family members and other caregivers in the conversation to address the issue of when family members provide outdated advice.

In FY 2019, a new evidence-based or -informed strategy measure (ESM) was implemented to increase the number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep. As noted in the FY 2020 application, the ESM was changed to require the *Helping Families Practice Infant Safe Sleep (Safe Sleep 201)* training instead of the three-part motivational interviewing and safe sleep webinar series. In FY 2020, all 83 MIHP agencies have staff trained to use the concepts of motivational interviewing with safe sleep.

In addition, efforts to support birthing hospitals to educate families on infant safe sleep continued but were significantly impacted by the pandemic. The related ESM was to increase the number of birthing hospitals trained on infant safe sleep. In FY 2020, the MDHHS Infant Safe Sleep Program trained nearly 200 nurses and other hospital staff in-person at five birthing hospitals in the state. No in-person trainings were conducted after March 2020. In addition, an online version of the training was made available in August 2020. From August to September 30, 2020, 14 individuals took the online version of the training, including staff from six additional hospitals. The pandemic also caused additional challenges for hospitals. Many of the restrictions put in place to control the spread of COVID-19 also impacted the delivery of safe sleep education. For example, the number of support people, including fathers, were limited at the time of birth. This decreased the opportunity for broader sharing of the safe sleep message. In addition, in many cases, hospital stays for a birth were reduced to 24 hours, decreasing the time available to educate families on safe sleep and address challenges.

In FY 2020, over 300 individuals attended an in-person or virtual safe sleep training (a reduction of over 50% due to the pandemic) and over 9,600 individuals completed one of the three online infant safe sleep trainings. Providers were also supported with access to free educational materials; over 285,000 educational items were distributed by MDHHS in FY 2020. During FY 2017, an infant safe sleep email listserv for professionals was established and by the end of FY 2020 had held steady at over 2,600 members. A quarterly webinar series on infant safe sleep was established in FY 2017 and has continued since that time. In FY 2020, nearly 700 participants attended the webinars.

The final strategy was to support promotion of protective factors related to infant safe sleep (i.e., smoking cessation, breastfeeding, immunizations). Outreach to other MDHHS programs that continued in FY 2020 included MDHHS Immunizations, WIC and MDHHS Breastfeeding and MDHHS Tobacco Section. In conjunction with MDHHS Tobacco Section, the MDHHS Infant Safe Sleep Program continued to host a quarterly call to support local health departments implementing Society for Public Health Education (SOPHE) Smoking Cessation and Reduction in Pregnancy Treatment (SCRIPT) as well as other smoking cessation activities. In FY 2020, the program trained nearly 100 WIC Breastfeeding Peer Counselors on infant safe sleep, unsafe sleep products, the importance of breastfeeding, and how to support families. In addition, State of Michigan WIC supported two local infant safe sleep coordinators in

obtaining their Certified Lactation Counselor (CLC) credentials. In FY 2020, the program connected with additional partners such as MDHHS Emergency Medical Services (EMS) and Trauma Support. That connection led to a webinar for local health departments and other partners on how EMS, Community Paramedicine, and the Direct On Scene Education can be utilized to promote infant safe sleep.

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

In FY 2020, activities occurred within three strategies for this objective:

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

In addition to these strategies, the Infant Safe Sleep Program also took steps to address health equity and racial disparities as part of the strategies for Objectives A and B. The intended outcome of reducing the gap between non-Hispanic white women and non-Hispanic black women in following safe sleep guidelines is to reduce the unacceptable racial disparity that exists in sleep-related infant deaths in Michigan.

The first strategy is to provide training and support to LHDs on health equity. In March 2020, a training session was planned on health equity for LHDs that received mini-grant funds; however, that session was modified due to the pandemic. Instead, grantees were led in a discussion on how the pandemic was affecting families and how to support them. The second strategy was to dedicate at least one infant safe sleep webinar annually to the topic of health equity. While there was not a specific webinar on health equity, each webinar included information about health inequities and how to address them. The third strategy was to send at least one message on the topic of health equity via the Infant Safe Sleep for Professionals listserv per quarter. In FY 2020, nine messages sharing information and resources on the topic of health equity, including training opportunities, were sent via the Infant Safe Sleep for Professionals Listserv.

Perinatal/Infant Health - Application Year

Breastfeeding (FY 2022 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; can reduce post-partum hemorrhage; and may reduce the chance 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 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 work to expand collaboration with BIPOC led organizations and communities that address this health equity work, especially in relation to dismantling barriers to breastfeeding.

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

PRAMS 2018 data tells a more complicated story with an initiation rate of 86.9%, above Healthy People 2020 goals and NIS projections. PRAMS has shown that Michigan's initiation rate has increased steadily from 2009-2017 gaining 14.5% across eight years from 73.2% to 87.6%. 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 the same rate as white women, from 2014 to 2017, initiation rates among black women have remained unchanged (77.3% to 77.2%) compared to increases among white mothers (86.3% to 90.1%). Initiation rates among black mothers continue to be about 13% lower than white mothers. Statistics from MDHHS Office of Vital Statistics also show slightly lower initiation rates among Hispanic and Native American women when compared to white women. 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 implementing Michigan's State Breastfeeding Plan, a framework for improving breastfeeding rates statewide, along with 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 supporting community-driven breastfeeding efforts. The evidence continues to support that babies born in Baby-Friendly designated hospitals are more likely to be breastfed; therefore, increasing the percent of Baby-Friendly hospitals in Michigan remains the Evidence-based Strategy Measure (ESM) for this NPM.

MDHHS receives community input on breastfeeding related issues through a statewide breastfeeding workgroup

and participation in local breastfeeding coalition meetings when possible. Plans for additional community input includes a statewide advisory work group implementing the State Breastfeeding Plan.

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

Michigan's second State Breastfeeding Plan was released in February 2021. MDHHS will work to implement the Breastfeeding Plan with community input received, similarly to when developing the plan. To ensure community voices are amplified throughout implementation of the plan, an advisory group will be developed to guide decision-making on state strategies to advance breastfeeding practices and promotional activities. Over 40 community members have expressed an interest in participating and will be a vital part in the Breastfeeding Plan implementation. The plan will provide a framework for improving breastfeeding support in Michigan from 2021 thru 2024. The Breastfeeding plan will be promoted widely throughout Michigan and with breastfeeding stakeholders.

The second strategy, to provide MDHHS Maternal Infant Health (MIH) staff with 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. A staff training plan for FY 2022 will be developed to facilitate ongoing learning opportunities and structured dialogue. This strategy, in tandem with the next two strategies, will help to achieve the state priority need by enhancing support systems that empower families, promoting care for self and child, and connecting families to resources in their communities.

Evidence demonstrates access to professional and peer support can increase breastfeeding duration. For its third strategy, MDHHS will continue to support and promote increased access to breastfeeding support professionals and peer counseling services in programs serving families. In FY 2022, MDHHS's Breastfeeding Coordinator will conduct outreach to public, private, and tribal entities serving families to strengthen community-clinical linkages and increase access to these critical resources. 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 fourth strategy, increase the percent of Baby-Friendly Hospitals in Michigan from 18.8% to 20% 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. Additionally, MDHHS will recognize hospitals that adopt breastfeeding-supportive maternity care and infant feeding as best practices. This is Michigan's ESM for this NPM.

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

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

When MDHHS sought community input on its second State Breastfeeding Plan, survey respondents indicated a strong need for breastfeeding promotion campaigns to normalize breastfeeding in culturally responsive ways. It is unlikely that a paid media campaign will be possible; however, at a minimum, social media messages will be identified, used on MDHHS social channels, and shared with local agencies for optional use in FY 2022. Additionally, MDHHS will stay abreast of local social media messages and share on MDHHS pages, as appropriate.

Centering breastfeeding experiences of Black, Indigenous, and People of Color (BIPOC) includes celebrating community resilience while identifying systemic racism as the root cause of breastfeeding inequity. The third strategy, celebrate and promote breastfeeding social events with state, local, and tribal partners will focus on MDHHS organizing and/or supporting activities for observances including but not limited to Breastfeeding Awareness Month, Native Breastfeeding Week, Black Breastfeeding Week, and Global Latch On. MDHHS will work with partners to coordinate and amplify event activities and messaging across the state and within tribal communities.

The final strategy will be to support at least one community's efforts to impact low breastfeeding rates among women of color. Any efforts will be community driven and MDHHS will serve in a supporting role to help the community implement the approaches that it deems as most appropriate and relevant for women and families. Community driven efforts may include coalition building, education and awareness raising, organizational practice change, and/or improving continuity of care for breastfeeding families. This strategy supports the priority to intentionally seek the knowledge and expertise of communities and families to build trust and create initiatives that center family and community needs.

Safe Sleep (FY 2022 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 aged 1-12 months old (2016-2018 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 to 2018, Michigan Public Health Institute (MPHI), 2020) 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 3.4 and some as low as 0.6 (CDC SUID Case Registry – 2010 to 2018, MPHI, 2020). Sleep-related infant deaths are largely preventable. Local Child Death Review Teams have determined that 89% of sleep-related infant deaths in Michigan could have been prevented (CDC SUID Case Registry – 2010 to 2018, MPHI, 2020).

Significant racial disparities exist among sleep-related infant deaths. In Michigan, non-Hispanic Black (NHB) infants are 3.5 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 Other (Other includes American Indian, Asian, Pacific Islander, and multi-racial infants) are nearly 2.4 times more likely to die of sleep-related causes (CDC SUID Case Registry – 2010 to 2018, MPHI, 2020).

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 2018, MPHI, 2020).

Significant progress on these behaviors has been slow and difficult to achieve. Data from the Michigan Pregnancy Risk Assessment Monitoring Survey (PRAMS) often take several years to reach statistically significant change. In birth year 2019, PRAMS data show 84.9% of Michigan mothers placed their infants to sleep on their backs, 40.6% of infants were placed to sleep on a separate approved sleep surface, and 63.1% of infants were reported as sleeping with no soft objects (pillows, bumpers, blankets, toys). These are all improvements from birth year 2018, although these improvements did not reach statistical significance. When looking at data between 2016 and 2019, there have been state level significant improvements in infants reported as sleeping with no soft objects and significant improvement in separate approved sleep surface.

Furthermore, 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 21% 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 2018, MPHI, 2020).

According to 2019 PRAMS data, there is a disparity gap of 16.6% for the behavior of infants usually being placed to sleep on their backs between NHW and NHB, 88.3% and 71.7%, respectively. There is a 16.8% disparity gap of infants being put to sleep without soft objects or loose bedding (42.0% for NHW as compared to 37.8% for NHB). The differences between these populations for these two indicators were statistically significant. NHW mothers also reported a slightly higher proportion of infants sleeping on a separate approved sleep surface (42.0% for NHW as compared to 37.8% for NHB; disparity gap 4.2%).

However, the difference in sleep behaviors by NHW and NHB infants does not account for all the difference 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 locally developed, community driven infant safe sleep education, awareness, and outreach activities. In FY 2022, five LHDs and ITC will be offered grants. The jurisdictions served by the five LHDs account for 50% 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. In addition to funds, the ISS Program will provide monthly support calls, individually and as a group, and other technical assistance and support.

LHDs and ITC work directly with the community and their work is driven by data, community needs, and local advisory team input. The focus is on populations within the LHD jurisdiction that experience high rates of sleep-related infant death and disparity. Grantees, as experts in their own communities, are given the latitude to design, direct and conduct their own work which has led to the development of several promising practices. As SDOH are known to contribute to poor 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. For example, LHDs will be supported in engaging internal and external partners that address SDOH in their work and will be encouraged to include those partners on the local advisory team. LHDs and ITC will also be encouraged to include families and community members on the local advisory team to ensure that their input is included in the planning, development and implementation of programs.

COVID-19 has significantly impacted the ability of LHDs and ITC to conduct safe sleep activities on many levels. First, staff that typically conduct the safe sleep programming have often been pulled to work in other areas such as testing, contact tracing and/or vaccinations. Second, internal and external partners, such as faith-based organizations, hospitals and shelters, have been affected by COVID-19 and have had limited capacity to focus on activities beyond COVID-19. Third, at times, it has been challenging to reach families since they are primarily focusing on keeping their families safe and healthy. And finally, opportunities for providing the safe sleep programming, such as in-person classes and events, have been severely limited or unavailable. LHDs and ITC have been creative in overcoming these challenges by conducting virtual programming for the community and have conducted events such as virtual safe sleep classes (for individuals and groups) and virtual and drive-by community baby showers. They quickly developed protocols for distributing pack and plays and other educational materials in a safe, contact-free manner. We anticipate that work will continue to be affected by COVID-19 in FY 2022 and will continue to encourage and support LHDs and ITC in their creative efforts to meet program objectives.

The second strategy is 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 be customized to fit their needs. In FY 2021, a model safe sleep policy for agencies guidance document was created. Feedback from providers was solicited and received. The document was updated and improved to incorporate agency feedback. The ISS Program will prioritize work with agencies that are 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 2022, 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.

COVID-19 has impacted and will continue to impact work on this strategy as well. Success at connecting with

agencies in FY 2021 has been challenging as they are busy with COVID-19 activities. Staff will continue to be persistent and creative in reaching out and making connections with agencies, including non-traditional partners.

A finding of the needs assessment was lack of awareness in the legislature around issues related to maternal and child health and specifically sleep-related infant deaths. As part of the third strategy, the ISS Program will continue to explore with MDHHS Legislative Affairs staff how to best address this issue. This strategy also includes the possibility of implementing a legislative or regulatory change that would increase the number of babies safely sleeping once the legislative focus can be shifted from the COVID-19 pandemic.

The fourth strategy is to develop and share tools with providers on how to have client/patient centered conversations regarding safe sleep. This includes trainings (virtual, online and, when possible, in-person in FY 2022) for providers who work with pregnant and parenting families in programs such as home visiting, WIC, childcare, child welfare, CPS, and prenatal care. All tools are developed through a process that includes multiple opportunities for provider feedback and revision. In FY 2022, motivational interviewing concepts and risk reduction techniques will be included in all trainings conducted with professionals who work with families. The trainings will 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 2022. MIHP agencies serve approximately 20,000 pregnant moms and 13,000 infants on Medicaid annually. Targeting MIHP providers allows the most high-risk mothers and families to be reached.

In FY 2021, the High Touch, High Tech (HT2) e-screening tool utilized by some prenatal clinics 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 messages and webinars. Content includes health equity concepts and points professionals to additional training and resources to increase their knowledge in this area. 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.

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. Quarterly calls with MDHHS programs such as Immunizations, WIC, Breastfeeding, 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 engage hospitals in areas of the state with a high rate of sleep-related infant and death and disparities. The ISS Program will continue to explore with each hospital ways they 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 be utilized in this work. The support provided to each hospital will be customized to fit the needs of the hospital. A continued ESM will be to track the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU.

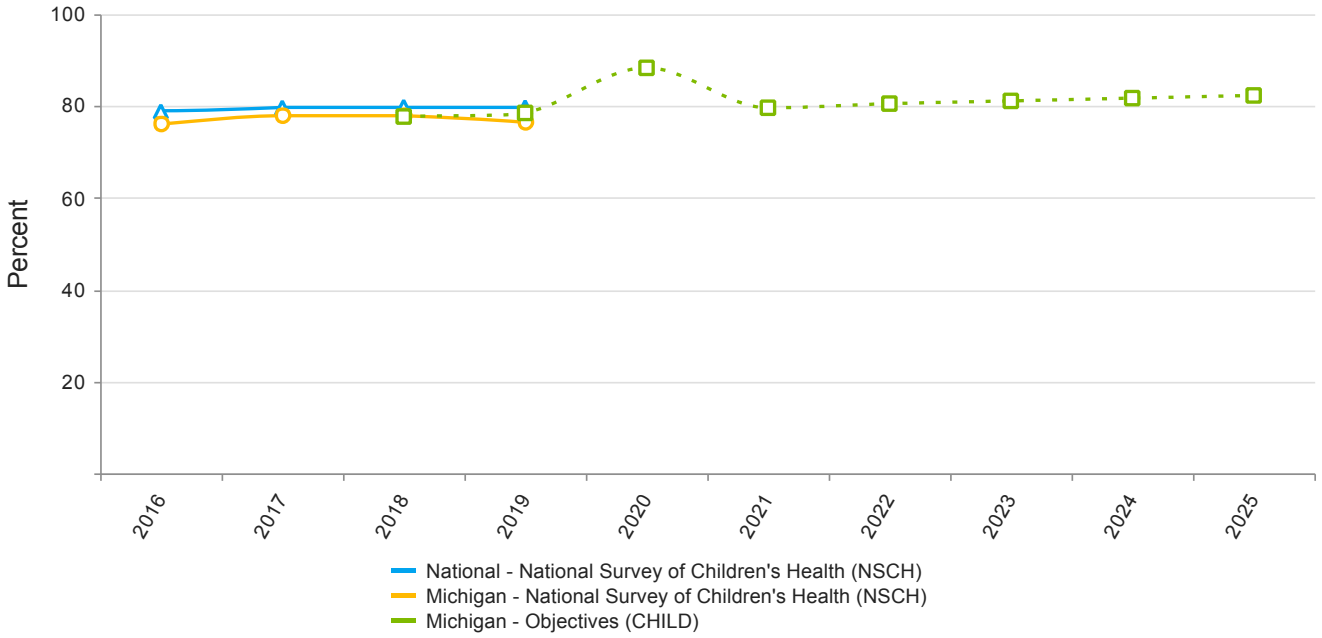
Child Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2018_2019	10.6 %	NPM 13.2
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	17.2 %	NPM 13.2
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	89.4 %	NPM 13.2

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)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			77.6	78.4	88.2
Annual Indicator		76.1	77.9	77.7	76.5
Numerator		1,584,320	1,629,730	1,618,664	1,574,401
Denominator		2,082,991	2,092,116	2,083,849	2,058,613
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	79.5	80.4	81.0	81.6	82.2	82.8

Evidence-Based or –Informed Strategy Measures

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

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		5,927	6,127	6,327	6,527
Annual Indicator	8,039	6,677	6,964	6,897	6,168
Numerator					
Denominator					
Data Source	SEAL Michigan Annual All Grantee Report	SEAL MI 2017 All Grantees Data Report	SEAL MI 2018 All Grantees Data Report	SEAL MI 2019 All Grantees Data	SEAL MI 2020 All Grantees Data Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	6,727.0	6,927.0	6,927.0	7,127.0	7,327.0	7,327.0

State Performance Measures

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

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		22.1	24.6	27.1	29.6
Annual Indicator	23.6	25	43.4	45.8	48.1
Numerator	1,208	1,048	1,308	1,671	994
Denominator	5,116	4,190	3,017	3,646	2,068
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	50.0	52.5	55.0	57.5	60.0	62.5

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					
	2016	2017	2018	2019	2020
Annual Objective		76	77	75	76
Annual Indicator	74.7	75	74.1	74.1	70.7
Numerator	125,343	125,853	123,596	121,707	119,786
Denominator	167,778	167,842	166,746	164,167	169,474
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	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	77.0	78.0	79.0	80.0	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) Increase reporting requirements from all DPSCD oral health providers B3) Record webinars for DPSCD school nurses focused on oral health education

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 patient's 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 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

C) Implement the I Vaccinate Campaign

Strategies

A1) Use data in the Michigan Care Improvement Registry (MCIR) to identify all children 6-24 months of age who are overdue for a vaccine A2) Generate recall letters from the MCIR and send to parents of children 6-18 months of age who are overdue for a vaccine, a minimum of annually A3) Partner with the City of Detroit health department to assist with increasing 19-36 month of age vaccination rates in Detroit

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

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

Child Health Overview

Meeting the health needs of children requires coordination and strategic action across multiple systems. The Division of Child and Adolescent Health (DCAH) provides leadership in this domain through the Early Childhood Health Section, Child and Adolescent School Health Section, and Oral Health Unit. Oversight of local MCH (LMCH) funding to local health departments is also located within this division. DCAH collaborates with the Michigan Department of Education, the Children's Service Agency, Division of Maternal and Infant Health, and the Children's Trust Fund to implement evidence-based home visiting and to strengthen early childhood systems at the state and local level. Through the Preschool Development Grant Birth through Five (PDG), Michigan is working to ensure smooth transitions for families throughout the early childhood system, including home visiting and Part C of IDEA. Michigan strongly supports Infant Mental Health, ensuring social emotional development of the child and family is considered as well as using a trauma-focused lens when working with families. Mental health consultation has been made available for early care and education providers and evidence-based home visiting providers.

The Oral Health Unit also plays a key role in promoting children's health and expanding access to dental screening and services for young children as well as school aged youth. The Division of Immunization (housed in the Bureau of Infectious Disease Prevention) tracks immunization rates and improves access to immunization services. Title V supports programs for children that improve childhood lead screening, increase access to dental care, address fetal alcohol spectrum disorder (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 these other funding streams are implemented in partnership with a variety of state and local organizations, including the Early Childhood Investment Corporation, Great Start System, local health departments (LHDs), Part C of IDEA, Healthy Start, Head Start, the Michigan League for Public Policy, the Michigan Council for Maternal and Child Health, and many others.

At the local level, LHDs expended LMCH funds across four performance measures in FY 2020. Five LHDs supported oral health for children (NPM 13) providing oral health education and gap-filling dental services (when schools were open during the pandemic). One LHD selected NPM 6 (developmental screening, originally selected in Michigan's 2015 needs assessment) to provide gap-filling developmental screenings and to educate parents on developmental milestones. Fifteen LHDs worked on SPM 1 (childhood lead poisoning prevention) providing gap-filling lead screening and case management, venous confirmation follow-up, and community education as able during the pandemic. Twelve LHDs selected SPM 2 for children immunizations. Agencies facilitated gap-filling immunization services and waiver education during periods when clinics were open in FY 2020.

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 2019 (2.9%) in Michigan, as it has in the nation overall. However, American Indian children (11.3%, ACS 2018) are significantly less likely to have health insurance than any other group of Michigan children. While 88.6% of children are in excellent or very good health as reported by their parents, only 80.0% of non-Hispanic Black children and 73.3% of children living at or below the federal poverty limit are reported to be in excellent or very good health (NSCH, 2017-2018). Regarding vaccination coverage, the percent of children ages 19-35 months who have completed the seven-vaccine series has increased over time from 52.1% (NIS-Child) in 2009 to 70.5% in 2018. However, coverage is lower among non-Hispanic Black children (51.6%) and children living at less than 100% of the poverty level (60.4%). Oral health is also a concern in Michigan where 8.9% of children, including 5.1% of children under five years of age, have tooth decay or cavities (NSCH, 2017-2018). Tooth decay is especially likely among children receiving Medicaid (11.3%),

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

Oral Health – Children (FY 2020 Annual Report)

The MDHHS Oral Health Program (OHP) provides population-based oral health prevention efforts and effective utilization of the dental workforce in implementing and improving oral health access. With the increased awareness of the impact of oral health to overall health, the OHP has increased its collaborations with community partners to improve oral health through prevention activities and direct access programs. The activities of NPM 13 in FY 2020, as discussed below, illustrate these strengthened partnerships. Additionally, Title V funding is used to support the activities of the SEAL! Michigan program, primarily through funding of school-based dental sealant programs.

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

This objective reflects activities to address and support the ESM, which is the number of students who have received a preventive dental screening through the SEAL! Michigan program. SEAL! Michigan is a school-based sealant program that aims to educate children about dental health and to reduce decay rates. In FY 2020, SEAL! MI experienced challenges as well as several positive achievements. To provide context for FY 2020, activities will be explained in chronological order.

To begin the year, the SEAL! Michigan program started with eight programs, which was one less than FY 2019. One program from FY 2019 became financially self-sufficient and moved into the SEAL! Of Approval program, in which the coordinators still collaborate with MDHHS School Oral Health Consultant and participate in all SEAL! Michigan activities, but do not receive funding. When this occurs, a new program is started; the new program identified to launch in FY 2020 was the District Health Department #10 (DHD #10). The first year of any sealant program is primarily a planning year, and this was the plan with DHD #10: to spend most of the year establishing the contract, completing trainings, establishing relationships with the schools, securing equipment, and beginning implementation in the first two schools in late spring 2020.

In the meantime, the other existing eight programs were active and were having a record year in terms of the number of schools they were working in and the number of students they were screening. For example, one program alone added 50 additional schools to their program.

In March 2020, Michigan experienced its first positive COVID-19 test, indicating that the virus was spreading in Michigan. Governor Whitmer launched a series of Executive Orders (EOs) across the state to help mitigate the spread of the virus and to support health care professionals, protect health care systems, and to ultimately save lives. Not only were schools closed, but Executive Order No. 2020-17 restricted non-essential dental procedures starting on March 21, 2020 until May 29, 2020. In the school-based dental sealant program, March to May is a significant period that programs work in schools because of better weather and fewer holidays. Thus, the school closures coupled with preventive dentistry being closed resulted in the inability of sealant programs to work. Additionally, the school calendar ends in late May/early June, so when the EO was lifted schools closed for the summer.

Another challenge in FY 2020 was navigating the novel coronavirus and understanding how to safely re-open the sealant programs in schools and securing the materials and supplies to do so. In June 2020, a *SEAL! Michigan Return to School Committee* was assembled, which included a total of four people who spent eight weeks developing the *Return to School COVID-19 Requirements.* The committee members included the MDHHS School Oral Health Consultant, who collaborates closely with the national *Organization for Safety Asepsis & Prevention*

(OSAP) in dentistry, and three other grantees of SEAL! Michigan who had demonstrated leadership in infection control. A plan was created and reviewed by one of the leading infection control experts in dentistry, Kathy Eklund, and then submitted for approval by the MDHHS Community Health Emergency Coordinator Center (CHECC). This document was approved in late August and a training was provided to all individuals who work in a SEAL! Michigan program. The guidelines were a requirement to return to work under SEAL! Michigan to ensure safety was put first as programs returned to schools to see students.

Once the plan was created to safely return to work, another committee was created (which included a member of each SEAL! Michigan program) to identify alternative work settings. This living document was created via collaboration and brainstorming on the numerous alternative locations that mobile dental programs could provide services to children if schools declined dental services or did not open. Some alternative locations included daycare centers, WIC, head start centers, youth groups (YMCA, churches, Boys & Girls Club, sporting arenas), youth homes, group foster homes, community centers, township halls, city halls, food pantries, and external service areas that could be set up in retail and health center parking lots.

In the meantime, over the summer months SEAL! Michigan programs continued to work and support families' oral health needs in ways that they could. Activities included packing thousands of oral health bags (which included toothbrushes, toothpaste, and oral health education) and distributing them to families via the school free lunch distribution. One program provided "tickets" in the oral health bag for a free electric Spin Brush if the ticket was brought to the dental clinic at the local health department where dental sealants were placed if the student was eligible for sealants. Another program began collaborating with the Women, Infants, and Children (WIC) department at the health department and started drive thru dental screenings and fluoride placement in which children did not leave the car. In addition to reaching out to families in a variety of ways, time was also spent maintaining equipment (e.g., portable dental units and dental busses); engaging in educational programs focused on health equity and social justice; and examining our individual roles in working toward a more equitable social system.

In late August, SEAL! Michigan programs were educated, stocked, and fully prepared to return to work in schools. Between August and the end of September, minimal schools around the state were both open and allowing dental programs to enter, but a few schools were welcoming, and some work was done. For schools that were taking precautions and not allowing outside programs to enter, SEAL! Michigan programs continued to support families by providing oral health bags and worked in alternative settings as possible.

Despite so many challenges, numerous achievements were realized during the year. First and foremost, the work conducted by the SEAL! Michigan colleagues is a testimony to their dedication to children and adolescents in their communities. Collectively the grantees dove into the work and embraced how to come out of the pandemic stronger. In addition, the strong start to the year helped the year-end data. Collectively, 6,203 students were screened and 14,334 sealants were placed across the eight programs. In comparison, 6,897 students were screened and 15,518 sealants were placed in FY2019 across nine programs.

The SEAL! Michigan program continues to focus on schools with high needs as indicated by 50% or more of the student population participating in the Free and Reduced Lunch Program. Of the students seen, the grades served vary by county. The Upper Peninsula and Wayne County programs serve all students in all grades; however all other counties only serve students in first, second, sixth, and seventh grades. This is because the Upper Peninsula is a severe health professional shortage area and is also rural with small schools. Wayne County has students who are high-risk for dental disease; has a transient population; and past data show that teeth erupt earlier thus it is important to see all students to determine if teeth can be sealed and to screen for urgent issues. Almost half of screened students received at least one sealant on a first molar; 5.8% received one sealant, 9.4% received two sealants, 5.8% received three sealants and 26.1% received sealants on all four first molars.

Of the total population served by SEAL! Michigan, 59.0% were white,12.4% were Black and 16.3% were Multiracial. According to the US Census Bureau (July 1, 2018), the population in Michigan is 79.4% white, 14.1% Black and 6.5% combined other races. Therefore, the population served by SEAL! Michigan reflects Michigan's population. A quarter of students screened had special health care needs and 86.3% of students received a fluoride varnish treatment (a slight decrease from FY 2019). There was a decrease from FY 2019 in the percent of students in need of urgent care, and this decline has been a positive trend (12.9% in FY 2016, 10.1% in FY 2017, 8.9% in FY 2018, 8.0% in FY 2019, 6.0% in FY 2020). Over the last three reporting years, there was minimal change in the percent of students who had evidence of decay or filled first molars (6.9% in FY 2016, 8.0% in FY 2017, 6.5% in FY 2018, 6.5% in FY 2019, and 5.1% in FY 2020).

In FY 2016, 19.2% of students did not have dental insurance and 35.2% were on the state's Medicaid program, Healthy Kids Dental (HKD). In FY 2017 there was a decrease in children who did not have dental insurance (17.3%) and an increase in HKD (41.6%). In FY 2018, the number of students reporting no insurance (17.4%) and the number of children on HKD (41.4%) remained about the same as the prior year. In FY 2019, over half of the students seen were covered by HKD (56.3%) and 1.1% had Medicaid, whereas 16.5% reported no dental insurance. In FY 2020, 56% of students screened had HKD and 0.8% had Medicaid, while 19.4% reported no insurance. This trend continues to demonstrate that HKD is working to increase access to dental care to children seen in the school-based dental sealant program. This positive trend may be attributed to the program coordinators working with parents to get students enrolled in HKD as it is a component of the SEAL! Michigan parent education.

In FY 2020, the SEAL! Michigan program continued to reach the target population through family and consumer outreach and engagement. To reach families and consumers, the funded programs attended back-to-school nights, Parent Teacher Organization (PTO) meetings, and some schools allowed information to be distributed via social media. These settings provided an opportunity to share information and answer questions about oral health. Student consent forms were delivered home with an informational brochure on the SEAL! Michigan program and the benefits of dental sealants. The informational flyer was updated in 2020 by the MDHHS Communication Department. When the flyer was initially developed several years ago, it was developed by a contracted health literacy expert at McMillian's Health and was written at a third grade reading level. During the revision, nearly all language was kept the same, but the flyer was updated and given a different look. It was made available in English, Spanish, and Arabic and is provided to all programs to attach to their consent forms. The flyer only shows teeth (no people) so it can be used across all grade levels.

It is shared anecdotally that when schools agree to send out consent forms at the beginning of the school year there is a much higher consent form return rate, and this will be encouraged in following years. A beneficial tactic learned in FY 2019 was to put a sticky note on the parental consent form. The notes are printed and briefly explain, in plain language, that it is important for the consent forms to be completed and returned to the school. This note added to the consent form made a significant impact on the number of returned forms in three of the programs, which experienced an increase of approximately 40% more forms returned. This success tip was shared with other programs and several have implemented the approach. Although not all returned forms are 'yes' consent, it is beneficial to receive the 'no' forms to know that guardians were able to make an informed decision.

In FY 2020, ongoing program management and technical assistance from the School Oral Health Consultant at MDHHS continued. The School Oral Health Consultant completed a certificate in infection control through the Organization for Safety, Sepsis and Prevention (OSAP). The certificate is a new process and took over a year to complete. The investment in this process has led to the SEAL! Michigan programs operating in an even safer manner via school-based care. The OSAP organization has also recognized this effort and has continued collaborating with the MDHHS School Oral Health Consultant to teach other national programs. In February 2020, the School Oral Health Consultant presented on behalf of SEAL! Michigan and OSAP on Infection Control in Mobile

Programs at the First Annual Mobile Dentistry Conference. Although infection control has always been a significant focus in SEAL! Michigan, it has been strengthened even further due to additional training in FY 2019 and FY 2020 related to water safety and routine testing of water lines; in FY 2020 training specifically focused on mitigating the spread of SARS-CoV-2 in school settings to ensure patient and provider safety.

Quality patient care and continual quality management continued to be a focus in SEAL! Michigan in FY 2020. Although funding is scarce for training opportunities, a goal has been set to provide at least one annual training to SEAL! Michigan providers via an in-person conference and via one webinar. These trainings have occurred since approximately 2010. Ongoing training provides the tools to continually increase quality within each program. It also provides networking opportunities between the program coordinators where collaboration can take place and lessons learned can be readily shared.

Each August, coordinators working in SEAL! Michigan programs at the local level attend the Annual SEAL! Michigan Workshop. Although unable to meet in person, the SEAL! Michigan Workshop still occurred virtually in August 2020. Dr. Katena Cain presented *Bridges Out of Poverty, Part II*. Dr. Cain presented *Bridges Out of Poverty, Part I* in 2018. Continuing education focused on understanding poverty and health equity is important for providers. This course was highly interactive, even more so in the virtual format, as participants felt comfortable sharing and asking questions. Many also utilized the chat feature and to add to the conversation. Workshop evaluations were incredibly positive, and one participant said that “it was so good it could have lasted all day!”. As previously mentioned, a training was also provided via webinar, recorded for on-demand learning, regarding infection control requirements expected of SEAL! Michigan programs.

To further support the growth and acceptance of school-based dental sealant programs, the MDHHS School Oral Health Consultant attended the Michigan Association of School Nurses (MASN) conference in both the Upper Peninsula and Lower Peninsula and presented an oral health update at both conferences.

In FY 2019, the Oral Health Program was moved into the Division of Child and Adolescent Health (DCAH). The Child and Adolescent School Health Section is also located within the DCAH, which houses consultants in both school wellness programs and school-based health centers, as well as the state School Nurse Consultant. This re-organization was beneficial as now all school health providers are in the same division and can more easily collaborate to discuss partnership opportunities. In FY 2019, a connection was also made with a Michigan Department of Education staff member focusing on school nutrition, and the School Oral Health Consultant assisted with adding oral health language to a project focusing on creating written school health plans. The MDHHS School Oral Health Consultant also formed a MDHHS COVID Navigation Committee which meets approximately every other month and brings together various consultants at MDHHS managing school-based programs (hearing, vision, sex ed, etc.) to network, share, brainstorm, and support one another on appropriate management techniques during this unprecedented pandemic. Members of this group have reported appreciation of this time to collaborate internally on best practices of supporting individual programs to ensure that the program is able to thrive post-pandemic.

One final success is the implementation of the Oral Health Coordinator position embedded within Detroit Public School Community District (DPSCD). This position is funded under Title V. The idea for the position was first formed in December 2018. According to the *2016 Count Your Smiles* report (an open mouth screening with a dental provider and written parent survey), looking specifically at the City of Detroit, approximately 82% of third grade children have active dental disease (18.3% have no obvious problems, 59.6% have early dental care needs, and 22.1% have immediate dental care needs) and only 28.3% have at least one dental sealant (which is the lowest rate by region in Michigan). Looking further into the 2016 CYS report, only 1.5% of third grade students’ parents report their child could *not get care* in the last year and 0% reported their child *never* had a dental visit. Evaluation of these data revealed that students in Detroit have a need for quality dental care and follow-up care coordination specific to

oral health because almost all students have been to a dentist, yet nearly 82% have active dental decay. This suggests children are being seen by a dental professional but are left with active disease and lack of follow-up care. Upon meeting with DPSCD school health staff, it was also discovered that no data on past oral health services exist.

After extensive collaboration efforts, a highlight in 2020 was that a new DPSCD Oral Health Coordinator began work. This half-time position is fully embedded within the DPSCD organization as a consultant of the Michigan Public Health Institute. The position is managed by the MDHHS Oral Health Director and works closely with the MDHHS School Oral Health Consultant. The DPSCD Oral Health Coordinator has the following responsibilities:

- Oversee dental treatment and providers on-site to ensure the patient experience is safe, complete, and prevention focused;
- Collect and report accurate data per SEAL! MI requirements;
- Evaluate dental providers with a quality indicator tool to conduct annual performance evaluations;
- Collaborate with providers to ensure students and parents receive oral health education;
- Care-coordination of high-risk students with dental needs to relieve students of the burden of disease;
- Organization of parent and student focus groups to learn how to best meet oral health needs and to increase positive consent forms for treatment; and
- Ensure preventative measures (dental sealants and fluoride varnish) are provided to all students with consent.

DPSCD has a total of 110 physical school buildings to which mobile dental providers are assigned. Having an Oral Health Coordinator housed in DPSCD allows for more hands-on oversight of the dental providers who provide school-based care, which was previously overseen by the school nurse. This new structure enables increased oversight to ensure that safe and proper care is being provided and that students with oral health disease are followed up on and placed in dental homes. Part of the agreement between MDHHS and DPSCD is that all dental providers contracted with DPSCD to provide dental care will prioritize placing dental sealants on all eligible teeth and will report data to MDHHS.

This new position is an exciting and promising new partnership to help ensure that kids who need access to dental care receive appropriate assessment and treatment. The position will also bring an enhanced level of oral heath prevention, oral health education, and community partnership around oral health in DPSCD. The current staff member is a life-long resident of Detroit and previously worked as a SEAL! Michigan coordinator for a former program, and therefore has many connections in Detroit to help support students, providers, and the school nurse.

Lead Poisoning Prevention (FY2020 Annual Report)

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

This report describes CLPPP activities undertaken in FY 2020 to improve testing in general and confirmatory testing specifically. 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 2020, among children younger than six years of age that had a blood lead test, 2.3% (2,134 of 93,655 children tested) had elevated blood lead levels. This was a slight decrease from 2.7% (3,912 of 143,223) in 2019. The rate of confirmatory venous testing of EBLL capillary test results in 2020 was 48.1% (994 of 2,068 EBLL capillary tests), which was an increase from 45.8%

(1,671 of 3,646) in 2018.

However, since the start of the COVID-19 pandemic, deferred care and increased use of telemedicine has negatively impacted blood lead testing. The pandemic also results in children spending more time at home, which increases the risk of exposure for children living in homes with lead contamination. MDHHS developed a response plan to address the decrease in testing rates, with strategies around education, outreach, and data surveillance.

Michigan's CLPPP is within the Division of Environmental Health, which has overall responsibilities for addressing environmental hazards and for administering the state's Lead Safe Home Program. Sitting within this division strengthens integration of the blood lead surveillance and epidemiology functions within MDHHS's area of epidemiological, environmental, and lead abatement subject matter expertise. The three main focus areas of CLPPP include surveillance, outreach, and health services. 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.

In FY 2020, CLPPP continued support to address priorities in the MDHHS Lead Strategy. The MDHHS Lead Strategy includes five pillars, including financing, compliance, workforce development, data, and screening. A kick-off meeting for the strategy was held in January 2020 with over 70 participants within MDHHS to present the strategy to Medicaid, maternal and child health programs, departmental leadership, and WIC. Several initiatives were started in FY 2019 to support these pillars, specifically the screening pillar. The initiatives are also part of the response plan to address the decreased blood lead testing rates due to the COVID-19 pandemic. These included:

- The development of a postcard to be mailed out to families of children under the age of six in Michigan. The postcard includes information on the sources of lead, health impacts of lead, and the importance of blood lead testing.
- The development of a statewide lead education media campaign that will show the main sources of lead and simple actions to protect against lead exposure.
- The development of a data dashboard that will be available on www.michigan.gov/lead and will include data about nursing case management, testing, and abatement activities.
- Presentations about lead poisoning prevention to internal and external partners, including Medicaid, WIC, and maternal and child health programs.
- Continued distribution of the "Lead Free Michigan" toolkit, a go-to resource for nursing case managers, health educators, and other public health professionals as they work with and provide education to various populations about lead poisoning prevention.

While two distinct objectives were identified for this state action plan, the same strategies were used to make progress on both objectives and thus are discussed in tandem, below.

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

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

All Medicaid-enrolled children are considered to be at high risk for lead exposure. Michigan Medicaid policy requires that all Medicaid-enrolled children be tested for blood lead at age 12 and 24 months of age, or between 36 and 72 months of age if not previously tested. Because of this policy, along with the available infrastructure and data,

Medicaid-enrolled children remain a focus for increasing testing rates. In addition, all other children served by private insurance carriers or with no insurance coverage should be assessed to determine if they are at risk for lead exposure. Regardless of insurance status, all children with an elevated blood lead capillary test result should be followed up with a confirmatory venous blood lead test. In 2016, baseline data indicated that 23.61% of all children under age 6 with an EBLL from a capillary test who received a venous lead confirmation test. In 2020, the original objective was exceeded with 48.1% of all children under age 6 with an EBLL from a capillary test receiving a venous confirmatory test.

In efforts to increase testing rates, partnerships with local health departments are essential for success. MDHHS provides funding to local health departments to focus on projects to increase capillary to venous testing rates, as well as provide nursing case management to children with elevated blood lead levels. In FY 2020, CLPPP focused on improving communication and technical assistance to local health departments through a quarterly newsletter called “CLPPP Notes”; bimonthly phone calls to facilitate conversation among local health departments that are facing similar barriers; and regular trainings to local health department nurses and staff.

In FY 2020, 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. 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.
- Distributing materials, providing education, and presenting at community events (many of which became 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.
- 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.

There was continued success in the in-home nursing case management program, provided by local health departments statewide and by the Community Health Access Program in Genesee County. Since the increase in reimbursement amounts for in-home visits to Medicaid children with elevated blood lead levels in 2017, more children have received nursing case management services. Due to COVID-19, these services had to be delivered via phone and tele-visits. In FY 2020, 657 reimbursable homes visits were conducted by the 43 participating local health departments for 522 children with elevated blood levels. This is a decrease in visits and children served from previous years, however, still a significant increase from pre-2017. A requirement for reimbursement is that the blood lead level must be confirmed with a venous blood lead test. If a child has an EBLL from a capillary test, a venous confirmatory test must be done before the in-home nursing case management can begin.

Although the nursing case management reimbursement is only for Medicaid-enrolled children because funding comes from Medicaid, many local health departments have committed to doing follow-up with non-Medicaid children with EBLLs, including pursuing venous confirmatory tests where indicated, regardless of no reimbursement. In FY 2020, 222 home visits were completed for a total of 176 non-Medicaid children with EBLLs. This is an increase from years past, however, these numbers were not required to be reported previously.

All efforts and interventions to lower an elevated blood lead level are documented by the nurse case managers and

CLPPP in Michigan's Healthy Homes and Lead Poisoning Surveillance System (Mi-HHLPSS). Mi-HHLPSS is a surveillance system maintained by CLPPP. It is used as a tool to assess homes abated and to prevent future EBLs. CLPPP uses the system to assure children are provided nursing case management by nurses.

Due to the COVID-19 pandemic and a move to remote work, coordination with other programs and partners became even more important to CLPPP's work. This included:

- Work to expand internal state agency partnerships with WIC, Michigan's Foster Care Program, and Lead Safe Home Program.
- Coordination with other health educators and community engagement specialists in the Division of Environmental Health to ensure that CLPPP educational materials were distributed widely.
- Coordination with the MDHHS Drinking Water Unit and Michigan's Department of Environment, Great Lakes & Energy to respond to communities with water testing over 15 ppb. When this happens, CLPPP develops data reports, helps with filter distribution, and attends events to ensure accurate information is distributed to residents.
- Coordination with community groups, advocacy organization, families of lead-exposed children, local government agencies

In FY 2020, CLPPP focused on identifying health care provider barriers to blood lead testing. In partnership with Altarum Institute, a survey was sent to health care providers statewide to better understand their current knowledge around testing/screening requirements and recommendations. Survey results showed that additional provider education should focus on testing recommendations, how to integrate testing into the clinic workflow, and how data management systems can support blood lead testing. Based on this information, CLPPP started planning for a robust health care provider education initiative. A public health detailer and physician consultant were hired by MDHHS Division of Environmental Health to assist with strategies and implementation. One of first activities was developing a health care provider resource packet that includes information on patient education, testing recommendations, care coordination with local health departments, and an online lead poisoning prevention training module for healthcare providers.

Additional programs and activities undertaken in FY 2020 to improve blood lead testing rates and capillary to venous testing rates in all children included:

- Began a partnership with MDHHS Vital Records to improve race and ethnicity reporting for blood lead testing. The project centers around establishing a data use agreement to link the birth records and blood lead data tables in the MDHHS Data Warehouse. This linkage will provide data to promote testing to populations that are at risk for blood lead exposure and to better address health disparities and inequities.
- Monthly data summary reports of testing status of Medicaid-enrolled children that included data by Medicaid Health Plans are available. These reports are produced in an effort to bring all Medicaid Health Plans in line with the Medicaid goal of 100% of continuously-enrolled children tested by age three. Planning began to move this report availability to a Medicaid care coordination online portal, called CareConnect360. This move will allow for LHD and foster care workers to access blood lead testing status for Medicaid children as needed.
- Continuation of a quarterly Medicaid-CLPPP workgroup to ensure coordination between Medicaid programs and CLPPP. A weekly meeting between CLPPP and the Medicaid Managed Care Program was established for more regular coordination about lead data.
- Facilitating requests for blood lead data and Medicaid data by partners and researchers.
- Held a meeting in January 2020 with the CLPPP data referent group to get feedback and input on reports, processes, and procedures from frequent users of CLPPP data.

- Completed the Master Person Index algorithm project to enhance the matching of individuals within the blood lead data and across MDHHS data systems including Medicaid and the Michigan Care Improvement Registry. This improves our reporting abilities and better links blood lead data to alert providers of a child's blood lead status.
- Contracted with a community advocate to begin outreach to the Arab American community in Southeast Michigan, specifically to parents, providers, and resettlement workers, promoting screening, testing, and education.
- Development of a radio script for Spanish-speaking populations which will be piloted in Kent County and will be available for use in other areas with Spanish-speaking populations.

To continuously improve CLPPP programs and activities, CLPPP contracts with the Michigan Public Health Institute to conduct an annual evaluation. The evaluation includes a satisfaction survey and key informant interviews with local health departments and lead poisoning prevention partners to collect data about communication, usefulness of resources, and response times/actions of CLPPP. Overall, results suggest participant satisfaction in their interaction with CLPPP staff.

Immunizations – Children (FY 2020 Annual Report)

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

The first measure, percent of children 19 to 36 months of age who have received a completed series of recommended vaccines, is discussed here. Many efforts were implemented by MDHHS in 2020 to assure children receive vaccines on-schedule according to the recommended ACIP (Advisory Committee on Immunization Practices) Immunization schedule. The COVID-19 pandemic has presented numerous challenges to both healthcare and public health. The MDHHS Division of Immunization 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.

In addition to the barrier of the pandemic, many parents still have questions about vaccines and lack vaccine confidence. A recent national study suggested that only 63% of parents are following the CDC recommended ACIP schedule. Michigan immunization rates for this SPM (percent of children 19 to 36 months of age who have received a completed series of recommended vaccines) have dropped from 74% in FY 2019 to 70% in FY 2020, based on MCIR vaccine information. 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: Increase the percentage of children 19-36 months of age who receive recommended vaccines.

In FY 2020, due to the COVID-19 pandemic, Michigan continued to experience a significant decrease in keeping children on schedule with all vaccines. During the first 6 months of the COVID-19 pandemic Michigan analyzed and

distributed data frequently for children 19-36 months old. Michigan statewide coverage for children 19 through 35 months of age for 4 DTaP, 3 Polio, 1 MMR, 3 Hib, 3 HepB, 1 Varicella, 4 PCV, 2 HepA (43133142) rebounded from 53.6% in July 2020 to 55.0% in August 2020. For September 2020, the coverage increased to 55.1%. Additionally, for the same series without 2 HepA (4313314), coverage decreased from 70.3% in August 2020 to 70.0% in September 2020. This vaccine series coverage is 2.9% and 3.9% lower than it was in September 2019.
With the demands of COVID-19 response activities and priorities, MDHHS Immunization staff have not generated immunization impact reports after September 2020. Children who are not fully vaccinated remain susceptible to vaccine preventable diseases.

MDHHS Immunization did assess the same childhood immunization coverage by Medicaid Status. The disparity in child coverage for the 4313314 series by Medicaid status remains. After gains in child coverage for the 4313314 series in August 2020, the coverage declined from 72.9% in August 2020 to 72.6% in September 2020 for non-Medicaid children and from 67.2% in August 2020 to 67.0% in September 2020 for Medicaid enrolled children. See Table 1 below for more information on the disparities in vaccination coverage by Medicaid status. Michigan children 7 months of age have the largest disparity in vaccination coverage by Medicaid status with coverage 21.6% lower for Medicaid-enrolled children than non-Medicaid children.

Table 1. Percentage of Michigan Children Vaccinated with the ACIP Recommended Vaccines at Milestone Ages by Medicaid Status, October 3, 2020

	3mo	5mo	7mo	16mo	19mo	24mo
Medicaid	65.8	61	43.9	46.3	51	41.9
Non-Medicaid	53.9	76.6	65.5	60.5	62.1	53.3
Difference	-11.9	15.6	21.6	14.2	11.1	11.4

To addresses these challenges, the Michigan Immunization program continues to support the statewide media campaign, I Vaccinate, which began in March of 2017. MDHHS also continues 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 2020 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 also been used during the COVID-19 pandemic.

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

The Division of Immunization, under the direction and guidance from CDC, has paused site visits with immunizing provider sides during the COVID-19 pandemic. The quality improvement (QI) reports remain available to local health department immunization staff and to immunization provider offices. QI reports are focused on timely administration of immunizations and assess coverage level rates at the age of 2 years, 13 years, and 17 years old. The QI reports assist with data to support strategies focusing on increasing timely vaccinations of all patients. In 2019, 829 QI visits were completed in provider offices to assist with increasing immunization rates. During 2020 fewer than 200 immunizing providers received a site visit, directly due to COVID-19 activities and priorities.

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

In FY 2017, County Immunization Report Cards were first generated and posted on the MDHHS website on a quarterly basis. The report cards were generated to reflect the immunization rates of each county in Michigan and ranked them against other counties in the state. The report cards have been modified several times to better meet the needs of local health departments. The goals of the report card data are to 1) provide each county with an understanding of vaccination rates in their respective communities and 2) identify areas for improvement. County report cards have been published every quarter and highlighted during several conferences. Because of the COVID-19 pandemic the Michigan Immunization report cards have not been generated. As COVID-19 demands decrease, Michigan will again make that data available to the public to increase awareness of immunization rates by county.

Child Health - Application Year

Oral Health – Children (FY 2022 Application)

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

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

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

The Healthy People 2030 target goal 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 the fall of 2018, SEAL! Michigan was funded through Title V, CDC Cooperative Agreements, HRSA grants (as available), and annual gifts received from the Delta Dental Foundation of Michigan. Beginning in the fall of 2018, the SEAL! MI program experienced a loss of federal grants, and is now primarily funded through a Medicaid match, Title V, and annual gifts from the Delta Dental Foundation. This blended funding supports direct services delivered in schools across Michigan, a School Oral Health Consultant to manage SEAL! Michigan at the state level, and a 0.5 FTE Oral Health Coordinator at Detroit Public School 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 adds significant sustainability to the program overall.

As a response to the COVID-19 pandemic, the SEAL! Michigan program implemented changes which will continue into FY 2022. 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 all of lower Michigan, minus Wayne county, and all students (K-12) were served in Wayne County and the Upper Peninsula. During the pandemic, the SEAL! Michigan programs have been school-based and school-linked when possible, and

when not possible, they are 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 can set up external service areas in retail and health center parking lots. Student seen are between the ages of 1-21 and it is allowable to seal both primary and permanent teeth. These changes are in response to so many students in Michigan not having access to preventive dentistry in a fixed dental home, now lacking services in the school environment, and not knowing the future of when schools will be open and allow for school dental services. Essentially, the programs are given the flexibility to think 'outside the box' on how, where, and when to provide dental screenings, sealants, and other preventive treatments.

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

This objective aligns with the Oral Health NPM: Percent of children, ages 1-17, who had a preventive dental visit in the past year. Implementing a school-based dental sealant program will support progress toward an increased number of children with a preventive dental visit. SEAL! Michigan is focused on providing preventive oral health care to students through assessment, education, dental sealants, and fluoride varnish application. To best align preventive efforts to highest areas of need, the SEAL! Michigan programs target schools that have 50% or more students enrolled in the Free and Reduced Lunch Program (FRLP).

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

SEAL! Michigan began in 2007 with a single pilot program serving a handful of schools. Through increased awareness and advocacy, the program has seen consistent growth by adding more programs and with each individual program expanding into more schools annually. Currently the program has nine grantees across the state, plus programs operating in DPSCD (which will be determined by DPSCD but ideally will be no less than four programs at a time). 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 improvement modifications to its data collection efforts. Data are collected annually and entered through Teleform software where it is 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 number of schools and students served and through 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 a marketing material with schools and/or on their webpages. The infographic highlights data from each individual program for the fiscal year and can be used by each program 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 infographic will be updated annually.

The SEAL! Michigan program attempts to reach the target population through family and consumer outreach and engagement. As stated previously, programs focus on schools with a high number of children enrolled in the FRLP. The program relies on parent and guardian awareness of the program; thus, parents' consent for their children to receive the preventive oral health services is a key component of the program. To reach families and consumers, staff from the funded programs attend back-to-school nights and Parent Teacher Organization (PTO) meetings. A satisfactory rate of parental consent is achieved among currently established SEAL! Michigan programs. New programs will assess parent engagement strategies, as discussed in Objective B. All student consent forms are delivered home with an informational brochure on the SEAL! Michigan program and the benefits of dental sealants. The brochure was 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 the summer of 2020 by the MDHHS Communications Office and will continue to be used in FY 2022. The brochure strives to deliver linguistically and age-appropriate health information.

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

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

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

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

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

Detroit Public Schools has incorporated BLUEPRINT 2020 into their system to help "rebuild Detroit Public Schools." Oral health is included in the plan and falls under the Whole Child Commitment, as students receiving dental care will have less toothaches and will be more likely to achieve their full potential. The Detroit Public School Community

District (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, the majority of children (approximately 82%) attending DPSCD 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 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 October 2018, the school system halted all oral health work as a result of having too many different providers of oral health services. Administrators took the opportunity to pause and create an oral health plan that provides more clarity on which providers are serving the schools. The new plan involves contracting with four different providers (two restorative and two preventive) and assignment of two to each school (one restorative and one preventive). This improvement enables DPSCD to have more control over which programs are coming in and out of each school building. Historically, DPSCD did not have a designated position to oversee all oral health activities and lacked the oversight to 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 a 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 in FY 2022 to provide oversight of the dental programs and to help the students in DPSCD receive both preventive and restorative care.

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 enable an increased ability to create culturally and linguistically appropriate health education materials. Involving parents and students will assist in gathering qualitative data and a better understanding of what parents and students need in their school-based oral health program—and conversely, what may not be working. This knowledge will likely lead to an increase in positive parental consent forms and result in a higher utilization of services. Findings will also be shared with SEAL! Michigan programs outside of DPSCD so all programs can benefit from the outcomes of the focus groups.

The second strategy is to increase 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 these data are collected and examined it will provide guidance as to where program improvement should be implemented.

The third strategy will be to offer oral health education to all DPSCD School Nurses. Currently, there are 110 school nurses (one in each building) and the OHC will work with the head school nurse at DPSCD and the MDHHS School Oral Health Consultant to create a series of webinars on oral health topics that will be recorded and available for on-demand viewing. Oral health education for school nurses will be integral for students to receive proper oral health

care, as they are the point of contact in each school building for all health-related issues and concerns. Educating the school nurses on the new OHC position, as well as common oral health issues, and how dental services will be running in each school is essential for sustainable oral health care delivery in DPSCD.

Lead Poisoning Prevention (FY 2022 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.

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 currently supports the childhood lead programs administered by CLPPP. CLPPP staff work collaboratively with MCH staff and Medicaid, particularly on issues related to case management and blood lead testing.

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

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

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

- Does the child live in or regularly visit a home built before 1978?
- Does the child live in or regularly visit a home that had a water test with high lead levels?
- Does the child have a brother, sister, or friend that has an elevated blood lead level?

- Does the child come in contact with an adult whose job or hobby involves exposure to lead?
- Does the child's caregiver use home remedies that may contain lead?
- Is the child in a special population group such as foreign adoptee, refugee, migrant, immigrant, or foster child?
- Does the child's caregiver have a reason to believe the child is at risk for lead exposure?

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

The blood lead risk assessment is a verbal questionnaire that is conducted with family members when they are in a health care provider's office. Currently, there is not a consistent way to document the completion of the risk assessment. That creates a barrier of not being able to accurately determine the number of providers that are conducting the risk assessment with their 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 will work with MCIR to determine the best way to add functionality in the registry to flag or alert a MCIR user that blood lead screening should be done by going through the blood lead risk assessment questions. Additionally, 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 in Michigan. CLPPP will undertake several efforts to educate and connect with health care providers. These include:

- Pilot projects by MDHHS physician consultant and public health detailer to connect 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 to present to pediatricians at annual conferences and during a webinar series.
- Develop a resource packet for health care providers to be mailed out through Michigan.
- 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, understanding 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 provide a mailing of education materials to daycare providers throughout the state.
- CLPPP will partner with those working in communities that have been identified as having action level exceedances for lead in water and Wayne State University, to pilot mobile blood lead testing event. If successful, there are hopes to expand this statewide where additional blood lead testing support is needed.
- A project by the Genesee Health Coalition Community Health Access Program to partner with area health care provider, 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.
- Eastern Michigan University Center for Health Disparities Innovations and Studies has a lead program that works with underserved Asian Americans. CLPPP will work with and support this program in developing culturally appropriate materials, outreach plans, and education/awareness strategies to decrease lead exposure for this population.
- CLPPP has partnered with a consultant in Southeast Michigan to provide trainings and equip staff with tools and materials to conduct environmental assessments, screenings, and education in Arabic for immigrant and refugee clients. This work will be based on the CDC's Lead Poisoning Prevention in Newly Arrived Refugee Children toolkit.
- CLPPP will work with the MDHHS Community and Faith Engagement Office to engage faith-based communities, specifically in areas of the state that are at highest risk for lead exposure. Engagement will include obtaining feedback from community members and faith-based leaders about the community's needs and what kind of messaging will be most effective in the community. The focus of this partnership will be to educate about lead poisoning and the various sources of lead exposure.
- CLPPP plans to continue to have lead poisoning prevention materials developed and translated into commonly used languages including Spanish, Arabic, and Bengali. CLPPP will work with 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. For Bengali translations, CLPPP will partner with Eastern Michigan University Center for Health Disparities Innovations and Studies to work with representatives from the Bangladeshi community to review materials and get feedback.
- 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 to be at high risk for blood lead poisoning. Specifically focusing on Medicaid-enrolled children can help to increase equitable health outcomes across the population. Medicaid policy requires blood lead testing at 12 and 24 months of age, or between 36 and 72 months of age if not previously tested. This population is a priority target for CLPPP to increase testing rates overall.

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

identify children who need follow up to encourage blood lead testing.

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

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

Two sample types are used in blood lead testing: a capillary draw and a venous draw. Any blood lead test that is done on a capillary drawn sample must be confirmed by a venous drawn sample. This is because oftentimes a capillary blood lead test can be falsely elevated, and a venous test is needed to confirm that the blood lead level is truly elevated. Additionally, a child that 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.

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

Immunizations – Children (FY 2022 Application)

Based on the Title V needs assessment, the state performance measure (SPM) created in 2015 was retained, which is the "Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4:3:1:3:3:1:4 series)." In the 2020 needs assessment 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.

While the needs assessment was completed before 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.

Within some populations Michigan has experienced declining immunizations rates and has not met the Healthy People 2030 goal of 80% for child immunizations. For example, the percent of children ages 19-35 months who

received a full schedule of age-appropriate immunizations (Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza and Hepatitis B) is at 70.0% based on Michigan Care Improvement Registry (MCIR) data.

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 and the need to talk with parents about their concerns. Michigan has also partnered with a non-profit organization called the Franny Strong Foundation to provide information for parents through the I Vaccinate campaign to learn facts about immunizations and the risks of not vaccinating. MDHHS continues to work with the Franny Strong Foundation to provide educational messages to the public to promote timely vaccinations.

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

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

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

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

The Michigan Division of Immunization operates the MCIR. The MCIR is a statewide immunization registry that contains over 149 million shot records administered to 10 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. Current enrollments include: 6,535 health care providers and pharmacies; 4,142 schools; and 3,943 licensed childcare programs. MCIR is used routinely by nearly 33,000 users to access and determine the immunization records of children and adults. In 2019, MCIR generated over 203,187 recall letters notifying responsible parties whose children had missed shots and encouraged them to visit their immunization provider to receive needed vaccines. In addition, over 3 million reports were generated by users of the MCIR system in 2019.

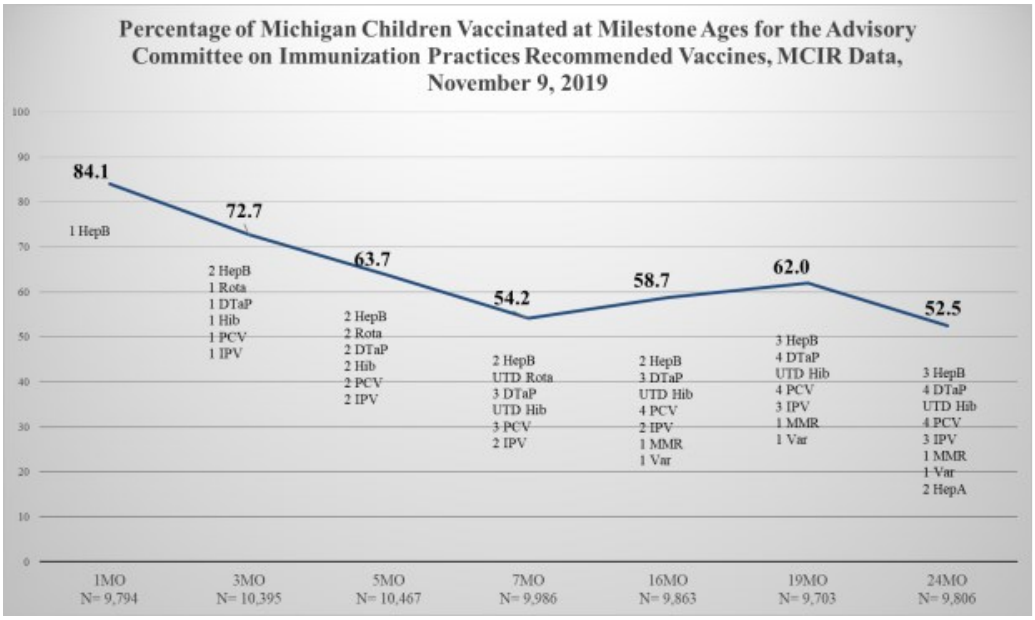
MCIR can forecast needed doses of vaccine for all children who are contained in the system. All children should have

completed the recommended pediatric vaccines by the time the child reaches 19 months of age. Data from MCIR show that 73.6% of children who reside in Michigan have received the routinely 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 and WIC. The current vaccination rate for children enrolled in Medicaid is 71.5% and the vaccination rate for children enrolled in WIC is 76.9%. The overall statewide vaccination level of 73.6% is short of the Healthy People 2020 goal of 80%.

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

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

Image 1. Percentage of Michigan Children Vaccinated at Milestone Ages



MCIR can also assess existing immunization data for children and forecast needed doses. This functionality greatly assists clinicians in determining any needed doses of vaccine during a clinical encounter. This same forecasting functionality can be used at a population level to determine any children who need vaccines. To increase vaccination rates, the Division of Immunization has initiated an effort to notify parents of all children 6 months through 24 months of age who are overdue for one or more vaccines. In the past, efforts have been targeted at children who are 2 to 3 years of age, but this effort will attempt to impact parents of children less than 2 years of age who are not staying on schedule. Data from MCIR show that children who stay on schedule are twice as likely to complete all needed vaccines as those who fall behind early 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.

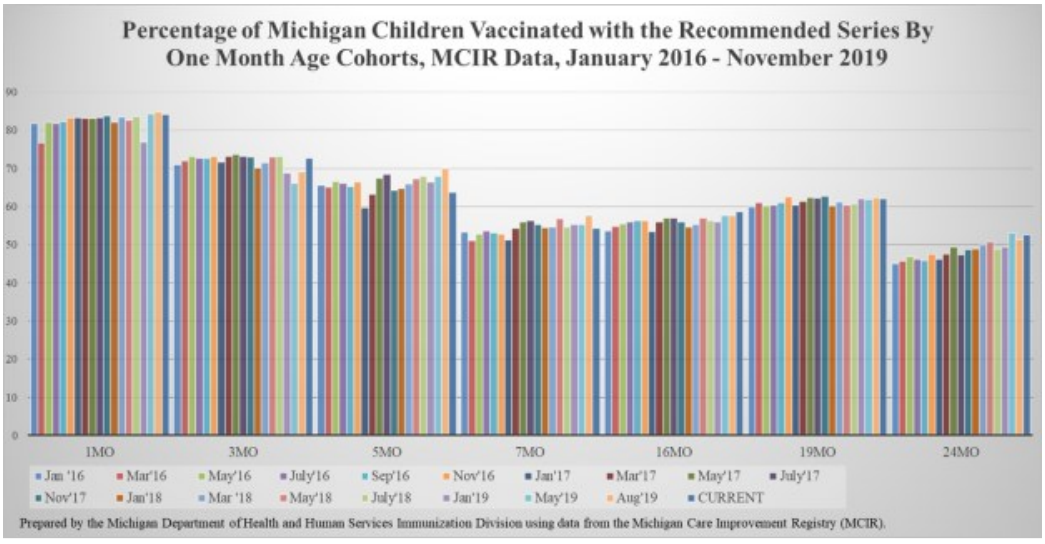
In Michigan, disparities exist in immunization rates based on race. The City of Detroit has among the lowest immunization rates in Michigan for the 4313314 series. Rates are even lower for people of color. In FY 2022, the Michigan Immunization Program plans to assess future immunization efforts and strategies to reduce disparities in immunization rates. Depending on the status of the COVID-19 pandemic, activities may be impacted based on capacity of the Immunization Program.

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 at least once per year, which will be posted on the MDHHS Immunization website. 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 immunization drop-off report. As discussed earlier, this report shows how well children are staying on-schedule for all 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. Image 2, below, shows immunization rates over time by age when vaccines should have been completed.

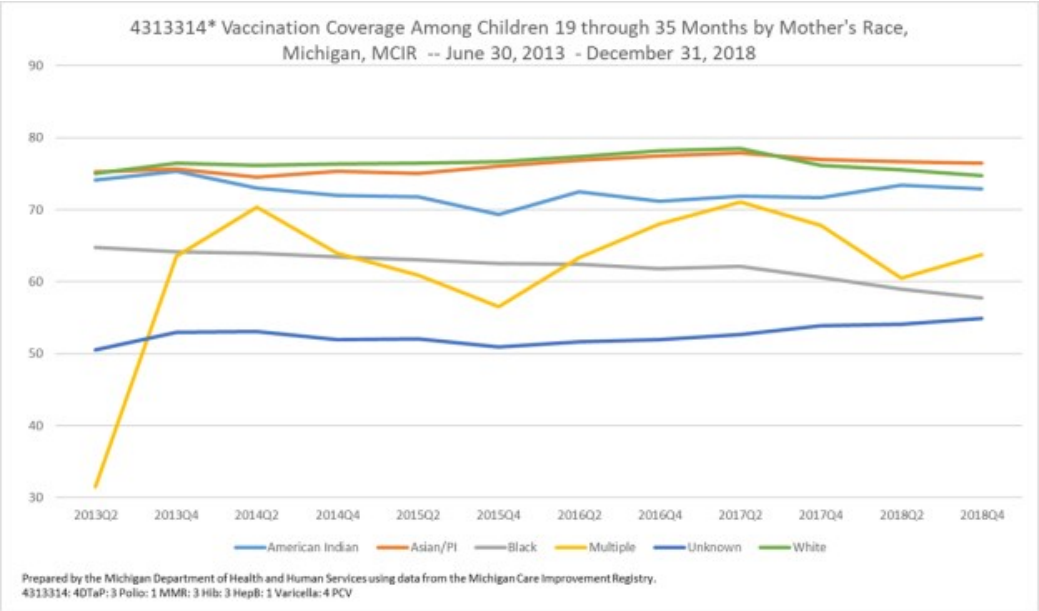
Image 2. Percentage of Michigan Children Vaccinated with the Recommended Series



These reports not only identify immunization rates by age but also show immunization rates by age broken down by vaccine types. Local health departments can identify immunization levels by vaccine type to determine areas where immunization providers may not be offering all recommended vaccines.

Michigan has large disparities in immunization coverage rates based on race. Using the same assessment logic being used by the CDC for the National Immunization Surveys, the statewide immunization rate is 70.89% for the 4313314 series. Image 3 illustrates vaccination coverage among children ages 19-35 months by mother's race. Black children record the lowest immunization rates (57.71%) as compared to the highest rates of Asian/Pacific Islanders (76.49%).

Image 3. Vaccination Coverage by Mother's Race



The 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.

Objective C: Implement the I Vaccinate Campaign.

Parental vaccine hesitancy continues to be a significant concern in Michigan. Vocal and organized groups have continued to push back on school vaccine requirements and vaccines more broadly. This trend is affecting not only the school reporting process but parents who may have questions about vaccines. Organized social media posts about vaccines circulate broadly throughout the state and the impact is that more parents are questioning the value and safety of vaccinating their children.

To make positive vaccine messages available to the public, MDHHS partnered with the Franny Strong Foundation in 2017 to launch the I Vaccinate Campaign. The campaign went live in March 2017 to provide information and tools based on research and medical science to help Michigan parents protect their children through vaccinations. MDHHS and the Franny Strong Foundation have partnered to provide financial and program support for the campaign. Approximately 17 other state and national groups are supportive of the campaign, including the Michigan Association of Health Plans, the Michigan Association of Local Public Health, the Michigan Chapter of the American Academy of Pediatrics, and the Michigan Health and Hospital Association.

The I Vaccinate Campaign uses several media platforms to reach target populations of women of childbearing years since they often have a primary role making decisions related to the health of their children. Television and radio ads are purchased to promote vaccinations to protect all children. Social media messages are used throughout the state with real life stories of individuals affected by vaccine preventable diseases. A website assists parents in the decision-making process about vaccines for their children. The website is built on fact-based information presented in a user-friendly forum from a parent's viewpoint.

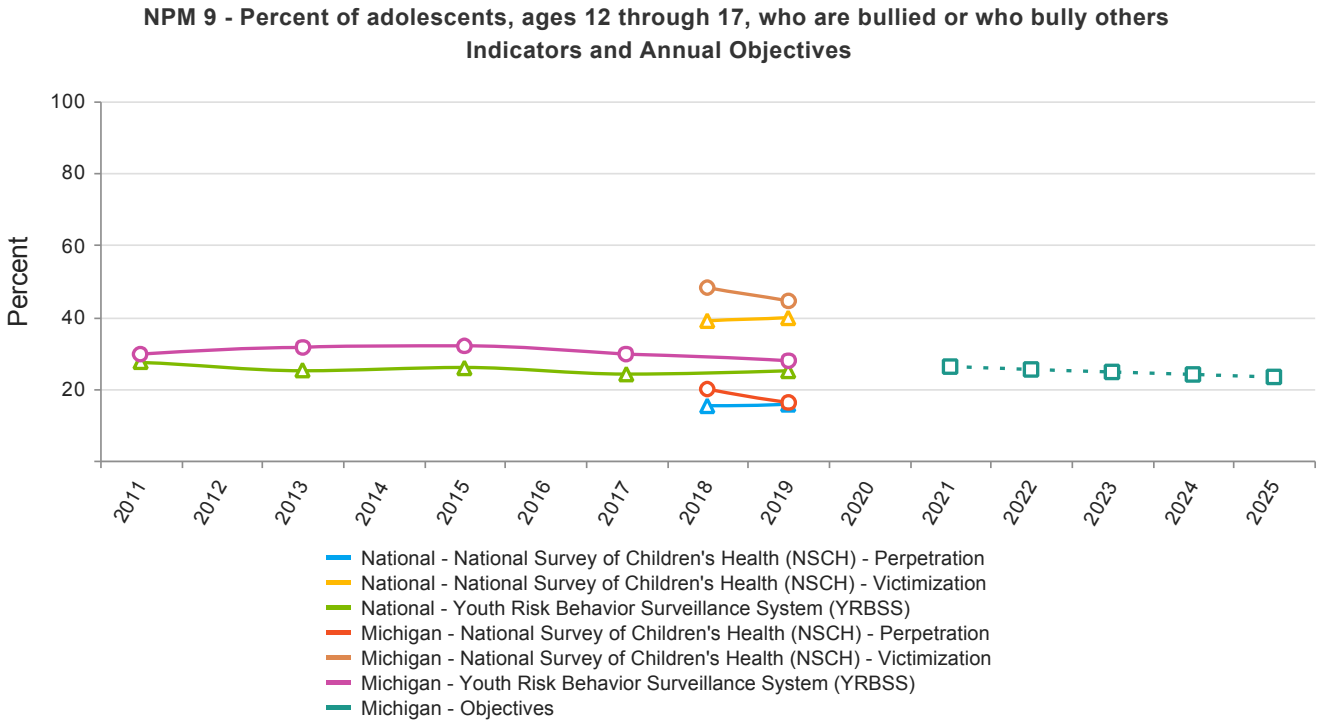
In FY 2022, the Michigan Immunization Program will continue to assess the I Vaccinate campaign to identify ways to strengthen its message and broaden its reach. In particular, the Immunization Program will consider ways to obtain feedback and recommendations from parents and community members. Better understanding barriers to immunizations will enable the Immunization Program and its partners to craft messages that build trust and confidence in the effectiveness and safety of vaccines. Parent and community input will also help to ensure that vaccine messages are culturally sensitive and linguistically appropriate, which may include different messages targeted to different population groups or geographical regions.

Adolescent Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000	NVSS-2019	30.3	NPM 9 NPM 10
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000	NVSS-2017_2019	8.0	NPM 10
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2017_2019	12.9	NPM 9 NPM 10
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	17.2 %	NPM 10
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2018_2019	65.0 %	NPM 10
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	89.4 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	NSCH-2018_2019	17.3 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2018	13.7 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	YRBSS-2019	15.3 %	NPM 10
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2019_2020	54.9 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NIS-2019	73.7 %	NPM 10
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2019	89.2 %	NPM 10
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2019	95.4 %	NPM 10
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2019	15.1	NPM 10

National Performance Measures



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

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - Perpetration		
	2019	**2020**
Annual Objective		
Annual Indicator	20.0	16.1
Numerator	145,381	116,534
Denominator	727,587	723,002
Data Source	NSCHP	NSCHP
Data Source Year	2018	2018_2019

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - Victimization		
	2019	**2020**
Annual Objective		
Annual Indicator	48.0	44.5
Numerator	349,295	321,323
Denominator	727,587	721,708
Data Source	NSCHV	NSCHV
Data Source Year	2018	2018_2019

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	26.2	25.4	24.7	24.0	23.3	22.6

Evidence-Based or –Informed Strategy Measures

ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	5.0	12.0	18.0	24.0	30.0	35.0

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
Annual Objective			44	54
Annual Indicator	39.3	41.9	52.4	44.1
Numerator	295,138	313,144	334,188	331,995
Denominator	750,281	746,563	637,751	752,019
Data Source	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
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	56.0	58.0	60.0	62.0	64.0	66.0

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 anti-bullying campaigns for CSHCS and determine goals for anti-bullying initiatives in Michigan

Strategies

A1) Six secondary schools per year will implement the Michigan Model for Health™ SEH module in all health education classrooms A2) Provide intensive training and technical assistance to six secondary schools per year on creating safe schools for LGBTQ+ students

B1) Conduct training for regional school health coordinators on relevant guidance for schools on PA 241 and State Board of Ed Model Anti-Bullying policy B2) Provide technical assistance follow up to school health coordinators working directly with schools B3) Facilitate learning session for educators during Child, Adolescent and School Health (CASH) conference B4) Collaborate with the Michigan Department of Education to disseminate guidance on Public Act 241 and the SBE Model Anti-Bullying Policy to schools and stakeholders

C1) Replicate bullying focus group with Family Leadership Network annually C2) Utilize the subcommittee to perform a systematic review of bullying policies from other states C3) Implement the CSHCS Bullying Prevention small grants, compile evaluation, and seek continuation of funding for the initiative

ESMs	Status
ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity	Active

NOMs

NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000

NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000

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

Priority Need

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

SPM

SPM 3 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Objectives

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

B) Increase outreach to adolescent immunization providers with low HPV immunization rates

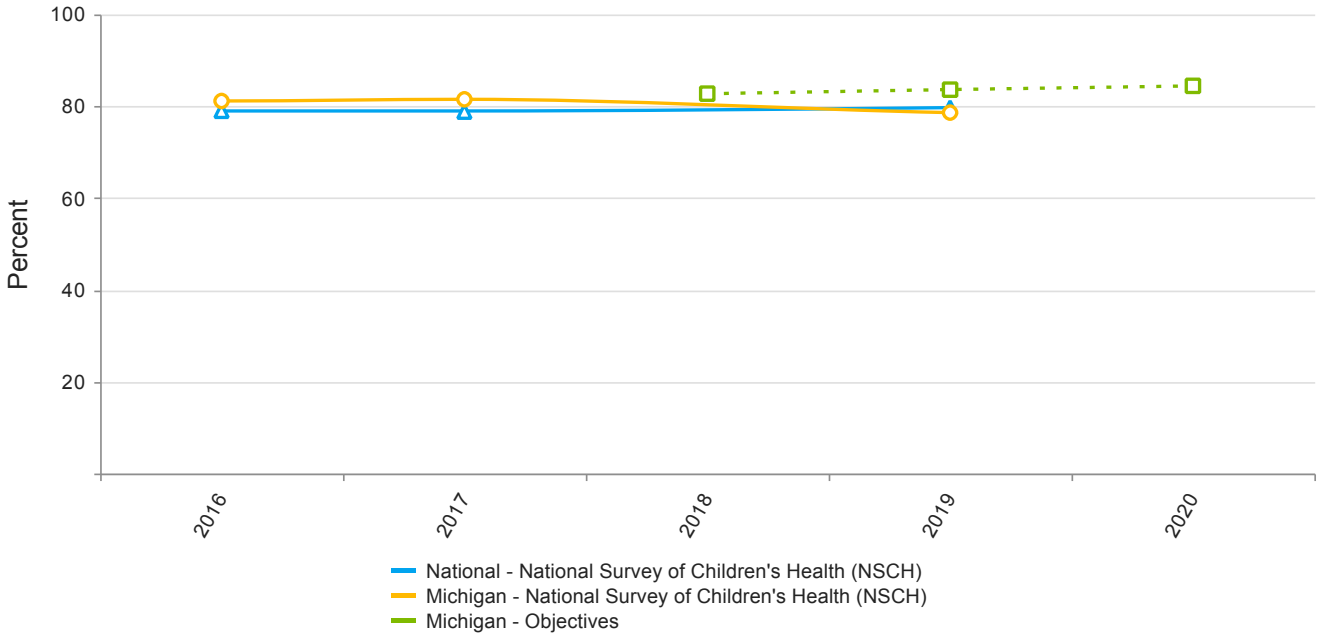
Strategies

A1) Generate and mail a letter using MCIR data to parents of adolescents who have initiated but not completed the HPV series A2) Partner with the MDHSS Cancer Program and the American Cancer Society to strengthen the Michigan HPV Cancer Prevention Alliance to promote timely HPV vaccination as cancer prevention A3) Partner with Michigan health systems to develop and implement strategies to increase timely HPV administration for their members

B1) Using MCIR data, generate a list of adolescent providers and their MCIR HPV completion rates at various ages B2) Prioritize provider outreach to practices with large adolescent populations and the lowest HPV immunization rates B3) Offer quality improvement visits (virtual or in-person) to provide a comprehensive assessment of immunization rates and offer strategies for practice improvements B4) Emphasize ‘on-time’ HPV vaccination of adolescents during the 11-12 year old visits using Quality Improvement reports in the MCIR system

2016-2020: National Performance Measures

2016-2020: NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year. Indicators and Annual Objectives



Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			82.6	83.5	84.3
Annual Indicator		81.0	81.3	81.3	78.4
Numerator		633,720	618,502	618,502	566,674
Denominator		782,076	760,429	760,429	722,681
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017	2019

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

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

2016-2020: ESM 10.1 - Of the health care providers who complete the Motivational Interviewing web course and the Motivational Interviewing professional development training, the percent who report skills in effectively counseling youth on changing risky behaviors

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		93	95	95	98
Annual Indicator	87.5	93.3	96.4	93.8	90.9
Numerator	7	28	27	15	20
Denominator	8	30	28	16	22
Data Source	MDHHS Participant Assessment Tool	Evaluation tool / SurveyMonkey	Evaluation tool / SurveyMonkey	Evaluation tool/SurveyMonkey	Evaluation tool/SurveyMonkey
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Adolescent Health Overview

The needs of adolescents are addressed at the state and local level in Michigan through a diffuse network of governmental and non-governmental organizations. Within MDHHS, the Division of Child and Adolescent Health (DCAH) plays a central role in meeting the health needs of Michigan's adolescents. DCAH includes programs designed to build healthy relationship skills among adolescents, prevent unintended pregnancy, and address bullying. It houses programs designed to meet adolescents' health needs in school settings thru Child and Adolescent Health Centers and school nursing. The Division of Immunization includes sections focused on adolescent outreach and education, as well as assessment and local support. The Children's Special Health Care Services (CSHCS) Division administers programs that impact adolescents and young adults with special health care needs, especially as they relate to transition. Title V funds support a variety of programs and services for adolescents through state and local organizations—including HPV immunization, pregnancy prevention and bullying—as well as services for adolescents who have special health care needs. Other federal MCH funds that impact adolescents include the State Abstinence Education Program (ACF funding), the State Personal Responsibility Education Program (ACF funding), the Pregnancy Assistance Fund to reduce unintended repeat teen pregnancy and an Epilepsy grant (HRSA funding). In addition, critical partnerships in the state that impact adolescent health include those with school-based health centers, the Michigan Department of Education, the Youth Risk Behavior Survey and its state-based counterpoint (the Michigan Profile for Healthy Youth), the Michigan Organization on Adolescent Sexual Health, and the School-Community Health Alliance of Michigan.

At the local level, LHDs expended Title V funds in three performance measures in this domain in FY 2020. Four LHDs worked on NPM 10 (adolescent well-visit) with gap-filling activities such as well-visit physical exams, family planning services, HIV and STI counseling and testing, health education and links to community services. Twelve LHDs completed activities related to SPM 3 on adolescent immunization measure which included media campaigns, initiatives to determine barriers to HPV vaccine, provision of gap-filling adolescent vaccinations, waiver education, recalls and reminders. Four LHDs selected former SPM 3 (depression across the life course) and 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.

Michigan's approach to adolescent health emphasizes reducing mortality, especially through suicide prevention, and protecting adolescents from adverse health outcomes due to a variety of factors, such as HPV or unplanned pregnancies. While the past decade has seen positive change in several dimensions of adolescent health, adolescents continue to face risks at the intersection of behavioral and physical health. The adolescent mortality rate of 32.8 per 100,000 has improved since 2009 but remains slightly above the national average (NVSS, 2018) and is highest among non-Hispanic Black adolescents (51.4 per 100,000, NVSS, 2016_2018). However, the motor vehicle mortality rate (11.66 per 100,000, NVSS, 2014_1016) among adolescents has dropped over the past six years to below the national average. Following alarming national trends, the suicide mortality rate (11.0 per 100,000, NVSS, 2014_2018) for adolescents has increased steadily over the past several years and currently exceeds the national average. The HPV vaccination rate has steadily increased, with the percent of female adolescents who have received at least one dose of the HPV vaccine increasing from 39.0% in 2009 to 72.5% in 2018 (NIS), and higher rates of vaccination among Hispanic (81.4%) and non-Hispanic Black (76.9%) adolescents as compared with non-Hispanic white (61.9%) adolescents. The teen birth rate has also steadily declined from 31.9 per 1,000 females in 2009 to 15.1 in 2019 (MDHHS). However, the teen birth rate was 30.5 and 23.1 in 2019 per 1,000 non-Hispanic Black adolescent females and Hispanic adolescent females, respectively. This disparity suggests a need to explore the appropriateness and responsiveness of teen pregnancy programs and services. In 2018, parents reported that 20.0% of Michigan adolescents bullied others (NSCH), compared with 15.3% nationally. In 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.

Adolescent Well-Visit (FY 2020 Annual Report)

In FY 2020, planned activities were focused on implementing a Motivational Interviewing (MI) web course and follow-up training to public and private providers, as well as implementation of a behavioral health quality measure among state-funded school-based and school-linked health centers, known as Child and Adolescent Health Centers (CAHCs) in Michigan.

The in-person Motivational Interviewing training was impacted by the COVID-19 pandemic in FY 2020, which prohibited in-person training for the majority of the year. The Evidence-based Strategy Measure (ESM) target for FY 2020 (98% of health care providers who completed the Motivational Interviewing web course and subsequently attended the Motivational Interviewing professional development *in-person* training reported improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies) was not specifically evaluated, as *in-person* trainings were prohibited by the State of Michigan beginning in March. An adaptation was made to provide the training virtually, with one training held in July. Among health care providers who completed the web course and subsequently participated in the *virtual* training, 91% reported improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies, which fell just short of the goal.

Each state-funded CAHC is required to report on a standardized set of quality measures with an ultimate goal of improvement in care for CAHC clients. In FY 2020, a behavioral health quality measure to assess appropriate follow-up care (treatment) for youth age 12 years and up who have a diagnosis of depression was implemented after a one-year pilot of the measure. This measure was likely negatively impacted by the pandemic as some providers were not able to see clients in person for several weeks; and some were initially not able to successfully engage a large number of clients in telehealth visits either due to client reluctance using a virtual visit platform, lack of technology and/or lack of internet access to participate in virtual visits. Additionally, some providers were temporarily deployed elsewhere within their medical sponsoring organizations to assist with pandemic response, which limited access to usual services for several months. In response, state CAHC staff and CAHC partners across Michigan worked together to develop a series of guidance documents which outline best practice strategies for outreach and communication with clients, parents, schools and communities; as well as planning for modified service provision during the pandemic so that clients could continue to seek and receive care to the extent possible.

Meaningful family and consumer engagement of parents and youth is a longstanding priority of the CAHC Program and is accomplished through various strategies. Per boilerplate requirements, each CAHC must operate a community advisory committee that is comprised of at least one-third parents of school-aged children and youth. Parents are recruited through a variety of means, including but not limited to social media postings, mailings in conjunction with schools, recruitment at in-person events, direct invitation, or word of mouth (e.g., when parents attend visits with youth, by invitation from other parents, teachers, etc.). Other organizations may also be involved in recruitment. These organizations are typically member organizations of the CAHC (such as community-based organizations, youth-serving organizations, and faith-based organizations) but may also include outreach from other parent organizations such as a Parent/Teacher/Student/Organization, Booster Club, etc.

The community advisory committees are tasked with giving input and approving core health center policies, including confidentiality, abuse and neglect and parental consent. Each group has a range of other responsibilities that are

unique to each center. When funding for the CAHC program was eliminated in 2003, these advisory groups rallied other parents to provide a critical advocacy voice that was instrumental in reinstating the funding. Parents are a powerful ally in this work.

Youth input is also a longstanding requirement of the program and occurs through various strategies. Centers are required to have youth input through either their existing Community Advisory Council (CAC) or through a stand-alone youth advisory committee. As part of their work on these committees, youth routinely provide feedback on center services and programs, the center's environment, and reading material. Youth are strong advocates for CAHC utilization among their peers. Some CAHCs also conduct focus groups with youth to identify ways to increase health center utilization and improve services and outreach. As part of ongoing CQI activities, CAHCs must implement a client satisfaction survey at least annually. Results of these surveys are compiled, and centers must demonstrate how this critical feedback was used to improve services to clients. Again, the guidance documents created by state and local CAHC partners outline best practice strategies for outreach and communication with community advisory council and youth advisory members; as well as strategies to modify and implement client satisfaction surveys in an electronic format so that family and youth engagement and feedback could continue, despite limitations imposed by the pandemic.

Objective A: Increase the percent of adolescents, ages 12 through 17, enrolled in Medicaid, with a preventive medical visit in the past year.

This objective was not addressed in FY 2020 as resources were shifted to address the pandemic.

Objective B: Of the health care providers who completed the Motivational Interviewing web course and the Motivational interviewing professional development training, 98% will report skills in effectively counseling youth on changing risky behaviors.

In 2014 and 2015, MDHHS Child, Adolescent and School Health (CASH) Section staff partnered with the Michigan Public Health Institute to design two web-based Adolescent Health Courses, grounded in research and best practice, to improve provider competencies in Motivational Interviewing (MI) and Positive Youth Development/Resiliency. Two additional courses were developed and released in 2017 including Adolescent Brain Development & Decision Making, and Encouraging Healthy Teen Relationships (interpersonal violence prevention). These courses have been promoted and offered at no charge to public and private providers throughout Michigan and the United States. The objective is to reach 250 providers over five years with these foundational adolescent health courses.

Since FY 2015, 2,642 health professionals (e.g., medical providers, mental health providers and health educators) have completed the MI web course. In FY 2020, 412 professionals completed the motivational interviewing course. Of those that have completed the course since 2015, 1,700 individuals requested continuing education contact hours from their respective professions: nursing contact hours (26%); Michigan Social Work clock hours (16%); NASW Social Work contact hours (12%); continuing medical education (6%); and Certified Health Education Specialist (40%).

Health behaviors are increasingly recognized as multidimensional and embedded in healthy lifestyles. Social determinants of health (SDOH) are influenced by the interrelationship of social factors, health services, individual behavior, and biology. It is the interrelationships among these factors that determine individual and population health. Therefore, interventions that target multiple determinants of health are most likely to be effective. The motivational interviewing course focuses on identifying risk and preventing harmful effects on adolescent population health. Assessment of SDOH combined with evidence-based motivational interviewing counseling and referrals results in

improved adolescent health and well-being.

As noted above, the ESM for this measure is the percent of health care providers who complete the MI web course and subsequently attend the MI professional development training who report improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies. Through the Title V program in 2020, MDHHS offered one virtual MI training reaching 22 providers, for a total of 168 providers who have attended the training over the past four years. Participants have included physicians, nurse practitioners, physician assistants, nurses, social workers and health educators. The trainings were promoted through provider organizations such as the Michigan Regional Chapter of the Society for Adolescent Health and Medicine, American Academy of Pediatrics, American Family Physicians, National Association of Pediatric Nurse Practitioners and the CAHC Medical Directors listserv. As a result of the MI training, 91% of evaluation respondents (n=22) reported improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies. Therefore, in 2020 Michigan fell just short of the ESM target (98%).

Objective C: Increase percentage of CAHC clients age 12+ with a positive depression screen who have documented follow-up.

As a first strategy to meet this objective, the CAHC program established a required behavioral health quality measure to assess appropriate follow-up care (treatment) among clients age 12 years and older who have a diagnosis of depression. A threshold of 90% has been established for this objective (e.g., 90% of clients age 12 years and older who have a diagnosis of depression will have documented, appropriate follow-up care).

Appropriate follow-up care has been defined as having ALL of the following elements of an appropriate follow-up plan**:** a) psycho-social assessment completed by third visit (includes suicide risk assessment/safety plan); AND b) treatment plan developed by third visit; AND for those on the caseload for at least 90 days, c) treatment plan reviewed after 90 days; AND d) screener re-administered at appropriate interval to determine change in score. The goals of appropriate follow-up care are early intervention for behavioral health concerns, resolution of or a decrease in symptom severity, better overall mental health, reducing stigma surrounding mental health care, and lowered risk of negative outcomes associated with depression including, but not limited to, suicide ideation and/or attempt.

A total of 1,728 clients age 12+ were reported as having a diagnosis of depression. (A total of 69 CAHCs reported having at least one client age 12+ with a diagnosis of depression in FY 2020). Of these 1,728 clients, 75% (median percentage) were reported as having appropriate follow-up care in FY 2020.

A full year of pilot data collection in 2019 for this new behavioral health measure revealed questions and concerns from the field that have been, and continue to be, addressed by the state CAHC program staff. The two most frequent concerns were 1) assurance that CAHCs have a proper understanding of the measure and subsequently the data to be collected and reported and 2) provider fear and/or reluctance of diagnosing depression among youth. Both concerns continue to be the subject of numerous site-specific and program-wide technical assistance calls and correspondence and have been incorporated into webinars, meetings and training.

Immunizations – Adolescents (FY 2020 Annual Report)

This section discusses the Immunization SPM focused on adolescent health: Percent of adolescents 13 to 18 years of age who have received a completed series of Human Papillomavirus (HPV) vaccine. The COVID-19 pandemic has presented many challenges to both healthcare and public health and has impacted much HPV-related activity that would have otherwise taken place in FY 2020. The MDHHS Division of Immunization has been closely monitoring the impact of the COVID-19 pandemic on vaccine administration and reporting patterns to the Michigan Care Improvement Registry (MCIR).

The HPV immunization coverage estimates for adolescents saw a decline in FY 2020. Given the decrease in vaccine confidence and an increase in refusal and delaying of vaccines in Michigan, as well as the global pandemic, the decrease of HPV coverage levels is consistent with the decline of other vaccination coverage levels. The HPV series completion rates over the last year for 13 to 18-year-old adolescents decreased by approximately 8.3% to 44.1%. Michigan HPV vaccine coverage continues to be significantly less than the Healthy People 2020 goal of 80% HPV vaccine coverage.

Objective A: Increase the percentage of adolescents who have completed the HPV series.

In the FY 2020 reporting year, 44.1% of adolescents 13 to 18 years of age completed the HPV series (based on MCIR data) which represents an 8.3% decrease from FY 2019. The Michigan Immunization Program, in FY 2020, needed to pause workgroups and collaborations with other state programs due to activities and priorities of the COVID-19 pandemic. The Michigan Immunization Program had minimal capacity during FY 2020 to collaborate with the state Cancer Program, the Michigan Cancer Consortium, the American Cancer Society or with Michigan Medicine as part of the Michigan HPV Cancer Prevention Alliance which is focused on implementing strategies and other activities to improve timely administration of HPV vaccine and result in increased HPV immunization rates in Michigan.

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

In FY 2020, the Michigan Immunization Program was not able to dedicate staff to work on this objective due to COVID-19 response activities and priorities. Outreach to Michigan adolescent immunization providers did not occur. The third annual Michigan HPV Cancer Summit was also cancelled, due to the pandemic.

Bullying (FY 2022 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 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. This represents a slight, but statistically non-significant, decrease from the 29.6% of students who reported experiencing bullying in 2017.

The link between bullying and suicide illuminates the need to recognize 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). Compared to non-LGBT youth who reported bullying, LGBT youth who reported bullying were more likely to report: bringing a weapon to school (1.5x more likely); engaging in self-harm (2.2x more likely); a suicide attempt requiring medical attention (1.7x more likely).

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.

Michigan's Forces of Change Assessment indicated that a lack of respect for and understanding of others increases stress, violence, and trauma. LGBTQ+ students struggle with anxiety and depression tied to their experiences with peers, families, and community members. They express the need for respect and inclusion within educational settings and report not feeling respected by their teachers or the education system. 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.

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 students who identify as LGBTQ+. In FY 2022, Michigan will again select six schools to implement an approach to bullying prevention that includes implementing health education and creating safe schools for LGBTQ+ youth. 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 Gay-Straight Alliance student clubs (or Gender and Sexuality Alliance). 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 the establishment, development, and sustainability of a GSA. Funds will also be used to support the consultant working directly with the school teams, facilitating workshops, and providing customized assistance with their strategies.

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 for this subset of students. This includes the establishment, growth, and sustainability of a GSA. A series of workshops, along with individualized technical assistance and networking with other schools involved in the work, 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 for many years 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, helps 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 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 many 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 their expertise in moving through the five components/stages of GSA development and functioning: Initiation and Organizing, Establishment, Implementation, Recruitment and Participation, and Sustainability. Their 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, so staff are better equipped to appropriately address bullying. The majority of 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. Regional 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. Coordinators will be supported by MDHHS and MDE staff.

To further create awareness and understanding in the education community and amongst partners a session at the Child, Adolescent and School Health (CASH) conference will address bullying prevention. The session will focus on the laws in Michigan and why adopting, and fully implementing, the SBE Model Anti-Bullying Policy is an essential component of anti-bullying efforts. This session will be held in October 2021.

An additional strategy for promoting knowledge and understanding of PA 241 and the SBE Model Anti-Bullying Policy will involve collaboration with MDE on dissemination of guidance through existing work groups, committees, coalitions, and stakeholders.

Objective C: Explore anti-bullying campaigns for CSHCS and determine goals for anti-bullying initiatives

in Michigan.

Acting upon needs assessment findings indicating CYSHCN are more likely to experience bullying, an objective specific to CSHCN was established in this state action plan. As a first step, in FY 2021 CSHCS created a subcommittee which includes family, youth, CSHCS staff, Michigan Department of Education, and Child and Adolescent Health representatives. The Family Center also hosted a focus group with the Family Leadership Network in 2021. The Family Leadership Network is comprised of parents representing each of Michigan's 10 Prosperity Regions. The first strategy for this objective will be to compile feedback from the focus group. The subcommittee will determine next steps for collecting information from families and identify what program changes may be required to improve the experiences of children with special health care needs with regards to bullying in Michigan. Additionally, CSHCS and the Family Center will replicate the focus group in consecutive years to document changes in perception and occurrence of bullying for children with special health care needs.

The second strategy for this objective is to utilize the subcommittee to perform a systematic review of bullying policies from other states, focusing on identifying areas specific to youth with special health care needs. Michigan is consistent with the other 49 states and has passed anti-bullying laws that are applicable to public schools. The law provides a general framework for districts to implement anti-bullying policies. The CSHCS subcommittee will develop a set of recommendations and present them to the Michigan Department of Education, which will assist with policy development as it relates to bullying of children with special health care needs.

In FY 2021, CSHCS requested proposals from Michigan schools interested in creating or expanding a peer-to-peer support group to decrease bullying for children and youth with special health care needs. The final strategy for this objective is to implement the CSHCS Bullying Prevention small grants, compile evaluation results, and seek continuation of funding for this initiative.

Immunizations – Adolescents (FY 2022 Application)

Based on the 2020 Title V needs assessment, the state performance measure (SPM) created in 2015 was retained, which is the "Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus (HPV) vaccine." In the 2020 needs assessment, when asked "Which of the following healthcare-related needs are most often unmet among the families you serve?" 37.8% of respondents across population domains identified immunizations as an unmet need. The need was identified as highest among respondents who serve CSHCN (46%) and children and adolescents (40.6%). The forces of change assessment identified an increasing focus on individual choice versus community benefits (including vaccine refusal) as a factor that impacts population health. However, the health status assessment identified positive progress: Michigan has improved the percentage of adolescents receiving at least one dose of the HPV vaccine almost every year since 2012 (NIS-teen, 2012-2017). Additionally, the gap in vaccination rates between male and female adolescents is shrinking as the HPV vaccination rate for both groups improves. 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. Michigan has made progress increasing the timely uptake of HPV vaccination for adolescents, but more progress is needed. The COVID-19 pandemic has significantly limited efforts to increase timely HPV administration in 2020 and 2021. When the global pandemic is reduced and priorities can shift to address previously identified needs, Michigan Immunization Program staff will again have the capacity to work on this SPM.

Since 2014, Michigan has increased the HPV coverage rate by 25%. 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 17-year-old females is 59.4% while the rate for 17-year-old males

is at 56.5%. 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 discussed in the Child Health section, the Division of Immunization operates the MCIR immunization information system. MCIR data as of March 2021 show that 74.8% of adolescents 13-18 years of age who reside in Michigan have received the routinely recommend 132321 adolescent vaccine series. The 132321-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 42.8%.

The MCIR can forecast needed doses of vaccine for all children and adolescents in the system. MCIR has several reports available that can assist physician offices and local health departments with identifying adolescents in need of the HPV vaccine. This strategy will be shared in more detail with providers when the COVID-19 pandemic ceases.

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

During FY 2022, if the COVID-19 pandemic has diminished, the Michigan Immunization Program will assess funding availability to conduct statewide adolescent recall letters to adolescents in the MCIR that are eligible but not complete with HPV vaccine. In Michigan, 61.2% of 13-year-old adolescents have initiated the HPV series but only 38.6% of the same age group have completed the HPV series. Whereas 69.4% of 17-year-old Michigan adolescents have initiated the HPV series, only 57.9% of that same age group have completed the series. The Michigan Immunization Program plans to send notices to families of each adolescent 11-18 years old in the MCIR who have initiated and not completed the HPV series to encourage them to complete the vaccination series. It is anticipated that approximately 50,000 notices could be sent to the families of these adolescents.

During the COVID-19 pandemic, MCIR technical staff was able to initiate the use of text reminders for people in Michigan who received a COVID-19 vaccine. The Michigan Immunization Program will pursue this technology during FY 2022 for possible use with HPV vaccines.

MCIR data in the past have indicated that adolescents receive other routine adolescent vaccinations at a rate higher than receiving HPV vaccinations (e.g., Tdap and MenACWY are near 95% coverage levels). The Michigan Immunization Program will analyze the MCIR data to identify the disparities between the various adolescent vaccines. Immunization providers that see adolescents for vaccine visits need to assure they are strongly recommending all ACIP vaccines and not missing an opportunity to administer the HPV vaccine.

The Michigan Immunization Program partners with the American Cancer Society and the Michigan Cancer section as part of the Michigan HPV Cancer Prevention Alliance stakeholder group. This stakeholder group has a steering committee made up of representatives from organizations including the Michigan Pharmacist Association, Karmanos Cancer Institute, Michigan Cancer Consortium, and representatives from larger medical groups and health systems. The group is tasked with increasing awareness about the importance of HPV vaccine to reduce HPV-related cancers through increasing the timely administration of HPV vaccine in Michigan. The steering committee meets on a quarterly basis, with planned larger stakeholder meetings at least annually.

MDHHS has partnered with several large health systems to increase awareness and vaccination levels for HPV vaccine. An HPV Cancer Prevention summit was cancelled in 2021 and may resume in FY 2022 if the COVID-19

pandemic ceases. The HPV Cancer Prevention Summit brings together representatives from organizations, large immunization practices and other partners to address current HPV related presentations and education. MDHHS plans to continue to work with the health systems throughout FY 2022 to solidify plans to increase HPV rates.

An additional strategy for the Immunization Program is to continue partnering with the cancer and oral health programs, working toward a common goal of increasing HPV coverage rates and decreasing the incidence of cancers caused by HPV. The Division of Immunization has partnered with these programs to promote the message about cancer prevention using social media and public advertising.

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

In FY 2022, the Division of Immunization epidemiologist will generate a monthly list of all immunization providers submitting data to MCIR that are vaccinating adolescents. The list will show how many adolescents are being seen by the practice and how many adolescents are receiving all needed vaccines. MDHHS staff will review this list and identify the largest providers with the lowest immunization rates and reach out to those providers. Follow-up will include providing comprehensive Quality Improvement reports and working with the practice to develop a plan to increase immunization rates. Through direct outreach to the provider, MDHHS will have the opportunity to customize a practical quality improvement plan to help improve immunization rates as well as the quality of care. The data will also be used to identify providers that are doing outstanding work on assuring all their adolescent patients are receiving the HPV vaccine. The Division of Immunization will recognize those practices achieving high immunization rates by providing Certificates of Excellence. The Immunization Program will also educate providers on the importance of HPV vaccination and the HEDIS measures. These measures will assess a) the number of adolescents who have completed the HPV series by 13 years of age and b) the number of adolescents who have completed the vaccine series according to the schedule which is to vaccinate at 11-12 years of age.

The Division of Immunization is changing the focus for how it evaluates completion of HPV vaccinations when educating provider offices. Rather than focusing on the completion rates for 13-18 years of age, more focus will be on adolescents who are complete at 13 years of age. This focus is to increase awareness in the provider office on timely vaccinations since all children should have completed the HPV vaccination series by 13 years of age.

Various studies and Michigan's experience indicate that clinical staff tend to overestimate the immunization rates for the practice. Feedback to provider practices based on MCIR data to identify the immunization coverage levels is insightful and enables staff to consider recommendations to improve how vaccines are promoted and administered. It may be as simple as making sure vaccines are assessed and offered at visits with every patient. The Michigan Immunization Program has made it routine to provide data and information to local health department clinic staff on coverage levels for people seen 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 and provide population-based immunization coverage levels for each county with rankings compared to other counties in Michigan. The Michigan Immunization Program will assess the ability to make the report cards available at the practice level in the future.

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. With the COVID-19 pandemic receding, it is the hope that in FY 2022 the MDHHS Division of Immunization can focus on working with providers in the Detroit area, where overall immunization rates lag state rates. The Michigan Immunization Program will assess possible

strategies for engaging families and communities in the vaccine dialogue. As discussed in the child health domain, seeking expertise from families and consumers can help MCH systems and providers identify barriers to vaccine uptake and create vaccination messages that are culturally sensitive and linguistically appropriate, which may include different messages targeted to different population groups or geographical regions.

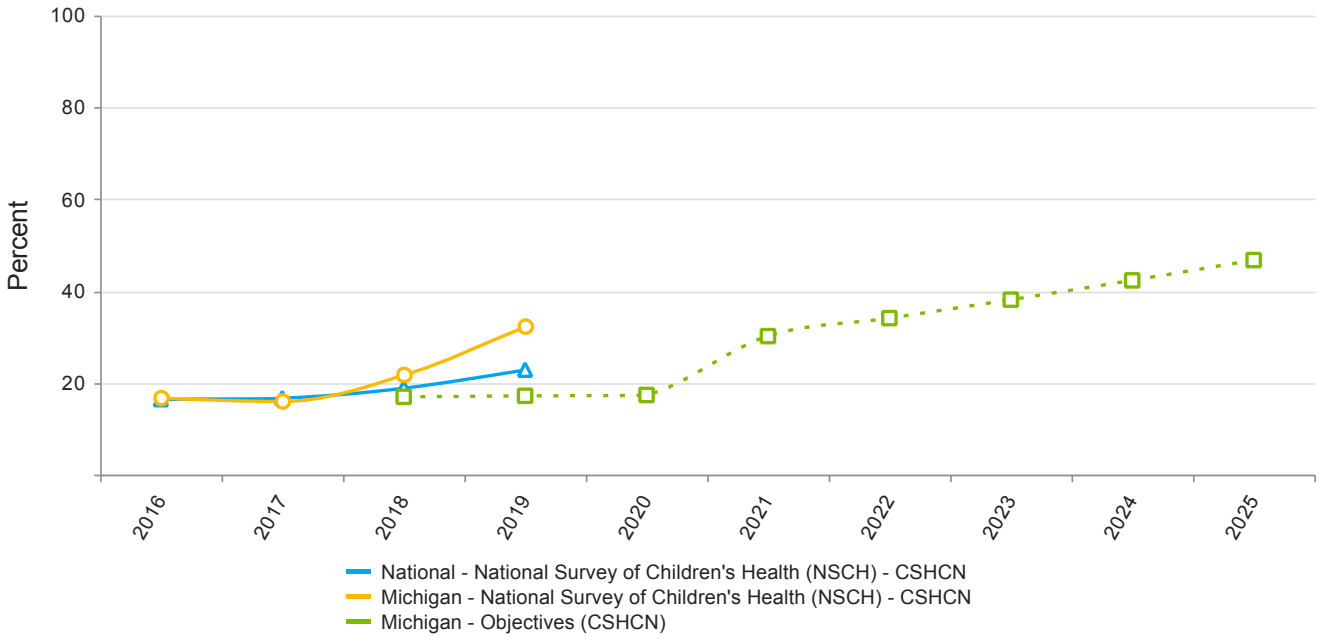
Children with Special Health Care Needs

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	17.2 %	NPM 12

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					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			17	17.2	17.4
Annual Indicator		16.7	16.0	21.6	32.3
Numerator		32,776	34,325	48,634	69,326
Denominator		196,702	215,008	225,148	214,341
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	30.2	34.1	38.1	42.3	46.7	51.1

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
Annual Objective	40	43	46	49
Annual Indicator	52.5	49.9	46.7	46.5
Numerator	1,705	1,725	1,787	1,995
Denominator	3,246	3,459	3,828	4,289
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
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	49.2	49.4	49.6	49.8	50.0	50.2

State Performance Measures

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		89.9	90.9	91.9	92.9
Annual Indicator	88.1	89.1	88.9	88	88
Numerator	14,253,020	20,556,206	14,678,590	10,365,782	7,297,774
Denominator	16,176,800	23,074,740	16,507,392	11,783,520	8,289,380
Data Source	CAHPS	CAHPS	CAHPS	CAHPS	CAHPS
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	89.5	90.0	90.5	91.0	91.5	92.0

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) Expand the school wellness center learning collaborative, a program designed to promote health care transition to students, grades 9-12, through school-based clinics A2) Systematically review transition website resources, update resources with current guidance from Got Transition, and launch a revised website A3) Continue to provide ongoing analyses and support for partners related to the ESM developed by CHEAR A4) Finalize and pilot an automated transition letter for 14-year-old CSHCS enrollees

B1) Implement the marketing plan to promote Got Transition’s health professional courses to providers across the State B2) Continue to support the HRSA CYE grant partners to improve transition for children and youth with epilepsy in rural communities B3) Identify existing disparities for patients with sickle cell disease and expand availability of adult services providers to improve care B4) Continue working with the Michigan Interagency Transition Taskforce to ensure health care transition is included in the Michigan Model for Secondary Transition

C1) Adopt and implement the “Current Assessment of Health Care Transition Activities” with partners 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 enrolling children with special needs into the medical care and treatment benefit, which provides payment for medical care and treatment related to the child’s qualifying condition A2) Expand and/or enhance the capacity of specialty clinics to assure the delivery of patient-centered, family friendly care through CSHCS sponsored multi-disciplinary team clinics and Field Clinics A3) Expand and support the use of telemedicine to improve access to specialty care in rural and underserved areas

B1) Continue to build a coordinated and systematic approach to family engagement, through the issuance of camp and conference scholarships; provision of resource and referral services; and utilization of the Youth Consultant to maximize outreach to adolescents B2) Develop and implement a comprehensive communication/outreach plan to improve awareness of CSHCS among providers, partners and families, to increase enrollment of eligible children with qualifying conditions B3) Maintain a competent workforce that is knowledgeable about the program and able to assist families in understanding their child’s condition and how to access the system of care

C1) Continue to explore, develop, and implement a statewide benefit to improve care for children with medical complexities 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 high-quality, family-centered care coordination in a well-functioning system

CSHCN Overview

Children with special health care needs (CSHCN) include children with a wide variety of physical, emotional and behavioral conditions, some of which qualify to receive support through the Children's Special Health Care Services (CSHCS) program within MDHHS. CSHCS annual program enrollment has grown to approximately 50,000 beneficiaries. The CSHCS Division is housed in the Bureau of Medicaid Care Management and Customer Service. The CSHCS Division includes the Family Center for Children and Youth with Special Health Care Needs (Family Center), which is parent-directed and designed to support and connect families with the care they need using a family-centered approach. CSHCS also includes sections focused on customer support, policy and program development, quality and program services, and the special needs fund. For the CSHCS population, Title V funds are primarily used to support medical care and treatment for CSHCN. Other federal funds that support CSHCS include a HRSA Epilepsy grant and Medicaid. Key partners include Medicaid, 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 CSHCS.

In addition to direct CSHCS funding received by LHDs, agencies can elect to expend additional LMCH funds for CSHCN. 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 2017-2018 National Survey of Children's Health (NSCH), 19.8% of Michigan's children have special health care needs, as compared to the national average of 18.5%. However, more than a third of non-Hispanic Black children (34.5%) were identified with a special health care need. Additionally, only 15.9% of Michigan parents of children with special health care needs report that their children receive care in a well-functioning system.

Transition (FY 2020 Annual Report)

In response to previous needs assessment findings that 41.2% of CYSHCN received the services needed for transition to an adult care provider, Michigan adopted NPM 12 ("Percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care") as a priority focus. To address this NPM, CSHCS created a comprehensive strategic plan to improve transition services across the state. Specific strategies were identified for local health departments (LHDs), Medicaid Health Plans (MHPs), medical providers, school-based health centers, adolescents, and families.

Accomplishments in FY 2020 included significant integration of medical transition considerations into transition efforts in the education sector through involvement in the Michigan Interagency Transition Taskforce (MITT); completion of MHP Focus Studies with a focus on transition, creating a quality improvement initiative for use by school-based health centers across the state; and expanded utilization of transition resources by providers of Michigan's Children and Youth with Epilepsy (CYE) project. CSHCS worked with MHPs, LHDs, the MDHHS Child and Adolescent Health Center (CAHC) section, HRSA-funded CYE grant participants, *Got Transition,* AMCHP's

Replication Grant team, and other MCH-funded organizations such as Florida Health and Transition Services (HATS). Challenges included slowed implementation of strategies due to COVID-19. In response to these challenges, CSHCS adapted program strategies to a virtual environment, focused efforts on establishing infrastructure, and invested in statewide collaboration efforts to maximize impact. Existing strategies were adjusted to provide maximum flexibility for partners who were focused on responding to COVID-19.

Objective A: By 2020, increase the number of youth who have a plan of care that includes transition planning, beginning at age 14, by 4.1%.

The first strategy for this objective was to provide health care transition technical assistance to community partners, including LHDs and MHPs. The transition specialist assists with transition for LHDs through technical assistance trainings on request, maintaining a website of resources, and assisting with individual clients. In FY 2020, LHDs assisted with transition through 1,527 billable encounters for 1,387 unduplicated families.

The transition specialist participated in focus studies with each of the MHPs. In FY 2020, CSHCS included transition expectations in the MHP contract. The focus studies were utilized to determine the level of compliance with the new language. The focus studies allowed the opportunity to build relationships with MHP staff, learn about current transition activities at the MHPs, provide resources, and offer ongoing support. Information gathered at these focus studies will provide a baseline and will help to inform future opportunities to engage MHPs in transition interventions.

The second strategy for this objective was to update current automated letters in Community Health Automated Medicaid Processing System (CHAMPS) claims processing system. In FY 2020, letters for 16-, 17-, 18-, and 21-year-old CSHCS Clients were updated with Got Transition Six Core Elements 3.0, edited to provide consistency, and finalized. The letters were shared with diverse stakeholders for review and approval. The changes were proposed to and accepted by Medical Services Administration (MSA) for integration into the CHAMPS processing system with an anticipated “go live” in March 2021. In FY 2020, a new letter targeting 14-year-old CSHCS enrollees was created with the assistance of a diverse subcommittee containing Office of Medical Affairs physician consultants, Family Center staff, the Family Center Youth Consultant, the project coordinator for the CYE grant initiative, local health department representatives, and the transition specialist. The letter was shared with and approved by multiple stakeholders. The letter will be piloted in FY 2021.

For the final strategy, CSHCS continues to utilize the MDHHS Data Warehouse to track when CSHCS clients transfer care from a pediatric to an adult provider. Through a contract with the University of Michigan’s Child Health Evaluation and Research (CHEAR) unit, an Evidence-informed Strategy Measure (ESM) was developed to provide ongoing analysis and support related to the CSHCS program. The measure is based upon selected groups that include cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology, and rheumatology. The measure combines encounter data from three sources: 1) CSHCS database; 2) CHAMPS (Medicaid Claims) database; and 3) University of Michigan’s provider database which includes providers statewide. In FY 2020, CHEAR reported 46.5% of targeted clients had encounters with only adult providers, indicating a successful transition to the adult model of care. After further investigation, an additional 7.7% of clients in the targeted population had encounters with both pediatric and adult providers. Based on current transition strategies, this would indicate individuals who are in the process of transferring to an adult model of care.

In FY 2020, CSHCS began the process of working with CHEAR to further stratify data regarding race, ethnicity, and other socioeconomic factors. Moving forward these data will help to identify health inequities and inform future interventions.

Objective B: By 2020, increase the number of youth and families by 50 that are aware of and understand the transition to adulthood process.

The first strategy for this objective was to pilot a school-based adolescent transition replication project in one school. In FY 2020, pilot results and outcomes were shared with stakeholders. Outcomes were presented at AMCHP's 2020 Conference as part of a panel to provide information on and promote replication projects. The project was featured on a Poster Presentation in partnership with Got Transition. Outcomes were also shared with the CSHCS Advisory Council, Child and Adolescent Health leadership, and clinic teams from across the state.

Plans to replicate the project in five schools through a learning collaborative model were impeded by the COVID-19 pandemic. As schools responded to the changing pandemic environment, each Child and Adolescent Health Center had unique responsibilities. In response, the transition specialist modified the replication project and created tiers of collaboration for Child and Adolescent Health Centers. Each tier offered an Assessment of Current Health Care Transition Activities, access to resources, and technical assistance. For those with the capacity to fully engage in the replication process, they would have the opportunity to create a team and implement a full quality improvement project around transition. For those Centers with limited capacity, the transition specialist offered a mid-range option with streamlined data reporting requirements. The third tier was created for those Centers with little capacity to engage. Resources and technical assistance are available on demand with few reporting requirements. These options were communicated with the Health Centers. Work continues to engage these Centers in FY 2021.

One outcome from the pilot project was the collection of significant feedback on the Transition to Adulthood Online Module. The Transition to Adulthood Online Module was designed to assist adolescents in preparing for transition and ultimately transferring to an adult provider. The Family Center Youth Consultant spearheaded the project to ensure the course is adolescent-friendly and relevant to current challenges. Feedback from multiple stakeholders was integrated into the course. Work will continue in FY 2021 to promote the Transition to Adulthood Online Module to adolescents and families. This will include outreach to LHDs, Child and Adolescent Health Centers, and providers across the state to encourage them to share the online module with the families they serve.

The second strategy for this objective was to ensure health care transition is considered during 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 diverse 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 Development Disabilities Administration, Disability Rights Council, and Services to Enhance Potential. The Taskforce is working with the National Technical Assistance Center on Transition to create a Michigan State Model for Secondary Transition. The model combines different best practice models with the goal of improving post-secondary outcomes for students and youth with disabilities. The model incorporates the following objectives: building skills to safely navigate community and access services; setting expectations of competitive integrated employment; setting expectations and developing skills to live independently; exploring post-secondary education options; and building self-determination, advocacy, and leadership skills. The transition specialist provides the health care perspective to the collaboration as well as serving as a liaison between this statewide initiative and CSHCS. Work will continue in FY 2021.

The second strategy for this objective was to collaborate with Michigan Family Voices to provide transition information to families. The transition specialist meets regularly with Michigan Family Voices to discuss opportunities to reach families needing assistance with Transition. In FY 2020, outreach activities were severely limited due to COVID-19. In response, the transition specialist modified existing strategies and focused efforts on updating transition resources available on the website. A diverse committee was formed to review, update, and add to website resources for families, providers, LHDs, and MHPs. The committee included the Family Center Youth Consultant, representation from Office of Medical Affairs physician consultant, Family Center representatives, CYE project coordination, and representatives from three local health departments. The goal of the committee is to update

existing content to be consistent with Got Transitions Six Core Elements of Transition 3.0, organize information to make the site more user-friendly, and create a plan to promote the new website. Work on this activity will continue into the next grant period.

The final strategy for this objective was to integrate youth voice and participation in the development of transition interventions. The Family Center Youth Consultant is integral to the success of Michigan's health care transition efforts. During the grant period, the Youth Consultant co-presented with the transition specialist at the annual conference for Child and Adolescent Health Centers. This presentation shared outcomes from the Transition pilot, led attendees through the process of evaluating their transition activities, and laid the groundwork for replicating the transition project. In addition, the Youth Consultant participated in a youth panel for the CYE annual meeting, sharing the youth perspective on transition. Also, at the CYE annual meeting, the Youth Consultant provided a presentation highlighting technology apps to help youth manage their epilepsy. Providers will utilize these resources to help youth in their practice learn to manage their epilepsy condition. In addition, these templates will be utilized to create resources for other conditions and will be available to families on the Family Center website. 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. Work continues to integrate the Youth Consultant in projects across the CSHCS division.

Objective C: Increase provider awareness and understanding of the transition to adulthood process by 25% through the establishment and offering of a free online Medical Transition course.

For the first strategy in this objective, Michigan reviewed various online transition courses targeted to providers. Instead of replicating an existing medical education transition project, the decision was made to promote Got Transition's Health professional courses. Got Transition provides free continuing education credits for physicians, nurses, and social workers through their respective state-based societies. In FY 2021, Michigan will create a marketing plan that targets health professionals and promotes Got Transition online course resources. The transition specialist will work with Got Transition to collect data to monitor the number of Michigan providers that complete the course.

The second strategy is to work through HRSA funded CYE grant's learning collaborative to increase the number of completed health care transition readiness assessments of youth (ages 14-22) with epilepsy in the targeted population. To accomplish this strategy, the Quality Improvement (QI) Leadership Team created a plan for monthly learning/meetings, continuing education credits, the annual in-person meeting, and Year One clinic site QI activities. The Advisory Work Group, a larger group of stakeholders, met on a quarterly basis to provide further guidance to project planning. Each clinic site identified a team lead and clinical representative; all clinic teams identified a patient/family representative. Subcontracts and workplans were established with each of the clinic sites and project partners.

During FY 2020, clinic teams received training on health care transition topics at the in-person meeting, through a webinar, and Got Transition resources were shared. Teams completed an assessment of their health care transition activities at the December 2019 in-person meeting. The Leadership Team developed a mini teen survey to help clinic teams gauge the teen-friendliness of their clinics. More than 200 youth completed the mini surveys across seven clinical sites. The survey documented youth perspectives on their experience in the clinic by asking questions about whether they checked themselves into their appointment, whether clinic staff spoke directly to the teen, whether the teen answered questions from the nurse or doctor, whether the teen felt the doctor listened as much to the teen as the parents, and whether the teen asked questions of the nurse or doctor during the visit. The project coordinator, evaluator, and medical consultant also conducted one-on-one calls with each clinic team during February and March to discuss health care transition activities, survey findings, and assist teams with refining their QI project. Work continues for this strategy in FY 2021.

Medical Care and Treatment for CSHCN (FY 2020 Annual Report)

Michigan's SPM for the CYSHCN population measures the percent of CYSHCN enrolled in Children's Special Health Care Services (CSHCS) that receive timely medical care and treatment without difficulty. The measure was originally aimed at addressing Michigan's 2015-2020 state priority need to reduce barriers, improve access, and increase the availability of health services for all populations. CSHCS was created to find, diagnose, and treat children who have chronic illnesses or disabling conditions enabling them to have 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. In FY 2020, approximately 36% of Michigan's Title V funding was used for medical care and treatment for CSHCN. CSHCS utilizes two survey questions from the Consumer Assessment of Healthcare Providers and Systems (CAHPS) to determine the "Percent of CYSHCN enrolled in CSHCS that receive timely medical care and treatment without difficulty" (SPM 4). In FY 2020, the result was 88%.

FY 2020 challenges included the COVID-19 pandemic and increased tensions related to racial bias, social injustice, and health disparities in Michigan. CSHCS responded to challenges by embracing technology, reviewing lessons learned from the pandemic, identifying ways to assess health disparities and apply a health equity lens, and focusing on program development. COVID-19 had and continues to have a substantial impact on the CYSHCN population including causing fear in accessing the health care system, stress from the impact of school closures, and pressure to make the correct decisions for their family. COVID-19 impacted the health care system causing closure of offices early in the pandemic, workforces transitioning to remote work environments, and rapid adjustment to telemedicine practices to ensure continued access to care.

CSHCS converted to a remote workforce and increased use of technology to ensure continuation of services while maintaining staff safety. In-person site visits, trainings, and collaborative meetings shifted to virtual, including Children's Multidisciplinary Specialty Clinic (CMDS) site visits, Medicaid Health Plan (MHP) focus studies, advisory committee meetings, trainings, and others. Telemedicine expansion within clinic settings led to improved access to services for CYSHCN who were impacted by decreasing availability of face-to-face services. COVID-19 created significant policy challenges, to which CSHCS responded by adjusting policies and procedures, and participating in Medicaid policy groups to ensure no negative impact for CSHCS enrollees. Adjustments were also made to transportation services including discontinuing rideshare practices and the requirement of an in-person signature.

Despite COVID-19, CSHCS participated in the MCH Workforce Development Cohort (WDC) to create a comprehensive program evaluation, was accepted into the Boston Children's Care Coordination Academy to improve service coordination for children with medical complexities and supported a pilot pediatric palliative care program.

Objective A: By 2020, reduce barriers to medical care and treatment by minimizing financial barriers from the increased medical services associated with the child's special need, as measured by a 5% increase in the Insurance Premium Payment Benefit Assistance program.

The first strategy was to provide payment assistance for specialty care and treatment related to a qualifying condition by enrolling CYSHCN in CSHCS. CSHCS covered an average of 44,000 individuals each month in 2020 with more than 2,600 qualifying diagnoses. Approximately 26% of enrollees have more than one severe, chronic health condition. Families with CSHCS receive care coordination through local health departments (LHDs). In FY 2020 LHDs provided more than 17,000 care coordination or case management encounters to 10,905 unduplicated clients.

CSHCS made operational changes to minimize the impact of the COVID-19 on CSHCS clients. Clients due for medical renewals received a one-year extension. Physician submission requirements were relaxed to allow NPs and PAs to submit enrollment and renewal documentation. Guidance was issued to CMDS clinics that allowed them to use telemedicine to conduct team visits with clients in their home and to LHDs to provide case management telephonically. Temporary enrollment and client audit procedures were suspended. COVID-19 vaccine administration fees became covered services for enrollees who lack other insurance.

The Family Center for Youth with Special Health Care Needs (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 Family Center responded to COVID-19 by shifting current programs to a virtual environment. Parent Mentor and Bereavement Parent Mentor Trainings were provided virtually. Family Leadership Network (FLN) and other advisory committee meetings were held virtually, Parent to Parent trainings were initiated to provide education and conversations around CSHCS services and transition. In FY 2020, the Family Center provided 46 presentations to families and communities, answered 9,534 Family Phone Line calls, completed 25 parent-to-parent matches, and funded 19 camp or conference scholarships.

The second strategy for this objective was to continue offering the Insurance Premium Payment Assistance Benefit (IPPAB) program. The IPPAB provides financial support to eligible families who lack adequate financial resources to pay the portion of their family's private or employer-based insurance premium specific to the eligible child. In 2020, 172 families qualified for IPPAB and received $304,500 in support.

The final strategy for this objective was to continue providing support for CYSHCN and their families through the Children's Special Needs (CSN) Fund. The mission of the CSN Fund is to provide support to CYSHCN in Michigan to obtain equipment and services to promote optimal health. In FY 2020, the CSN Fund received 148 applications, approved 92 grants, and provided $404,156 to purchase equipment.

Objective B: By 2020, improve access to medical care and treatment by improving the systems of care for CSHCN clients, as measured by the CMDS patient satisfaction survey.

Michigan utilizes CMDS clinics to offer highly coordinated, interdisciplinary teams to care manage chronic conditions for CSHCS enrollees. CMDS clinics provide enhanced, patient-centered, family-friendly, and equitable care coordination services. Utilizing this model helps to address provider shortages in Michigan, while simultaneously wrapping services around families. CMDS clinics have a medical director and operate under the authority of hospitals/medical universities. Teams include social workers, nurses, therapists, dieticians, and other specialties as needed to provide comprehensive care for enrollees. CSHCS provides enhanced reimbursement to support the ancillary members of the team and offset the time and resources needed to provide complex care coordination. In FY 2019 (the most recent year with final data), CMDS clinics reported 3,315 client encounters with more than $472,800 of enhanced benefit provided to the clinics.

The first strategy for this objective is to improve the quality and effectiveness of CMDS clinics by conducting site reviews. Four site visits were conducted by CSHCS, Family Center and Office of Medical Affairs staff in FY 2020. Due to COVID-19, two of the four site visits were completed virtually. Clinic sites are evaluated on their ability to provide patient-centered, family-friendly care in a coordinated and equitable manner.

In FY 2020, CSHCS accepted a proposal from Michigan Medicine to add an audiology field clinic in an area with a high population of Amish residents. In the field clinic model, a provider travels to a rural or distant area in Michigan to provide subspecialty exams, evaluations, and treatments for a specific medical condition. For Amish families, the distance between their county of residence and Michigan Medicine's location made seeking care difficult. The field

clinic will remove that barrier to care. Work to establish the clinic will continue in FY 2021.

As a second strategy for this objective, CSHCS was accepted to the National Center for Care Coordination's Care Coordination Academy. The objective for the project is to establish specific case management and care coordination protocols to reflect promising and/or evidence-based practices for children with medical complexity. CSHCS utilized National Care Coordination Technical Assistance Center's (NCCTAC) assistance to customize the Pediatric Integrated Care (PIC) Survey. Once completed, staff gained approval from the MDHHS privacy and security office to implement the survey. CSHCS piloted the PIC survey in a CMDS clinic located in rural Michigan. A second pilot of the survey will occur in FY 2021.

The third strategy for this objective was to facilitate discussions with three of the state's largest Children's Hospitals. In FY 2019-2020, CSHCS held meetings with C.S. Mott Children's Hospital, DeVos Children's Hospital and Children's Hospital of Michigan. Information from these meetings was compiled, and staff has followed up on items within the scope of CSHCS. The discussions provided an opportunity for CSHCS to meet hospital administrators, assess program satisfaction, and identify opportunities to improve relationships with the medical community. In FY 2021, CSHCS will explore future partnership opportunities.

For the fourth strategy, CSHCS established a contractual relationship with Michigan Medicine's Partners for Children (PFC) program to explore the feasibility of providing a palliative care benefit package for medically complex children enrolled in CSHCS. PFC is a team-based, home visitation, palliative care program, which provides 24/7 access for families. Due to the pandemic, many of PFC services have shifted to telemedicine.

MDHHS contracted with University of Michigan's Child Health Evaluation and Research (CHEAR) Center to conduct pre-post comparisons of utilization and costs for children in PFC. For the first year, the study demonstrated positive impacts on reducing inpatient utilization and costs for medically complex children, yielding an average savings for the state Medicaid program of $1,915 per child per month. Cost savings were due to decreased inpatient care, particularly critical care. Increased expenditures for prescription medication and other outpatient services demonstrated that savings were not due to constrained care. Moving forward, CSHCS will work with Michigan Health Endowment Fund to explore and determine sustainability efforts.

For the fifth strategy, CSHCS held focus studies with all 10 Michigan MHPs in FY 2020. The focus studies discussed topics such as processes impacting enrollment for CYSHCN, health equity, care coordination/case management, transition, and family engagement. The CSHCS team consisted of OMA medical consultants, the manager of quality program services, quality analyst, and representatives from Customer Support Section, Policy and Program Development, and the Family Center. The studies identified opportunities to improve consistency in care coordination and transition services delivery. In addition to focus studies, CSHCS seeks to improve relationships between MHP and LHDs through regularly scheduled, joint conference calls to discuss challenges coordinating care for CSHCS clients.

In 2020, the Title V five-year needs assessment was completed and served as a springboard for creating a comprehensive evaluation for the CSHCS program. CSHSC was accepted as a team for the National MCH WDC's 2020 Cohort with the project goal of creating a comprehensive program evaluation. The team adopted the CDC's Framework for Evaluation in Public Health. In FY 2020 the team engaged stakeholders, utilized diverse perspectives to create a program description, and began the process of focusing the evaluation design. Due to COVID-19, the process became extended. The team continues to work with the WDC in a single-state arrangement. Work on the comprehensive evaluation project is continuing in FY 2021.

The third objective for this strategy is to assess health disparities and inequities for CYSHCN. In FY 2020 CSHCS's health equity committee identified perceived health disparities in transition to adult health care for sickle cell disease

patients and access to durable medical equipment for youth with type I diabetes. Committees were formed to evaluate these topics and work is continuing in FY 2021.

Objective C: By 2020, increase the availability of health services, particularly in underserved regions, through the utilization of telemedicine and community-based services.

The first strategy for this objective was to provide ongoing technical assistance and education for LHDs. LHD staff implement the program, identify enrollees, provide care coordination/case management service in the home and telephonically, and assist with access to and utilization of local resources. In FY 2020, COVID-19 significantly impacted the CSHCS Division's ability to provide education to LHDs. Both workforces adjusted to remote working environments and many LHDs diverted time and resources to frontline COVID-19 response. CSHCS began the process of shifting annual, in-person training sessions to a virtual environment. CSHCS is planning to offer a half day, virtual training session for LHDs. CSHCS also adopted virtual meeting modalities for monthly LHD and CSHCS LHD Advisory Committee meetings to provide technical assistance, and gain LHD feedback.

The second strategy for this objective was to convene an interagency collaboration to reduce barriers for children with complex medical and developmental/behavioral needs. The collaborative committee included representatives from both state and local CSHCS and Behavioral Health, as well as ARC of Michigan, Community Mental Health (CMH) Association and child welfare. As a result of the collaboration, presentations were provided at three statewide conferences. The presentations were designed to improve understanding of CSHCS and how mental health providers can help families and youth with special health care needs. The collaborative began to develop tools for families, LHD staff, and CMH staff. A leadership committee was established to guide the work of the collaborative moving forward.

The third strategy for this objective was to incorporate telemedicine into patient care. In FY 2020, new telemedicine policy was promulgated to allow for provision of services to patients in their home. In response to COVID-19 there was a necessary shift to providing services via telemedicine. Additional flexibilities associated with providing telemedicine were granted and policies promulgated. The telemedicine workgroup reviewed these flexibilities, along with outcomes to identify what telemedicine components allowed during COVID-19 should be institutionalized for the future.

Transition (FY 2022 Application)

Through the five-year Title V 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, 32.3% of CYSHCN reported they received services to transition to adult health care. While Michigan’s percentage is nearly 10% greater than the nation’s, the data clearly indicates that more than two-thirds of Michigan’s CYSHCN are not receiving necessary healthcare transition services, making them vulnerable to worsening chronic health conditions, behavioral health issues and underutilization of needed healthcare services. Specific NSCH transition indicators reveal additional opportunities for improvement. For example, 44.5% of Michigan respondents reported they have a plan of care that addresses transition to doctors or other health care providers who treat adults, and 37.6% discussed with their provider shifting to practices that treat adults. Several strengths were also found such as 69.1% of respondents reported their doctor worked with the adolescent to gain skills to better manage their condition and 65.6% of respondents reported their provider discussed how to obtain and keep some type of health insurance as the child becomes an adult.

Given these findings, three objectives were developed which focus on promoting awareness, developing skills, and creating capacity for measuring improvement. Each objective targets areas of opportunity, while simultaneously addressing the state priority need. In addition, the objectives work in tandem to strengthen the Michigan Title V needs assessment pillars of improving capacity to achieve equitable health outcomes; engaging families and communities; and delivering culturally, linguistically, and age-appropriate health education. Working in conjunction with a network of partners to address transition challenges for CYSHCN and their families, the strategies contained within the objectives reflect input from stakeholders at every level. CSHCS partnerships are varied and include local health departments, Medicaid Health Plans, school wellness centers, family advocacy organizations, and specialty providers. Title V funding is used to provide care coordination services through contracts with local health departments, which includes medical transition services. Transition is included as a Minimum Program Requirement during the LHD accreditation process. Transition objectives and strategies build on the local health department partnership, in conjunction with stakeholders, to improve awareness, provide training, and promote systematic change in the way transition progress is tracked and reported.

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

Thanks to the support of a replication grant from the Association for Maternal and Child Health Programs (AMCHP), CSHCS completed a pilot program to develop a process and toolkit for integrating transition programming into Child and Adolescent Health Center (CAHC) school wellness centers. The first strategy for this objective is to expand the pilot to form a learning collaborative designed to promote health care transition in grades 9-12 through school clinics. Each year, CAHC-funded programs must implement a continuous quality improvement initiative that utilizes a Plan-Do-Study-Act (PDSA) cycle. The transition project meets these requirements. By expanding the pilot to additional schools, the goal is to formalize the toolkit and promote the process as an option to fulfill the Quality Improvement requirement.

For this strategy, the transition specialist will work with MDHHS CAHC state staff to identify school-based clinics, school-linked clinics, and school wellness centers to replicate the transition pilot. Three to five clinics will be identified that represent diverse populations and have the capacity to implement the pilot. Each clinic will complete Got

Transition's "Current Assessment of Health Care Transition Activities" to identify their baseline. In response to the COVID-19 pandemic, the pilot was tiered to offer different levels of engagement on behalf of the CAHC organization. Teams will work together to customize documents for their clinics and will discuss how to effectively integrate transition programming into clinic workflow. The transition specialist will provide training specific to the concerns of participating clinics. Data collection will begin in the fall and will be collected monthly through the end of the school year. Along the way, clinic teams will have the opportunity to participate in training webinars and conference calls to provide feedback on the process, ask for guidance and share ideas from other participating clinics. The transition specialist will document activities, collect data, and seek guidance from Got Transition as appropriate. Upon completion of the school year, clinics will once again complete a "Current Assessment of Health Care Transition Activities" as a posttest. Data compiled from these two data collection points will be compared and used to evaluate the project's success and identify needed modifications to the toolkit. Results will be shared with stakeholders including CSHCS and CAHC leadership and will be used to expand the project's reach.

The second strategy for this objective is to utilize an existing subcommittee to systematically review the transition website resources, update resources with current guidance from Got Transition, and launch a revised website. The subcommittee includes the Family Center Youth Consultant as well as family members of children with special health care needs and local health department representatives. Resources will be evaluated for ADA compliance and updated to reflect the most recent evidenced-based information. Subcommittee members will review resources to ensure they are culturally appropriate.

As a third strategy, MDHHS will continue to contract with the Regents of the University of Michigan, 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 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. CSHCS will continue to work with U of M CHEAR to monitor this ESM and seek ways to stratify the data by race, ethnicity, and region. By stratifying the data, CSHCS hopes to identify health inequities in health care transition services as well as better understand how to target educational efforts at a regional level to improve transition outcomes.

The final strategy will build on previous work with automated transition letters to families. In FY 2020, CSHCS finalized a transition letter for 14-year-old CSHCS enrollees encouraging them and their families to begin thinking about transition to adult health care. This letter will be added to existing automated letters (for ages 16, 17, 18 and 21) which are generated through the Community Health Automated Medicaid Processing System (CHAMPS) database. In FY 2022, the transition specialist will finalize a pilot to distribute the 14-year-old letter via the CSHCS database system. The transition specialist will analyze the results of the pilot and consider transitioning all automated letters to the CSHCS database. This change will improve consistency and enable LHDs to create reports on an as needed basis to assist in projects to improve transition to adulthood for the clients they serve.

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.

Building upon prior work to create an online training module for providers, the first strategy for this objective is to implement the marketing plan to promote Got Transition's health professional courses to providers across the State. The transition specialist will work with Got Transition staff to collect data to establish a baseline and monitor the number of Michigan providers that complete the training courses. The transition specialist will utilize this data to identify areas for targeted outreach to encourage providers to complete the training courses.

The second strategy for this objective is to work through the HRSA CYE grant to provide education to providers at

participating clinics. 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 transition 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 2022, 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 transition strategies and resources. In addition, the project will conduct targeted health care transition trainings, such as Teen Transition Workshops for children with epilepsy and their families.

In FY 2020, through the combined work of the CSHCS Advisory Committee and the CSHCS Health Equity, Diversity, and Inclusion workgroup, a health disparity was identified for patients with sickle cell disease in need of health care transition services. This led to the development of a sickle cell disease subcommittee with diverse stakeholders. During the past year, the subcommittee created a work plan to address health disparities in patients with sickle cell disease. The third strategy for this objective is to quantify existing disparities while expanding availability of adult service providers to improve outcomes. The subcommittee will work to identify adult providers across the state who are currently managing patients with sickle cell disease and make this information available to pediatric clinics. In addition, the work group will implement a pilot project to equip sickle cell clinics across the state with tools and resources for helping youth with sickle cell disease transition to an adult provider. Another barrier for transition is lack of adequate insurance for sickle cell disease patients. Pending approval of the state budget, CSHCS will continue work to expand eligibility of sickle cell disease patients into adulthood resulting in an expanded service delivery system.

The fourth strategy for this objective is to continue working with the Michigan Interagency Transition Taskforce (MITT) to ensure medical transition to adult providers 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 2022, the transition specialist will continue to ensure medical transition 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."

Work in prior years has established relationships with LHDs, MHPs, providers, school wellness centers, and families. The first strategy of this objective is to build on current projects to implement Got Transitions "Current Assessment of Health Care Transition Activities" with partners across the state. This strategy will improve the ability to measure improvements in transition related activities.

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 2022, partners will complete the annual assessment, continue to monitor the progress of clinic sites, and determine plans for improving transition activities across the project partners.

Medical Care and Treatment for CSHCN (FY 2022 Application)

Children's Special Health Care Services (CSHCS) was created to find, diagnose, and treat children who have chronic illnesses or disabling conditions. The mission of CSHCS, to improve health outcomes and enhance quality of life of children served, is accomplished by assisting children and their families in accessing the broadest range of appropriate medical care, health education, and support. CSHCS removes barriers to care, including financial barriers, improves access to services, and strengthens existing systems of care.

During FY 2020, 50,965 individuals were enrolled in CSHCS and of these individuals, 37,969 were also eligible for Medicaid. Although there is an annual fee to enroll in CSHCS, this fee is waived if the client has Medicaid, MI Child, 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 total Title V funds) to support medical care and treatment of CSHCS recipients.

Focus groups conducted for the 2020 needs assessment indicated CSHCS stakeholders experience service barriers that impact their ability to access timely health care services and therapies. Barriers included lack of specialty providers available and insurance challenges, as well as language and cultural barriers. 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 caregivers who are strong 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 CYSHCN can utilize Family Center services, regardless of CSHCS enrollment status.

Objective A: By 2025, increase the percentage of CSHCS CAHPS' respondents who rate their health care with a top box score of 9 or 10 from 71.9% (2019) to 75%.

The first strategy is to continue enrolling children with special health needs into the medical care and treatment benefit. The CSHCS benefit, while not intended to cover all the care a child needs, helps to reassure families that necessary specialty care for their child's qualifying diagnosis will not create undue financial burden. CSHCS is the payer of last resort and requires families to follow their primary and secondary insurance rules. If a family's income indicates that they may be eligible for Medicaid, they are required to apply for Medicaid.

CSHCN who qualify for Medicaid and the CSHCS benefit continue to receive care through Medicaid Health Plans (MHP), with few exceptions. Children who are already receiving Medicaid, and are determined to be medically eligible for CSHCS, are automatically enrolled. Automatic enrollment into CSHCS benefits families by increasing access to care coordination and case management services. To achieve continued enrollment of families, CSHCS works with local health departments (LHD) and MHPs.

The second strategy is to expand the capacity of specialty clinics to ensure delivery of patient-centered, family-friendly, equitable care through CSHCS multidisciplinary specialty (CMDS) clinics and field clinics. In FY 2020, CSHCS facilitated implementation of a University of Michigan (U of M) audiology field clinic in Branch County. This rural area is located approximately 80 miles from the U of M Health Care System. Providers observed an increased number of Amish children with unmet audiology needs. It was identified that cultural barriers limited the ability of Amish residents to travel to U of M to seek specialty treatment. The field clinic was established in a convenient location in Hillsdale. Clinic staff utilize Amish schools and use battery operated devices to demonstrate respect for Amish beliefs. In FY 2022, CSHCS will establish and monitor outcomes from the field clinic to ensure improved access to care for Amish residents.

In FY 2020, a proposal was submitted to the Governor's office for funding to extend CSHCS coverage for individuals with sickle cell disease throughout adulthood. The benefit proposed will mirror existing coverage for adults with cystic fibrosis and hemophilia. Pending proposal approval, CSHCS will implement expanded eligibility for patients with sickle cell disease of any age in FY 2022. CSHCS will expand its CMDS clinic network 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. This strategy is in response to an identified health disparity for Michiganders with a sickle cell disease diagnosis.

The third strategy is to continue expansion of telemedicine through the HRSA-funded Children and Youth with Epilepsy (CYE) grant and CMDS clinics. The CYE project aims to utilize telehealth strategies 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 measure the number of clinics 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. Support will include tracking information, collaborating with other HRSA-funded projects, and conducting a QI project on telemedicine workflow. The project will also support adoption of telehealth strategies for patient education and clinic support. Support will include adapting existing trainings to reflect the priorities of CYE and families, diversifying how trainings are delivered to best meet the needs of participants, identifying additional telehealth tools to promote epilepsy management, and obtaining feedback from CYE and their parents/caregivers on the tools provided. The Family Center Youth Consultant will review material, provide presentations when appropriate, and guide adolescent outreach to improve effectiveness.

The COVID-19 pandemic highlighted the important role telemedicine plays in providing access to care while quickly improving comfort levels among providers and families. CMDS clinics demonstrated rapid growth in telemedicine visits. In FY 2022, we will monitor utilization and apply a health equity lens to improve access to telemedicine.

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 2022, the Family Center will continue to provide camp and conference scholarships, the Parent Mentor program, the Family Phone Line, and utilization of a Youth Consultant to maximize outreach to adolescents. The Family Center will facilitate Sibshops to provide siblings of CSHCN the opportunity to connect with other siblings, discuss the challenges of being a sibling, and create a network of support. In response to COVID-19, the Family Center initiated virtual Professional and Parent Connect calls. In FY 2022, the Family Center has a goal of reaching 24 community-based service providers through Professional Connect calls and proactive building of strategic partnerships. Parent Connect calls provide parents

with resources, support, and an opportunity to discuss the most pressing issues for parents of CSHCN.

The Family Center facilitates the Family Leadership Network (FLN) to obtain diverse perspectives of families and receive input on programs and special projects. The network meets quarterly and welcomes two representatives from each of Michigan's Prosperity Regions. They participate in focus groups and serve as a link between families and partners such as LHDs, providers, and MHPs.

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 FY 2022, the Family Center has a goal of increasing the number of LHD awards from five to eight totaling $40,000.

The second strategy will be to implement the comprehensive communication and outreach plan to improve awareness of the CSHCS program among providers, partners, and families. In FY 2019, an Outreach and Communications committee was formed to evaluate the current strategy and design and implement a work plan. As part of the work plan the committee identified organizations representing the diverse populations of Michigan. In FY 2022, the group will implement a strategy to reach out to these organizations, begin building relationships with key stakeholders, and schedule presentations to share information on CSHCS with these organizations and the populations they serve. This will include a Professional Connect calls held by the Family Center. These calls are informational 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 addition, the committee will revise existing presentations, resources, and materials to ensure they are ADA accessible, culturally appropriate, and family centered. Finally, the committee will review the website, update content, redesign pages to make it more user friendly, and ensure all pages are ADA accessible. As part of this strategy, work will continue in FY 2022 to build upon the information gathered from the CSHCS provider survey to identify opportunities to continue to engage providers in providing feedback to the program.

The final strategy is to maintain a competent workforce that is knowledgeable about the program and able to assist families in understanding how to access the system of care. MDHHS will continue to contract with the MSU Institute for Public Policy to design and offer regional training opportunities to LHDs and MHPs to ensure a competent local CSHCS workforce. In FY 2022, a mix of statewide and regional trainings are being explored and will be targeted to better meet the needs of changing staff as a result of staff turnover. LHD trainings will focus on enhancing program staffs' skills and abilities to identify, enroll, and renew families while providing quality, comprehensive, family centered care coordination services. MHP staff will receive ongoing education to improve their awareness of the CSHCS program and the challenges families with children with special health care needs face with the goal of improving their ability to provide quality care coordination services. Regularly scheduled calls occur with MHP and LHD representatives to improve care coordination. Trainings are provided virtually or in-person depending on COVID-19 and other circumstances with staff safety remaining CSHCS's top priority.

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 to explore, develop, and implement a statewide benefit to improve care for children with medical complexities. In FY 2020, CSHCS applied and was accepted to participate in a national Care Coordination Academy through Boston Children's Hospital. The Care Coordination Academy provides tools and technical assistance from an interdisciplinary team of experts to guide benefit exploration and development as well as include evaluation indicators for measuring success. The objectives of Michigan's team are to pilot the Pediatric Integrated Care (PIC) survey in an existing pediatric palliative care program; assess the number and characteristics of children with medical complexity currently enrolled as well as the current capacity of the health care delivery

systems to provide needed services; support availability of services for children with medical complexities statewide; explore a statewide palliative care benefit; and introduce care coordination curriculum and principals to palliative care partners through at least two training events.

In addition, CSHCS will continue to work with Michigan's Partners for Children (PFC) Program to explore the feasibility of providing a palliative care benefit package for medical complex children enrolled in CSHCS. In FY 2022, CSHCS will work with the Michigan Health Endowment Fund to explore and determine sustainability efforts for a more intensive benefit specific to children with medical complexity.

The second strategy is to 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. In FY 2019, CSHCS was accepted to the MCH Workforce Development Center's Learning Cohort to devise the comprehensive strategy. The CSHCS team adopted the CDC's Framework for Program Evaluation. In FY 2020, the team engaged stakeholders, utilized logic models and causal loop diagrams to create a comprehensive program description, and began the process of developing evaluation questions. In FY 2021, the team will collect credible evidence. In FY 2022, the team will utilize this evidence to draw conclusions, cross reference these conclusions with stakeholder feedback, establish benchmarks, create a program dashboard, ensure use and share evaluation lessons, and make modifications for future iterations.

The third strategy is to continue to ensure CSHCS families are receiving care coordination that is high quality, family centered, and in a 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. FY 2022 focus studies will focus on care coordination and identifying potential barriers for families. The CSHCS Division works with the Managed Care Plan Division to apply a health equity lens while assessing the services received by CSHCS clients from MHPS. 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 program requirements. The LHD requirements and associated indicators are reviewed and updated every three years. Most recent changes are anticipated go into effect in the FY 2022 accreditation cycle. LHD accreditation was paused due to COVID-19 and expected to resume in FY 2022.

Cross-Cutting/Systems Building

State Performance Measures

SPM 6 - Support access to developmental, behavioral, and mental health services through Title V activities and funding

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	Yes	Yes	Yes	Yes	Yes	Yes

State Action Plan Table

State Action Plan Table (Michigan) - Cross-Cutting/Systems Building - Entry 1

Priority Need

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

SPM

SPM 6 - Support access to developmental, behavioral, and mental health services through Title V activities and funding

Objectives

A) Support the work of local health departments in addressing developmental, behavioral, and mental health needs in their jurisdictions through 2025

B) Support the work of Regional Perinatal Quality Collaboratives in addressing behavioral and mental health in their respective Prosperity Region through 2025

C) Support increased collaboration and engagement between Title V and behavioral health partners

Strategies

A1) Provide Title V funding to local health departments to address developmental, behavioral, and mental health needs

B1) Provide resources to Regional Perinatal Quality Collaboratives to implement and expand use of universal perinatal screening at prenatal care clinics within their respective regions B2) Provide resources to Regional Perinatal Quality Collaboratives to implement and expand telehealth services inclusive of behavioral and mental health within their respective regions

C1) Engage behavioral health stakeholders to ensure issues and concerns related to children with special health care needs are represented

Cross-Cutting/Systems Builiding - Annual Report

No content was entered for the Cross-Cutting/Systems Building - Annual Report in the State Action Plan Narrative by Domain section.

Cross-Cutting/Systems Building - Application Year

Cross-Cutting Overview

Public health can play a key role in mental health promotion and the prevention of mental illness, as well as providing linkages to systems of intervention and treatment. Recognizing that physical and mental health are closely related at the individual and population levels, Michigan is working toward better integration between these systems. Additionally, 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.

Within the organizational structure of MDHHS, the Behavioral Health and Developmental Disabilities Administration (BHDDA) and the Public Health Administration (PHA) both fall under the leadership of the Senior Chief Deputy for Health. Additionally, there are close working relationships between BHDDA staff who work with children and families and PHA staff. For example, BHDDA's Division of Services to Children and Families leads the implementation of the Infant Mental Health program, a home visiting model that coordinates with public health home visiting programs. Additionally, BHDDA's Division of Recovery Oriented Systems of Care supports a network of substance use treatment programs designed specifically for pregnant women and women with young children. Similar partnerships exist between MDHHS and the Michigan Department of Education related to adolescent mental health. MDHHS is also working toward better integration of mental and physical health care through a behavioral health redesign effort that involves establishing specialty integrated Medicaid health plans for those with significant behavioral health needs.

Although efforts have occurred at the state and local level to coordinate and integrate promotion, prevention, intervention, and treatment strategies across physical and behavioral health, the Title V needs assessment found that gaps remain 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 2019 (23.1%, BRFS) in reporting two or more weeks of poor mental health over the previous month. From 2016 to 2018 the percentage of Michigan women who reported treatment for anxiety or depression in the year prior to their pregnancy rose from 35.8% to 38.4% (PRAMS). Similarly, major postpartum depression symptoms rose from 2014 (12.6%) to 2018 (16.3%, PRAMS). While there are fewer sources of data regarding mental health among children in Michigan, they are more likely than children nationwide to be diagnosed with an autism spectrum disorder (3.2%, NSCH 2017-2018) or attention deficit disorder (10.0%). Over a third of Michigan children ages 6-11 years who had a diagnosed mental or behavioral health condition did not receive treatment in the previous year (36.8%, NSCH 2017-2018). Adolescents in Michigan have experienced a higher suicide mortality rate than adolescents nationwide since at least 2012 despite increases in both rates. In 2019 for adolescents ages 10-19 years, the suicide rate in Michigan was 7.3 per 100,000 and 6.6 per 100,000 for the US (WISQARS). 37.3% of Michigan high school students reported two or more weeks of sad or hopeless feelings over the previous month in

2019, a major increase from the 26.0% in 2011, and 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 59.3% of children with special health care needs experienced bullying, compared to 43.2% of non-CSHCN (NSCH 2018), which is linked to adverse mental health outcomes. These data indicate that Michigan has unmet needs for mental and behavioral health services across Title V populations.

The COVID-19 pandemic has resulted in economic and social challenges that are having a significant impact on the mental health and well-being of mothers, children, adolescents and families. According to the "Kids, Families and COVID-19: Pandemic Pain Points and the Urgent Need to Respond" report, 22% of Michigan households with children reported feeling down, depressed, or hopeless during the pandemic. 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." Additionally, the Child and Adolescent Mental Health as a Result of COVID: a Michigan Perspective report states that in Michigan "trends show increased isolation, fear of contagion, political and racial unrest along with economic uncertainty have resulted in increased anxiety and depression." The report notes other stressors that compound the effects of the pandemic, including financial stressors such as job loss and eviction. The report includes links to several studies that highlight the significant negative impact of the pandemic on children's emotional well-being and mental health—and in turn, the increased demand for mental health services.

Behavioral/Mental Health (FY 2022 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, for the purpose of Title V the priority formally links to a state performance measure (SPM) on childhood lead poisoning prevention and an SPM 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 is focusing 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 Title V and behavioral health partners. Notably, 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.

The objective in this state action plan helps to illustrate how behavioral/mental health is being addressed at the local level with the support of Title V funding. The 45 LHDs in Michigan receive approximately one-third of Michigan's total

Title V allocation through LMCH. Each health department has the flexibility to use Title V funds to align with their local MCH strategic priorities. Local needs vary across the state. 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. Additionally, some activities that tie with mental/behavioral health and wellness may be captured in other areas of the Title V application (such as NPM 9 on bullying).

Currently, eight LHDs are addressing some aspect of mental health as a performance measure in their annual plans such as depression, adverse childhood experiences and suicide prevention within the women/maternal health and adolescent health population domains.

For example, SPM 6 was utilized in the women/maternal health domain by an LHD that used Title V funds as gap filling 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 LHD educated pregnant/postpartum clients on stress, depression prevention and management, and created treatment goals with clients during case management for stress/depression. 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 the statewide 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 schools students on mental health topics such as stress management, depression, body image, and substance use during health education classes. This LHD measures the number of adolescents who received the education and measures knowledge gained through pre/post-test evaluations. A second example is an LHD that uses funds in a nurse-led medical service clinic to screen for adolescent depression using PHQ2 with follow up with PHQ9 when indicated. The measure is the count of adolescents served.

State strategies to support LHD work on this measure include provision of support, guidance, and technical assistance from the MDHHS LMCH consultant. Training webinars will be offered to provide information on evidence-based and evidence-informed strategies and activities for behavioral/mental health access. 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. In 2021, the LMCH consultant provided a sample LMCH workplan that demonstrates some initial strategies to integrate inclusion and equity and to promote family engagement. The state Title V program recognizes that given the significant and ongoing demands on LHDs in response to the COVID-19 pandemic, LHDs may not have the capacity to make significant adjustments to workplans for FY 2022.

The LMCH program will also track Title V spending on behavioral and mental health activities. Data gathered from this performance measure will provide a local perspective, which will be important for strengthening future Title V behavioral/mental health strategies and activities.

Objective B: Support the work of Regional Perinatal Quality Collaboratives in addressing behavioral and mental health in their respective Prosperity Region through 2025.

Behavioral and mental health has a significant impact on maternal and infant morbidity and mortality. Michigan is plagued by poor behavioral and mental health outcomes, especially in pregnant women, as illustrated through several indicators. For example, in 2019, 13.6% of women in Michigan with a live birth indicated that they smoked while pregnant; in 2018, the Neonatal Abstinence Syndrome (NAS) rate for Michigan was 721.2 per 100,000 live

births; and from 2013-2017, 32.0% of pregnancy associated injury deaths were attributed to accidental poisoning/drug overdose and 5.1% were attributed to suicide[1].

Michigan is working to address behavioral and mental health concerns through the work of the Regional Perinatal Quality Collaboratives (RPQCs). The aim of the RPQCs is to develop innovative strategies to regionally address the drivers of adverse birth outcomes. Several RPQCs have begun addressing perinatal substance use through implementation of universal prenatal screening, increasing treatment capacity in their respective region and offering educational opportunities in unconscious bias and stigma reduction. Building on these efforts, the RPQCs will work to implement and expand telehealth services, focused on behavioral and mental health, for pregnant and postpartum people living in areas with limited in-person options for this type of specialized care. Depending on the availability (or lack) of other funding sources, Title V funding is used as a gap-filling funding source for RPQCs. Title V MCH leadership is also closely involved in the work of RPQCs.

Strategies to achieve Objective B focus on providing resource supports to the RPQCs to implement and expand universal screening and telehealth services in their region. Previous surveys of prenatal care clinics illustrated a lack of consistent or universal screening of patients for perinatal substance use or mental health conditions, such as depression and anxiety. Universal screening of all pregnant 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 is the essential next step for those identified through universal screening, or otherwise. Behavioral and mental health professionals are a limited resource in Michigan, especially in rural areas. Residents in rural Michigan often encounter barriers to care that include the physical distance to clinics and reliable and consistent transportation. Telehealth services are a logical option in overcoming these barriers.

Four RPQCs have implemented prenatal screening at clinics that serve residents of their respective regions. West Michigan'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 women 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. It is anticipated that these results will lead to expansion of universal screening within their regions, as well as in other regions.

Most clinics that have implemented universal prenatal screening have an embedded social worker or behavioral health professional in their clinic. This serves as a great resource for initial contact with patients, but in terms of ongoing support, it may not fully meet patient needs or may only benefit those patients who live near the clinic and have adequate transportation. West Michigan, Northern Lower Michigan, the Thumb area and the Upper Peninsula are comprised of largely rural areas. Patients in these areas often travel long distances for prenatal care appointments; some struggle with reliable transportation or having money for gas; and some are unable to take the time from work for additional appointments. It is these situations and barriers which necessitate tele-behavioral/mental health services. Clinics in the Upper Peninsula have begun piloting tele-behavioral/mental health services for prenatal patients through a state-based vendor. Successful results are anticipated and will be used as a model to expand tele-behavioral/mental health services both within and outside the regions. Utilizing telehealth services for behavioral and mental health care will greatly increase the capacity of care, especially in rural areas of Michigan.

The effects of the current pandemic led many health care provider offices to, at least temporarily, offer care via

telehealth services. Many providers, clinics and patients are now familiar with the technology, which should ease the introduction of tele-behavioral/mental health services within this population. It could also prove beneficial in coordinating care for patients who may not have stable or reliable internet access. For example, the telehealth appointment could be coordinated with their prenatal appointment and accessed from the prenatal care clinic.

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.

Building on prior accomplishments, in FY 2022 the collaborative workgroup will finalize and publish a toolkit for families needing assistance from CSHCS and mental/behavioral health and I/DD systems. In addition, the workgroup will update, publish, and promote a series of webinars describing the mental/behavioral health, CSHCS, and I/DD services for families. The workgroup will continue to provide outreach and education sessions for both mental health and I/DD staff regarding CSHCS and services available through the program. Finally, work will continue in FY 2022 to explore high-level policy priorities (such as respite physical and behavioral health integration) and to improve systems of care for this shared population.

[1] Source: Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services

III.F. Public Input

A draft of the Title V FY 2022 application/FY 2020 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 advisory groups, community-based partners, nonprofit partners, advocacy groups and other state programs. Additionally, notice will be sent to all 45 local health departments. Individuals who participated in the 2020 Needs Assessment Stakeholder Group and Population Domain Workgroups will also receive notification of the posting. Public input will be presented to the Title V steering committee for review and consideration prior to submission of the 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 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. When determining the process to be used, the Needs Assessment Planning Committee prioritized the need to engage a diverse group of stakeholders to assess both needs and system strengths and capacity. In total, the needs assessment engaged approximately 1,000 community members, providers, clients, and stakeholders to obtain their thoughts, opinions and perspectives on the health and wellbeing of women, mothers, infants, children, adolescents, and children with special health care needs. The System Capacity Assessment and the Forces of Change Assessment captured input and perspectives from the Stakeholder Group. Additionally, the three methods in the Community Themes and Strengths Assessment—a provider survey, an encounter survey, and focus groups/listening sessions—offered a variety of opportunities to capture rich qualitative information.

Twenty-two focus group/listening sessions were completed with community members and stakeholders across the five Title V population domains. A provider survey distributed to MCH providers received 526 responses, and an encounter survey distributed through MIHPs and local health departments received 307 responses. The population domain workgroups, which reflected the population health domains, included state and local MCH staff, state and local MCH system partners, parents, parent consultants, consumers, and partners with expertise in health equity. Their input and experience shaped the issues and priority needs considered and included in Michigan’s 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 systems of care and care coordination for children with medical complexity.
- 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).
- Support of local public health partners in implementing new requirements or priorities as related to Title V.
- Sharing of best practices and other peer learning opportunities (e.g., between states or within regions).

Additionally, given the ongoing COVID-19 pandemic, Michigan may seek out 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 and HRSA learning labs. Training or technical assistance provided by HRSA or AMCHP, especially in relation to ESMs, NPMs, Title V Information System (TVIS), and other Title V priorities or requirements, is shared with relevant MCH programs and staff.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - MichiganStatePlan2021 - Excerpt for Title V.pdf

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - Literature Review Sources_FINAL DRAFT.pdf

Supporting Document #02 - Title V NPM-SPM Chart FY2021-2025.pdf

Supporting Document #03 - NPM Annual Objectives - FY 2021 - HP 2030 update FINAL.pdf

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - MDHHS_OrgChart 5-3-21 CSHCS MIH CAH.pdf

VII. Appendix

This page is intentionally left blank.

Form 2
MCH Budget/Expenditure Details

State: Michigan

	FY 22 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 19,474,600	
A. Preventive and Primary Care for Children	$ 6,381,400	(32.7%)
B. Children with Special Health Care Needs	$ 6,994,200	(35.9%)
C. Title V Administrative Costs	$ 597,100	(3.1%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 13,972,700	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 51,089,300	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 790,000	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 7,897,800	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 59,777,100	
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)	$ 79,251,700	
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)	$ 365,627,200	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 444,878,900	

OTHER FEDERAL FUNDS	FY 22 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 1,847,900
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 1,568,500
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)	$ 396,600
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	$ 10,459,000
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 176,519,100
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy	$ 416,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 6,875,500
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 20 Annual Report Budgeted		FY 20 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 19,316,300		$ 18,757,073	
A. Preventive and Primary Care for Children	$ 6,583,100	(34.1%)	$ 6,052,385	(32.2%)
B. Children with Special Health Care Needs	$ 6,994,200	(36.2%)	$ 6,994,200	(37.2%)
C. Title V Administrative Costs	$ 524,000	(2.7%)	$ 583,362	(3.2%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 14,101,300		$ 13,629,947	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 48,158,300		$ 45,760,081	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0		$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 500,000		$ 560,970	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 68,599,500		$ 54,711,675	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 117,257,800		$ 101,032,726	
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)	$ 136,574,100		$ 119,789,799	
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)	$ 344,942,800		$ 342,780,969	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 481,516,900		$ 462,570,768	

OTHER FEDERAL FUNDS	FY 20 Annual Report Budgeted	FY 20 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 1,914,500	$ 1,686,853
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 1,600,200	$ 1,439,817
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 150,000	$ 128,765
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 212,800	$ 212,832
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventive Health and Health Services Block Grant	$ 200,000	$ 210,000
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 124,597,700	$ 160,271,337
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy	$ 451,300	$ 361,883
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 7,799,700	$ 8,580,959
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000	$ 96,978
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 248,000	$ 244,368
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	$ 970,000	$ 870,280
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 7,600,000	$ 6,959,239
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 194,634,200	$ 151,776,966

OTHER FEDERAL FUNDS	FY 20 Annual Report Budgeted	FY 20 Annual Report Expended
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	$ 4,067,800	$ 9,579,678
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	$ 361,014

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: FY 2020 Annual Report Expended was greater than projected due to the increase in the indirect rate.	
2.	**Field Name:**	**5. OTHER FUNDS**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: FY2020 Annual Report Expended was higher than budgeted due to Children with Special Needs Fund earnings above the authorized amount in the budget	
3.	**Field Name:**	**6. PROGRAM INCOME**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: FY2020 Annual Amount Expended was lower than budgeted due to WIC Rebate Earnings less than the appropriation amount.	

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served

State: Michigan

I. TYPES OF INDIVIDUALS SERVED

IA. Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	$ 674,000	$ 617,185
2. Infants < 1 year	$ 1,860,300	$ 1,799,936
3. Children 1 through 21 Years	$ 6,381,400	$ 6,052,385
4. CSHCN	$ 6,994,200	$ 6,994,200
5. All Others	$ 2,967,600	$ 2,710,005
Federal Total of Individuals Served	$ 18,877,500	$ 18,173,711

IB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	$ 2,198,000	$ 769,287
2. Infants < 1 year	$ 10,108,400	$ 57,382,806
3. Children 1 through 21 Years	$ 1,891,900	$ 1,864,678
4. CSHCN	$ 43,442,300	$ 39,203,038
5. All Others	$ 2,136,500	$ 1,812,918
Non-Federal Total of Individuals Served	$ 59,777,100	$ 101,032,727
Federal State MCH Block Grant Partnership Total	$ 78,654,600	$ 119,206,438

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 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	$ 9,460,600	$ 9,313,020
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 333,000	$ 507,419
B. Preventive and Primary Care Services for Children	$ 4,056,700	$ 3,734,709
C. Services for CSHCN	$ 5,070,900	$ 5,070,892
2. Enabling Services	$ 6,404,400	$ 6,157,667
3. Public Health Services and Systems	$ 3,609,600	$ 3,286,386
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		$ 4,523,741
Physician/Office Services		$ 1,871,349
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 715,379
Dental Care (Does Not Include Orthodontic Services)		$ 342,008
Durable Medical Equipment and Supplies		$ 245,056
Laboratory Services		$ 0
Other		
Special Projects, Local MCH and CSCHS		$ 1,615,487
Direct Services Line 4 Expended Total		$ 9,313,020
Federal Total	$ 19,474,600	$ 18,757,073

IIB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	$ 41,494,500	$ 37,434,487
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	$ 212,021
C. Services for CSHCN	$ 41,214,700	$ 37,222,466
2. Enabling Services	$ 5,654,650	$ 5,483,055
3. Public Health Services and Systems	$ 12,627,950	$ 58,115,184
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		$ 24,637,897
Physician/Office Services		$ 1,644,069
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 8,152,866
Dental Care (Does Not Include Orthodontic Services)		$ 70,225
Durable Medical Equipment and Supplies		$ 2,727,882
Laboratory Services		$ 0
Other		
Medical Care and Treatment		$ 201,548
Direct Services Line 4 Expended Total		$ 37,434,487
Non-Federal Total	$ 59,777,100	$ 101,032,726

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: 102,745 **Data Source Year: 2020**

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	102,237 (99.5%)	2,803	274	274 (100.0%)

Program Name(s)				
3-Hydroxy-3-Methyglutaric Aciduria	3-Methylcrotonyl-Coa Carboxylase Deficiency	Argininosuccinic Aciduria	Biotinidase Deficiency	Carnitine Uptake Defect/Carnitine Transport Defect
Citrullinemia, Type I	Classic Galactosemia	Classic Phenylketonuria	Congenital Adrenal Hyperplasia	Critical Congenital Heart Disease
Cystic Fibrosis	Glutaric Acidemia Type I	Glycogen Storage Disease Type II (Pompe)	Hearing Loss	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, ßeta-Thalassemia	S,C Disease	S,S Disease (Sickle Cell Anemia)	Severe Combined Immunodeficiences	Spinal Muscular Atrophy Due To Homozygous Deletion Of Exon 7 In SMN1
ß-Ketothiolase Deficiency	Trifunctional Protein Deficiency	Tyrosinemia, Type I	Very Long-Chain Acyl-Coa Dehydrogenase Deficiency	X-Linked Adrenoleukodystrophy

2. Other Newborn Screening Tests

Program Name	(A) 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	98,392 (95.8%)	5,601	191	191 (100.0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

Michigan has a robust system for follow-up beyond referral of an infant with a positive newborn screening (NBS) result. The state maintains several coordinating centers, focused on different groups of NBS disorders. Each center is designated by MDHHS and works with the family, the newborn's primary care provider, and specialists to triage infants with positive screens and facilitate prompt diagnostic testing, evaluation, and initiation of medical monitoring and/or treatment. Each center reports the number of infants seen, diagnostic work-ups provided, and results of assessments to MDHHS. Information is crucial for measuring and monitoring detection rates, positive predictive values, and other screening performance metrics including time from birth to treatment initiation. Aggregate results are included in the NBS Annual Report online. The length of follow-up monitoring varies by disorder, with the longest follow-up occurring for those will metabolic disorders and sickle cell disease.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	**Field Name:**	**Core RUSP Conditions - Total Number of Out-of-Range Results**
	Fiscal Year:	**2020**
	Column Name:	**Core RUSP Conditions**
	Field Note: 2,803 newborns had a presumptive positive	
2.	**Field Name:**	**Core RUSP Conditions - Total Number Confirmed Cases**
	Fiscal Year:	**2020**
	Column Name:	**Core RUSP Conditions**
	Field Note: 274 newborns confirmed with RUSP Disorders	
3.	**Field Name:**	**Core RUSP Conditions - Total Number Referred For Treatment**
	Fiscal Year:	**2020**
	Column Name:	**Core RUSP Conditions**
	Field Note: 274 newborns were referred for treatment. Treatment hasn't been initiated for all because some of the newer disorders are later onset, but all have been referred for medical management.	
4.	**Field Name:**	**Early Hearing Detection & Intervention (EHDI) Program - Total Number Receiving At Least One Screen**
	Fiscal Year:	**2020**
	Column Name:	**Other Newborn**
	Field Note: Preliminary EHDI information is based on 2020 provisional data of hospital and midwife births reported as of April 2021.	

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 2020

Form 5a – Count of Individuals Served by Title V (Direct & Enabling Services Only)

		Primary Source of Coverage				
Types Of Individuals Served	(A) Title V Total Served	(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	7,500	39.9	0.0	57.8	1.9	0.4
2. Infants < 1 Year of Age	23,433	39.8	0.0	57.9	1.9	0.4
3. Children 1 through 21 Years of Age	282,911	35.0	0.0	61.0	4.0	0.0
3a. Children with Special Health Care Needs 0 through 21 years of age^	50,965	74.5	4.0	17.9	3.6	0.0
4. Others	104,567	17.0	0.0	76.0	7.0	0.0
Total	418,411					

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	107,886	No	102,680	98.0	100,626	7,500
2. Infants < 1 Year of Age	106,918	No	102,745	100.0	102,745	23,433
3. Children 1 through 21 Years of Age	2,569,243	Yes	2,569,243	41.0	1,053,390	282,911
3a. Children with Special Health Care Needs 0 through 21 years of age^	554,400	Yes	554,400	41.0	227,304	50,965
4. Others	7,308,596	Yes	7,308,596	2.0	146,172	104,567

^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 and Non-federal Title V program dollars as reported on Form 2, line 8. Duplication in counts is possible because some individuals may have received more than one service. Per the Title V Guidance, WIC could be included "if Title V funds or staff time are used to promote or enhance services." Since Title V funds are not directly used, WIC participants were not included, even though WIC rebates are a component of program income on Form 2, Line 6. Note that MHVI counts are from the state match from general funds, not MIECHV federal funds.

Form 5b is the total percentage of the population that received Federal and Non-federal Title V supported programs, as reported on Form 2, Line 8. It includes all levels of the MCH pyramid. Direct and enabling service numbers from Form 5a were added to public health services and systems to calculate Form 5b.

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2020**
	Field Note: Individuals in the pregnancy category include Local Maternal Child Health Program breastfeeding (as proxy for pregnancy), Family Planning (includes pregnant/seeking pregnancy data FPAR, preliminary 2020, and Planned Parenthood of Michigan 15-19 and 20-24 FY 2020), MICCA postpartum LARCs project, Nurse Family Partnership, Rural MHVI HFA, MI-APPT and MI APP. 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 2020, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services. Pregnant women may also receive non-pregnancy related services and be counted in other participant categories.	
2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2020**
	Field Note: Individuals in the infancy category include Local Maternal Child Health Program Safe Sleep (as proxy for infancy), Nurse Family Partnership, Rural MHVI HFA, MIECHV, and immunizations. 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 Occurrent births, preliminary, 2020, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.	
3.	**Field Name:**	**Children 1 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: Children 1-21 years category includes Local Maternal Child Health Program direct and enabling services (adolescent well visit, oral health, lead prevention, depression, immunizations, and local needs), Family Planning (unduplicated count of girls and boys ≤15-19 , FPAR, preliminary 2020; PPMI girls and boys ≤15-19 and 20-24, FY 20), Nurse Family Partnership, Rural MHVI HFA, MI-APPPT and MI APP, Fetal Alcohol Spectrum Disorder, lead education, dental sealants, and immunizations. 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:	**2020**

Field Note:
Includes CSHCN, age 0-21, for medical care and treatment. Medical insurance coverage is reported by the CSHCS program (MDHHS, Data Warehouse). Michigan serves a much larger CSHCS Medicaid population (74.5%) than the National Survey of Children's Health – CSHCN, 2018-2019 (46%).

5.	**Field Name:**	**Others**
	Fiscal Year:	**2020**

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 services reported include safe sleep education to individuals and parents, Nurse Family Partnership, rural MHVI HFA, Inter-tribal MIECHV, MI-APPT and MI APPP, Family Planning (FPAR, 2020, preliminary, PPMI FY 20), Local Maternal Child Health (NPM/SPM: Well Woman, Oral Health, Lead Prevention, Immunizations), and distribution of lead materials to families. 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+, 2020.

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women**
	Fiscal Year:	**2020**

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 Title V support for seven of the projects. A population estimate of births in each Title V supported region was used. Calls to Michigan 2-1-1 for pregnancy-related services were also included. Duplication of services may be possible. Denominator from Birth Certificate Resident births, preliminary, 2020, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.

2.	**Field Name:**	**InfantsLess Than One Year**
	Fiscal Year:	**2020**

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. Note that 2-1-1 calls coded to infant-related needs were not included in this count due to high potential for duplication. Reference data for denominator is 2020 provisional live birth occurrence file, Division for Vital Records and Health Statistics, Michigan Department of Health and Human Services.

3.	**Field Name:**	**Children 1 Through 21 Years of Age**
	Fiscal Year:	**2020**

	Field Note: In addition to Children 1-21 and CSHCN Form 5a counts, numerators were used for the programs and services with the largest reach for a given population. For Children 1-21, the Michigan Model for School Health curriculum was used because staff time for Title V match was used to support the program. The curriculum is widely used across Michigan for school-aged children. Additionally, the number of children less than 6 screened for lead was used because Title V funds support lead poisoning prevention program staff. Note 2-1-1 calls coded to children were included. Due to age range overlap, some duplication in numbers is possible. [Denominator provided by HRSA]	
4.	**Field Name:**	**Children with Special Health Care Needs 0 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: CSHCS is a subset of Children 0-21. Form 5a CSHCS counts 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 years. [Denominator provided by HRSA]	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2020**
	Field Note: In addition to Others from Form 5a counts, numerators were used for the programs and services with the largest reach for a given population. For Others, counts include the Local Maternal Child Health Public Health Infrastructure and Support (includes counts on population such as media campaign analytics, distribution of materials at a health fair/outreach event, etc.); participants in the Great Lakes Breastfeeding Series; cases reviewed in the FIMR process; professional training/staff development; distribution of lead free toolkit to providers across the state; and other media campaigns. Michigan 2-1-1 calls coded to non-pregnant women or families is included. [Denominator from HRSA]	

Data Alerts: None

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: Michigan

Annual Report Year 2020

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	102,680	68,884	19,129	7,072	399	4,209	46	2,283	658
Title V Served	102,680	68,884	19,129	7,072	399	4,209	46	2,283	658
Eligible for Title XIX	40,999	21,528	12,572	4,211	205	972	25	1,243	243
2. Total Infants in State	102,745	68,890	19,142	7,089	397	4,230	46	2,291	660
Title V Served	102,745	68,890	19,142	7,089	397	4,230	46	2,291	660
Eligible for Title XIX	40,870	21,373	12,579	4,220	205	974	25	1,248	246

Form Notes for Form 6:

Data Source: 2020 Provisional Live Birth File, 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:	**2020**
	Column Name:	**Total**
	Field Note: Michigan Residents - Relates to count of pregnant women served in Form 5b.	
2.	**Field Name:**	**2. Total Infants in State**
	Fiscal Year:	**2020**
	Column Name:	**Total**
	Field Note: Michigan Occurrences - Relates to count of infants served in Form 5b.	

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: Michigan

A. State MCH Toll-Free Telephone Lines	2022 Application Year	2020 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"		5,966

B. Other Appropriate Methods	2022 Application Year	2020 Annual Report Year
1. Other Toll-Free "Hotline" Names	Family Phone Line	Family Phone Line
2. Number of Calls on Other Toll-Free "Hotlines"		9,534
3. State Title V Program Website Address		
4. Number of Hits to the State Title V Program Website		
5. State Title V Social Media Websites		
6. Number of Hits to the State Title V Program Social Media Websites		

Form Notes for Form 7:

The "Number of Calls Received on the State MCH Hotline" represents the total number of unique MCH contacts to 2-1-1 for associated MCH needs.

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 W. 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 / 48913
Telephone	(517) 241-7186
Extension	
Email	BarnettL@michigan.gov

3. State Family or Youth Leader (Optional)	
Name	Candida Bush
Title	Director, Family Center for CYSHCN
Address 1	400 South Pine Street
Address 2	
City/State/Zip	Lansing / MI / 48913
Telephone	(517) 241-7197
Extension	
Email	BushC9@michigan.gov

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: Michigan

Application Year 2022

No.	Priority Need	Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period)
1.	Develop a proactive and responsive healthcare system that equitably meets the needs of all populations, eliminating barriers related to race, culture, language, sexual orientation, and gender identity	New
2.	Improve access to high-quality community health and prevention services in the places where women, children, and families live, learn, work, and play	New
3.	Ensure children with special health care needs have access to continuous health coverage, all benefits they are eligible to receive, and relevant care where they learn and live	New
4.	Expand access to developmental, behavioral, and mental health services through routine screening, strong referral networks, well-informed providers, and integrated service delivery systems	New
5.	Improve oral health awareness and create an oral health delivery system that provides access through multiple systems	New
6.	Create and enhance support systems that empower families, protect and strengthen family relationships, promote care for self and children, and connect families to their communities	New
7.	Create safe and healthy schools and communities that promote human thriving, including physical and mental health supports that address the needs of the whole person	New

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

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 Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 10
National Outcome Measures (NOMs)

State: Michigan

Form Notes for Form 10 NPMs, NOMs, SPMs, SOMs, and ESMs.

2020 field notes for SPMs and ESMs are not currently populating in the Title V Information System (TVIS) as of 5/27/2021. SPM and ESM field notes will be available in the final application.

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
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
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
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
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
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
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
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
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
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
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
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
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
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
2018	6.8	0.3	738	108,118
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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**
Annual Objective		
Annual Indicator	27.3	26.5
Numerator	9,510	9,054
Denominator	34,845	34,117
Data Source	NVSS	NVSS
Data Source Year	2018	2019

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	25.8	25.6	25.4	25.2	25.0	24.8

Field Level Notes for Form 10 NPMs:

None

NPM 4A - Percent of infants who are ever breastfed

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	79.1	79.7	80.5	81.2	82.7
Annual Indicator	80.8	75.9	77.7	83.0	85.3
Numerator	82,892	86,976	88,168	86,380	88,053
Denominator	102,591	114,556	113,401	104,098	103,283
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	83.3	84.1	84.8	85.5	86.2	86.9

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data					
Data Source: National Immunization Survey (NIS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	20.6	21.5	31.1	32.9	34.4
Annual Indicator	26.6	22.6	23.9	28.4	25.8
Numerator	25,900	25,415	25,921	28,764	25,629
Denominator	97,537	112,351	108,464	101,206	99,495
Data Source	NIS	NIS	NIS	NIS	NIS
Data Source Year	2013	2014	2015	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	36.2	38.0	39.8	41.6	43.4	45.2

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

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	87.7	88.9	90.0	91.1	92.3	93.5

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	
2.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives reflect a cumulative count based on Infant Safe Sleep staff obtaining/ reviewing policy/protocols for two birthing hospitals per year. Annual objectives for FY2022-2026 were updated due to the closing of a birthing hospital and the impact of the COVID-19 pandemic.	

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**
Annual Objective		35.7	45
Annual Indicator	39.2	38.9	40.6
Numerator	39,142	38,781	39,451
Denominator	99,861	99,669	97,218
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	45.2	47.3	49.3	51.4	53.5	55.5

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.

All PRAMS states began asking different safe sleep questions in 2016. In prior years this measure was based on only two sleep risk factors - does the infant sleep in his or her own crib, and does the infant sleep with other people. Starting in 2016 this measure is now based on a combination of 5 different sleep risk factors (always or often sleeps alone in own bed; in a crib, bassinet or pack and play; does not sleep on a twin or larger mattress; does not sleep on couches, sofas, armchairs; does not sleep in a car set or swing). Asking about whether infants sleep in a car seat or swing - a new question - has had an especially large impact on this measure. The proportion of Michigan mothers meeting this goal is lower than in prior years, but the measurement now provides a more comprehensive picture of infant safe sleep.

2.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.

In birth year 2016, MI was ranked 17th out of 29 total PRAMS states for this measure. In the 2017 birth year, MI was ranked 2nd out of 26 total PRAMS states for this measure.

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

Federally Available Data			
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)			
	2018	**2019**	**2020**
Annual Objective		54.4	68.2
Annual Indicator	58.3	59.8	63.1
Numerator	58,277	59,314	61,216
Denominator	99,994	99,167	96,949
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2018	2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	70.0	73.1	75.9	78.5	80.9	83.1

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
HRSA is using variables from the 2016 PRAMS survey which differ from the infant sleep environment variables on previous versions of the questionnaire. Michigan does not yet have 2016 data, so the closest approximation to the 2016 variables was used.

2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.
All PRAMS states began asking different safe sleep questions in 2016. In prior years this measure was based on whether or not the infant often slept with any of four different sleep space objects (soft or plush blankets, pillows, stuffed toys, bumper pads). Starting in 2016 this measure is now based on a combination of 3 different sleep space items (blankets, toys or pillows, bumper pads). Due to changes in the wording of the blanket question [any blanket vs only plush or thick blankets], many more mothers now report that their infants have at least one soft item in the sleep space. Although the number here differs from the number reported in the past, in 2016 Michigan had the highest proportion of mothers reporting that their infants do not sleep with soft objects (compared to 28 other PRAMS states reporting this data).

3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent the general population.
All PRAMS states began asking different safe sleep questions in 2016. In prior years this measure was based on whether or not the infant often slept with any of four different sleep space objects (soft or plush blankets, pillows, stuffed toys, bumper pads). Starting in 2016 this measure is now based on a combination of 3 different sleep space items (blankets, toys or pillows, bumper pads). Due to changes in the wording of the blanket question [any blanket vs only plush or thick blankets], many more mothers now report that their infants have at least one soft item in the sleep space. Although the number here differs from the number reported in the past, in 2016 Michigan had the highest proportion of mothers reporting that their infants do not sleep with soft objects (compared to 28 other PRAMS states reporting this data).

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

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

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - Perpetration		
	2019	**2020**
Annual Objective		
Annual Indicator	20.0	16.1
Numerator	145,381	116,534
Denominator	727,587	723,002
Data Source	NSCHP	NSCHP
Data Source Year	2018	2018_2019

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - Victimization		
	2019	**2020**
Annual Objective		
Annual Indicator	48.0	44.5
Numerator	349,295	321,323
Denominator	727,587	721,708
Data Source	NSCHV	NSCHV
Data Source Year	2018	2018_2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	26.2	25.4	24.7	24.0	23.3	22.6

Field Level Notes for Form 10 NPMs:

None

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

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	30.2	34.1	38.1	42.3	46.7	51.1

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	55.1	56.2	56.4	57.4	58.5
Annual Indicator	50.3	53.6	49.8	49.2	51.3
Numerator	54,731	57,883	53,356	51,874	53,228
Denominator	108,763	108,083	107,079	105,470	103,825
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2013	2015	2017	2018	2019

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	53.6	54.1	54.7	55.2	55.7	56.3

Field Level Notes for Form 10 NPMs:

None

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

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

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	79.5	80.4	81.0	81.6	82.2	82.8

Field Level Notes for Form 10 NPMs:

None

Form 10
National Performance Measures (NPMs) (2016-2020 Needs Assessment Cycle)

State: Michigan

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

Federally Available Data					
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective					75.2
Annual Indicator				77.2	77.2
Numerator				1,288,214	1,282,777
Denominator				1,668,506	1,661,307
Data Source				BRFSS	BRFSS
Data Source Year				2018	2019

Previous NPM-1 BRFSS data for survey years 2015, 2016 and 2017 that was pre-populated under the 2016, 2017 and 2018 Annual Report Years is no longer displayed since it is not comparable with 2018 survey data.

Field Level Notes for Form 10 NPMs:

None

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

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

State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	89.4	90.1	91.6	91.5	92.1
Annual Indicator	89.2	88.9	86.7	89.5	89.8
Numerator	1,547	1,511	1,462	1,315	1,401
Denominator	1,735	1,699	1,687	1,470	1,560
Data Source	2015 Michigan Resident Live Birth File	2016 Michigan Resident Live Birth File	2017 Michigan Resident Live Birth File	2018 Michigan Resident Live Birth File	2019 Michigan Resident Live Birth File
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Home births are not included in data reporting.

2016-2020: NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			82.6	83.5	84.3
Annual Indicator		81.0	81.3	81.3	78.4
Numerator		633,720	618,502	618,502	566,674
Denominator		782,076	760,429	760,429	722,681
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017	2019

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

Field Level Notes for Form 10 NPMs:

None

Form 10
State Performance Measures (SPMs)

State: Michigan

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

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		22.1	24.6	27.1	29.6
Annual Indicator	23.6	25	43.4	45.8	48.1
Numerator	1,208	1,048	1,308	1,671	994
Denominator	5,116	4,190	3,017	3,646	2,068
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Provisional	Provisional	Provisional	Provisional	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	50.0	52.5	55.0	57.5	60.0	62.5

Field Level Notes for Form 10 SPMs:

1. **Field Name:** **2016**

Column Name: **State Provided Data**

Field Note:
DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for the last quarter of 2016 (October – December 2016) and 2017 are incomplete, and subject to change. Blood lead test results from 1/1/2014 to 2/13/2017 were downloaded from the DW on 2/22/17, and data for CY 2016 plus 30 days (1/1/2016-1/31/2017) were extracted for this report. The numerator was calculated as the number of Child_IDs with at least one capillary or unknown type test >= 5 ug/dL from 1/1/2016-12/31/2016 followed by a venous blood test within 30 days from 1/1/2016 to 1/31/2017. The denominator was all Child_IDs with a capillary or unknown type test > 5 ug/dL from 1/1/2016 to 12/31/2016.

2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
Results reported are for initial elevated capillary blood tests conducted in CY 2017 (Jan. 1 2017 – Dec. 31 2017) with confirmatory testing completed before Feb 2, 2018. DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for FY2017 are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 2/2/2018. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test ≥ 5 µg/dL from 1/1/2017 to 12/31/2017 followed by a venous blood test within 30 days. The denominator was all children under 72 months with a capillary or unknown type test ≥ 5 µg/dL from 1/1/2017 to 12/31/2017.

3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Results reported are for initial elevated capillary blood tests conducted in CY 2018 (January 1, 2018 - December 31, 2018) with confirmatory testing completed before February 2, 2019.

DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for the last quarter of 2018 (October – December 2018) are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 2/08/2019. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test ≥ 5 µg/dL (> 4.5 µg/dL – Michigan began storing test results as unrounded numbers in 2017: this number was chosen maintain consistency in identifying elevated levels with past years when blood lead test results were rounded to the nearest whole number) from 01/1/2018 to 12/31/2018 followed by a venous blood test within 30 days. The denominator was all children under 72 months with a capillary or unknown type test ≥ 4.5 from 01/01/2018 to 12/31/2018.

NOTE: There have been significant improvements in the algorithm used by the MDHHS Data Warehouse to assign unique identifiers to individual children, which has corrected instances wh

4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Results reported are for initial elevated capillary blood tests conducted in CY 2019 (Jan. 1 2019 – Dec. 31 2019) with confirmatory testing completed before Feb 2, 2020

DATA REPORTED SHOULD BE CONSIDERED PROVISIONAL: data collection for the last quarter of 2019 (October – December 2019) are incomplete, and subject to change. Blood lead test results were downloaded from the MDHHS Data Warehouse on 1/13/2020. The numerator was calculated as the number of children under 72 months with at least one capillary or unknown type test ≥ 5 µg/dL (> 4.5 µg/dL – Michigan began storing test results as unrounded numbers in 2017: this number was chosen maintain consistency in identifying elevated levels with past years when blood lead test results were rounded to the nearest whole number) from 01/1/2018 to 12/31/2018 followed by a venous blood test within 30 days. The denominator was all children under 72 months with a capillary or unknown type test ≥ 4.5 from 01/01/2018 to 12/31/2018.
NOTE: Ther

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

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		76	77	75	76
Annual Indicator	74.7	75	74.1	74.1	70.7
Numerator	125,343	125,853	123,596	121,707	119,786
Denominator	167,778	167,842	166,746	164,167	169,474
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	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	77.0	78.0	79.0	80.0	80.0	80.0

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: Completion rate will be measured at the end of the year.	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: The Immunization rates have remained static for children 19-35 months of age in the last fiscal year.	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: The immunization rates are dropping for children 19-36 months over the past year.	

SPM 3 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Measure Status:			Active	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			44	54
Annual Indicator	39.3	41.9	52.4	44.1
Numerator	295,138	313,144	334,188	331,995
Denominator	750,281	746,563	637,751	752,019
Data Source	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
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	56.0	58.0	60.0	62.0	64.0	66.0

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: We have increased the number of adolescents who have completed the HPV vaccination series. Part of the reason for the significant increase was due to the change in the recommended schedule to receive the HPV series. Adolescents less than 15 years of age can complete the HPV series with only two doses of vaccine if they are separated by at least 5 months. The change in the recommended schedule resulted in a 7% increase in our vaccination rates for adolescents of this age.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: We continue to see adolescent rates increase. HPV completion rate had a slow but steady increase, as we continue to encourage parents and providers to vaccinate at the early recommended ages as to complete with just 2 doses.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: HPV completion rate continues to increase. Posting male and female combined rates for state and counties on website on immunization report card.	

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		89.9	90.9	91.9	92.9
Annual Indicator	88.1	89.1	88.9	88	88
Numerator	14,253,020	20,556,206	14,678,590	10,365,782	7,297,774
Denominator	16,176,800	23,074,740	16,507,392	11,783,520	8,289,380
Data Source	CAHPS	CAHPS	CAHPS	CAHPS	CAHPS
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	89.5	90.0	90.5	91.0	91.5	92.0

Field Level Notes for Form 10 SPMs:

1. **Field Name:** **2016**

   Column Name: **State Provided Data**

   Field Note:
   The CSHCS Program intended for this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where:

   “In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?”
   A: Number who reported “usually” or “always”
   B: Number of respondents who answered this question

   “In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?”
   C: Number who reported “usually” or “always”
   D: Number of respondents who answered this question

2. **Field Name:** **2017**

   Column Name: **State Provided Data**

	Field Note: Question 2 reads: “In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?” The CSHCS Program intended this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where: “In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?” A: Number who reported “usually” or “always” (2768) B: Number of respondents who answered this question (3287) “In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?” C: Number who reported “usually” or “always” (1649) D: Number of respondents who answered this question (1755).	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: Question 2 reads: “In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?” The CSHCS Program intended for this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where: “In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?” A: Number who reported “usually” or “always” (2,471) B: Number of respondents who answered this question (2,931) “In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?” C: Number who reported “usually” or “always” (1,317) D: Number of respondents who answered this question (1,408)	
4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: Question 2 reads: “In the last 6 months, when your child needed care right away, how often did your child get care as soon as he or she needed?” The CSHCS Program intended for this measure to reflect the average of the marginal probabilities, as opposed to the joint probability of the two specified questions. Therefore, in order to provide a numerator and denominator, the individual fractions were converted using the following formula: ((A*2D) + (C*2B)) / (2B*2D) where: “In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?” A: Number who reported “usually” or “always” (2,099) B: Number of respondents who answered this question (2,520) “In the last 6 months, when your child needed care right away, how often did your child get the care as soon as he or she needed?” C: Number who reported “usually” or “always” (1,083) D: Number of respondents who answered this question (1,169)	

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

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	57.2	59.8
Numerator	59,915	61,665
Denominator	104,673	103,197
Data Source	PRAMS	PRAMS
Data Source Year	2018	2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	59.8	60.9	61.9	63.0	64.0	65.0

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent general population

SPM 6 - Support access to developmental, behavioral, and mental health services through Title V activities and funding

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	Yes	Yes	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
Annual Objective		
Annual Indicator	68	50
Numerator		
Denominator		
Data Source	Michigan AIM/Michigan Hospital Association	Michigan AIM/Michigan Hospital Association
Data Source Year	2019	2019
Provisional or Final ?	Final	Provisional

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	72.0	74.0	76.0	78.0	80.0	79.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: Reporting year is 2019	

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

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		17	20	23	26
Annual Indicator	14.3	14.5	19.5	18.8	18.8
Numerator	12	12	16	15	15
Denominator	84	83	82	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	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	29.0	18.0	19.0	20.0	21.0	22.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: FY2016 Annual Indicator was used as a baseline measure to create Annual Objectives, including FY2016.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: One birthing hospital closed which decreased # of hospitals from 83 to 82. Sparrow (Carson City) closed in 2018.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: The number of Michigan birthing hospitals decreased from 82 (in FY 2018) to 80 (in FY 2019)	

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

Measure Status:	Active

State Provided Data				
	2017	2018	2019	2020
Annual Objective			85	84
Annual Indicator			83	83
Numerator				
Denominator				
Data Source			Maternal Infant Health Program (MIHP) staff	Maternal Infant Health Program (MIHP) staff
Data Source Year			2019	2020
Provisional or Final ?			Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	83.0	83.0	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.

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

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	10.0	20.0	30.0	40.0	50.0	60.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**

Field Note:
Annual objectives based on Infant Safe Sleep staff obtaining/ reviewing policy/protocols for 10 agencies per year.

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

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	2.0	4.0	6.0	8.0	10.0	12.0

Field Level Notes for Form 10 ESMs:

None

ESM 9.1 - Number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	5.0	12.0	18.0	24.0	30.0	35.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**

Field Note:
Lost one school due to pressures with COVID mitigation.

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
Annual Objective	40	43	46	49
Annual Indicator	52.5	49.9	46.7	46.5
Numerator	1,705	1,725	1,787	1,995
Denominator	3,246	3,459	3,828	4,289
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
Data Source Year	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	49.2	49.4	49.6	49.8	50.0	50.2

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
The ESM combines three separate data sources: 1) the CSHCS database; 2) the CHAMPS (Medicaid Claims) database; and 3) University of Michigan provider database. These three databases provide information on CSHCS clients, and the providers they see.

Percent of children enrolled in CSHCS within a selected diagnosis groups who had an outpatient visit with adult specialists only, based on administrative claims. The selected diagnosis groups included: cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology.

2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
The ESM combines three separate data sources: 1) CSHCS database, 2) CHAMP (Medicaid claims) database; and 3) University of Michigan provider database. These three databases provide information on CSHCS clients and the providers they see.

In FY 2017, 49.9% of CSHCS clients ages 18-20 in selected diagnosis groups had outpatient visits only with adult specialists, based on administrative claims. The selected diagnosis groups were cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology.

3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
ESM includes clients ages 18, 19 and 20. Clients age out on their 21st birthday. In FY 2018, 46.7% of CSHCS clients ages 18 to 21 in selected diagnosis groups had outpatient visits only with adult specialists, based on administrative claims. The selected diagnosis groups were cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology.

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

Measure Status:	Active

State Provided Data				
	2017	2018	2019	2020
Annual Objective			390	410
Annual Indicator	636	648	401	423
Numerator				
Denominator				
Data Source	FY2017 MDHHS Tracking Database	FY2018 MDHHS Tracking Database	FY2019 MDHHS Tracking Database	FY2020 MDHHS Tracking Database
Data Source Year	FY2017	FY2018	FY2019	FY2020
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	430.0	450.0	470.0	490.0	510.0	520.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: This ESM was newly established in 2018 to align with NPM 13.1. Therefore, there is no column for reporting 2018 data. In FY2018, 648 medical and dental professionals received perinatal oral health education through MDHHS. FY2018 exceeded expectations regarding provider education. This was due to the continued addition of different education activities across the state.	
2.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: FY 2019 exceeded the annual target for provider education due to the addition of educational activities across the state. Note: the perinatal oral health consultant was on maternity leave for several months of the reporting period, resulting in a decrease in the number of professionals trained in comparison to previous years.	

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

Measure Status:	Active

Baseline data was not available/provided.

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	40.0	41.0	42.0	43.0	44.0	45.0

Field Level Notes for Form 10 ESMs:

None

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

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		5,927	6,127	6,327	6,527
Annual Indicator	8,039	6,677	6,964	6,897	6,168
Numerator					
Denominator					
Data Source	SEAL Michigan Annual All Grantee Report	SEAL MI 2017 All Grantees Data Report	SEAL MI 2018 All Grantees Data Report	SEAL MI 2019 All Grantees Data	SEAL MI 2020 All Grantees Data Report
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	6,727.0	6,927.0	6,927.0	7,127.0	7,327.0	7,327.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: Number was higher due to additional funding allocated to program, which created new programs. Funding may or may not continue in future years.	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: Goal was achieved, this is likely due to the additional funding under Title V.	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: Goal was exceeded, likely due to funding opportunities that supported program expansion.	
4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: In 2019 there was a loss of dental programs due to a loss of federal funding. However, the programs cut served the lowest number of students--and existing programs grew internally in each school and also added new schools to serve students. Thus, annual objectives were still achieved.	

Form 10
Evidence-Based or -Informed Strategy Measures (ESMs) (2016-2020 Needs Assessment Cycle)

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

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		61.3	62.3	63.3	64.3
Annual Indicator	60.3	64.3	66.2	58.4	59.9
Numerator	846,111	914,885	936,099	830,851	841,079
Denominator	1,404,213	1,423,068	1,413,029	1,422,036	1,404,555
Data Source	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste
Data Source Year	2015	2016	2017	2018	2019
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: The reproductive life planning variable that will be used to quantify the identified strategy measure was a state-added question to the Michigan BRFS starting in 2015	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: The reproductive life planning variable that will be used to quantify the identified strategy measure was and continues to be a state-added question to the Michigan BRFS starting in 2015.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: The reproductive life planning variable that will be used to quantify the identified strategy measure was and continues to be a state-added question to the Michigan BRFS starting in 2015.	

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

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		12	12	12	12
Annual Indicator	14	12	14	15	12
Numerator					
Denominator					
Data Source	Centering Health Institute	Centering Health Institute	Centering Healthcare Institute	Centering Healthcare Institute	Centering Healthcare Institute
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: *CHI=Centering Health Institute; Of the 14 CenteringPregnancy sites in Michigan, 5 are CHI approved sites.	
2.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: *CHI = Centering Healthcare Institute; Of the 14 CenteringPregnancy sites in Michigan, 7 are CHI accredited sites.	
3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: *CHI = Centering Healthcare Institute; Of the 15 CenteringPregnancy sites in Michigan, 7 are CHI accredited sites. There are also 3 CenteringParenting sites in Michigan	

2016-2020: ESM 5.1 - Number of birthing hospitals trained on infant safe sleep

Measure Status:			**Active**	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			8	16
Annual Indicator			19	24
Numerator				
Denominator				
Data Source			Infant Safe Sleep Program Staff	Infant Safe Sleep Program Staff
Data Source Year			FY2019	FY2020
Provisional or Final ?			Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Annual objectives are based on Infant Safe Sleep staff providing training to eight birthing hospitals per year. Annual objectives reflect the cumulative number of birthing hospitals trained.

2016-2020: ESM 10.1 - Of the health care providers who complete the Motivational Interviewing web course and the Motivational Interviewing professional development training, the percent who report skills in effectively counseling youth on changing risky behaviors

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		93	95	95	98
Annual Indicator	87.5	93.3	96.4	93.8	90.9
Numerator	7	28	27	15	20
Denominator	8	30	28	16	22
Data Source	MDHHS Participant Assessment Tool	Evaluation tool / SurveyMonkey	Evaluation tool / SurveyMonkey	Evaluation tool/SurveyMonkey	Evaluation tool/SurveyMonkey
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**
	Field Note: In 2016, there were technical issues with the data collection process related to this ESM. Only eight of the 35 Motivational Interviewing Training participants completed an assessment. Efforts are now in place to improve data collection.	
2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: MDHHS offered two in-person MI trainings, reaching 43 providers (30 completed evaluation).	
3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**
	Field Note: MDHHS offered two in-person MI trainings, reaching 42 providers (28 completed evaluation).	
4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**
	Field Note: MDHHS offered two in-person MI trainings, reaching 26 providers (16 completed evaluation).	

Form 10
State Performance Measure (SPM) Detail Sheets

State: Michigan

SPM 1 - Percent of children less than 72 months of age who receive a venous lead confirmation testing within 30 days of an initial elevated capillary test
Population Domain(s) – Child Health

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To reduce the number of young children in Michigan with an unconfirmed elevated blood lead level</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>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>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>These data are provided by the Michigan Department of Health and Human Services (MDHHS) Childhood Lead Poisoning Prevention Program (CLPPP). Some blood lead levels are reported to CLPPP as decimal values, but currently all are recorded in the data warehouse as integers (decimals are rounded up at ≥0.5).</td></tr>
<tr><td>Significance:</td><td>Exposure to lead, which can enter the body through ingestion or inhalation, can result in negative health effects. Children less than six are vulnerable to the effects of lead poisoning, especially at younger ages when they are likely to put contaminated hands and items (such as toys) into their mouths. Exposure to high levels of lead can result in brain damage and even death in extreme cases. Low levels of lead in the body have been shown to affect IQ, the ability to pay attention, and academic achievement. Capillary blood lead tests are considered to be screening tests, and are prone to false positives. It is important to obtain a confirmatory venous test before interventions are initiated.</td></tr>
</table>

SPM 2 - Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4313314 series)
Population Domain(s) – Child Health

Measure Status:	Active
Goal:	To increase the percent of all children 19 to 36 months of age to have a completed immunization series for all vaccines recommended by the Advisory Committee on Immunization Practices.
Definition:	**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:	Children die or are hospitalized every year from vaccine preventable diseases. These are avoidable outcomes if we can assure that all children have received all recommended vaccines based on the schedule recommended by the ACIP. Note: This was formerly a two-part measure. As of 2018, the second part of this measure (Percent of adolescents age 13-18 who have received a completed HPV vaccine series) is included in a separate SPM.

SPM 3 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine
Population Domain(s) – Adolescent Health

Measure Status:	Active
Goal:	To increase the adolescent HPV coverage rate.
Definition:	**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:	**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

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Increase the proportion of women with an intended pregnancy</td></tr>
<tr><td>Definition:</td><td>
<table>
<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>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Data collected from the Michigan Pregnancy Risk Assessment Monitoring System (MI PRAMS) survey. MI PRAMS uses responses from a randomly selected sample of new mothers each year in Michigan to describe characteristics for the whole population of mothers of live born infants.

Pregnancy intention is related to the concept of desired pregnancy timing. PRAMS responders are asked the question: "Thinking back to just before you got pregnant with your new baby, how did you feel about becoming pregnant?"

Women who respond "I wanted to be pregnant sooner" or "I wanted to be pregnant then" are classified as having an intended pregnancy. Women answering, "I wanted to be pregnant later," "I didn’t want to be pregnant then or at any time in the future," or "I wasn’t sure what I wanted" are not classified as having an intended pregnancy.</td></tr>
<tr><td>Significance:</td><td>Assisting women and families to decide when and if they want to have children leads to improved health outcomes and financial stability. Assuring that women enter pregnancy in the best possible health is critical for both healthy babies and mothers. For women, reproductive health is critical in that nearly three decades are spent avoiding an unintended pregnancy (Sonfield, Hasstedt, & Gold, 2014) to address educational attainment, career prospects, and financial stability. When pregnancies are unintended, entering pregnancy healthy can prove difficult and result in higher health care costs for mothers and infants. Short inter-pregnancy intervals are associated with increased risk for preterm birth, low birthweight, small for gestational age, and perinatal death. Optimal birth spacing allows for recovery from pregnancy and parent/infant attachment. Two key tools for increasing intended pregnancy and healthy birth spacing are access to contraception and assessing pregnancy intention. While no single method of contraception is right for everyone, the type of method used by women is strongly associated with her risk of unintended pregnancy. Assessing pregnancy intention assists individuals to think about when and under what circumstances they would like to become pregnant or conversely, how pregnancy will be prevented, with the primary focus on increasing the overall health and well-being of the individual regardless of reproductive intentions.

American College of Obstetricians and Gynecologists. Prepregnancy counseling. Committee Opinion No. 762. Obstet Gynecol 2019; 133(1): e78-89. https://www.acog.org/Committee-Opinions/no.762

Gavin L, Moskosky S, Carter M, et al. Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of Population Affairs, 2014. MMWR Recomm Rep 2014:63 (No. RR-4): 1-29. DOI: http://dx.doi.org/10.15585/mmwr.rr6304a1</td></tr>
</table>

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:	**Unit Type:** Text **Unit Number:** Yes/No **Numerator:** N/A **Denominator:**
Data Sources and Data Issues:	State Title V and MCH Programs
Significance:	During Michigan's five-year needs assessment, needs related to mental and behavioral health were identified throughout the Mobilizing for Action through Planning and Partnerships (MAPP) assessments. These needs were identified across population domains but especially within women's health, adolescent health, and children with special health care needs. A person's mental health impacts their thoughts, behaviors, and overall well-being. Access to timely and appropriate mental and behavioral health services is critical, and yet access to care remains a barrier (America's Mental Health 2018; Cohen Veterans Network and the National Council for Behavioral Health). This SPM was created to 1) better capture Title V work related to mental and behavioral health and 2) promote an increased focus on mental and behavioral health across Title V and MCH programs.

Form 10
State Outcome Measure (SOM) Detail Sheets

State: Michigan

No State Outcome Measures were created by the State.

Form 10
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Michigan

ESM 2.1 - Number of birthing hospitals participating in Michigan AIM
NPM 2 – Percent of cesarean deliveries among low-risk first births

Measure Status:	Active
Goal:	Increase the number of birthing hospitals participating in Michigan AIM
Definition:	**Unit Type:** Count **Unit Number:** 80 **Numerator:** Number of birthing hospitals participating in Michigan AIM **Denominator:**
Data Sources and Data Issues:	Michigan AIM
Significance:	For some medical indications, like placenta previa, cesarean birth is the safest delivery method and at times can be a life-saving measure. However, for most low-risk pregnancies, a cesarean delivery increases preventable risks for maternal mortality and morbidity outcomes. Such outcomes include mortality due to hemorrhage or morbidities such as infection, uterine rupture, cardiac arrest and anesthesia complications. A low-risk delivery is often defined as full-term (at least 37 completed weeks of gestation), singleton pregnancy (not a multiple pregnancy), with vertex presentation (head facing downward position in the birth canal). From 2012-2016, 15.3 % of pregnancy-related deaths in Michigan were due to hemorrhage and 54.2% of pregnancy-related deaths were deemed preventable. In 2018, the percentage of low-risk cesarean deliveries in Michigan was 28.7%, which is above the Healthy People 2020 goal (24.7%) and the average in the United States (25.9%). In addition, Michigan also has a higher percentage of low-risk cesarean deliveries in women of color. To address the high percentage of low-risk cesarean deliveries, including the disparate numbers among women of color, Michigan will increase the number of birthing hospitals participating in Michigan AIM. It is expected that birthing hospitals engaging and participating in Michigan AIM will experience improved birth outcomes.

ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	By increasing the number of Michigan birthing hospitals with Baby-Friendly designation, the proportion of live births that occur in Michigan birthing hospitals that provide recommended care for lactating mothers and their babies will increase
Definition:	**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:	Baby-Friendly designated birthing hospitals and centers 1) promote breastfeeding as the best method of infant feeding; 2) implement evidence-based practices to support breastfeeding and lactation; 3) facilitate informed health care decision-making for mothers and families; 4) ensure health care delivery that is sensitive to cultural and social diversity, 5) protect mothers and families from false or misleading product promotion and advertising, and 6) educate parents on safe and appropriate methods for formula mixing, handling, storage, and feeding when a mother has chosen not to breastfeed or has chosen to supplement. The Baby-Friendly Hospital Initiative is a global program launched by the World Health Organization and the United Nations Children's Fund in 1991 to encourage and recognize hospitals and birthing centers that provide the best level of care for infant feeding and mother/baby bonding. Baby-Friendly designation is built on the implementation of Ten Steps to Successful Breastfeeding and the International Code of Marketing of Breast-Milk Substitutes, which empowers birthing facilities to examine maternity care policies and procedures, requires training and skill building for all levels of staff, and involves the development of quality assurance mechanisms within all aspects of maternity care operations. Baby-Friendly designated birthing hospitals and centers support healthy outcomes for both baby and mom, and can help to reduce breastfeeding disparities, especially within communities of color and low socioeconomic status communities.

ESM 5.1 - Increase the number of Maternal Infant Health Program agencies that have staff trained to use the concepts of motivational interviewing with safe sleep
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Improvements in how home visitors talk to families about infant safe sleep will lead to improvements in parent behavior, with the ultimate goal to reduce the number of sudden unexpected infant deaths.
Definition:	**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 have implemented or revised/updated a safe sleep policy/protocol
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Ensure agency staff are knowledgeable about safe sleep guidelines and how to support parents. Ensure parents receive safe sleep messaging and resources, thereby reducing the number of sudden unexpected infant deaths.
Definition:	**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 have implemented or revised/updated their safe sleep policy/protocol.
Significance:	Strategies to increase the percentage of infants sleeping safely include supporting the implementation of safe sleep practices through policies and protocols. When agencies implement an infant safe sleep policy/protocol, they are more likely to have staff knowledgeable about safe sleep and how to educate and support parents.

ESM 5.3 - Increase the number of hospitals that have implemented or revised/updated a safe sleep policy/protocol for the NICU
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Ensure parents receive safe sleep messaging in birthing hospitals and that infant safe sleep is modeled by hospital staff, thereby reducing the number of sudden unexpected infant deaths.
Definition:	**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 have implemented or revised/updated their safe sleep policy/protocol for the NICU.
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

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Annually increase by six the number of secondary schools implementing the Michigan Model for Health™ Social and Emotional Health Module with 80% fidelity</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>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>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Teacher implementation logs. Classroom teachers will complete implementation logs tracking the lessons taught from the Michigan Model for Health™ Social and Emotional Health Module. The measure will reflect a cumulative count over time.</td></tr>
<tr><td>Significance:</td><td>Bullying takes a toll on the entire school community, with potentially lasting harm. Nearly 30% (29.6%) of Michigan high schools students report experiencing bullying (MI YRBS 2017). For those who are bullied, the resulting emotional trauma can persist into adulthood. The link between bullying and suicide has also illuminated the need to recognize the damage bullying can inflict. At the school level, educational achievement can be impacted through reduced test scores when bullying is prevalent. A student who is stressed and feeling unsafe struggles to succeed academically. Educational success can be hampered by bullying experiences in school. But students who bully also suffer emotionally and academically, with a higher likelihood of defiant and delinquent behaviors, school drop-out and poor academic performance.

A lack of respect for and understanding of others increases stress, violence and trauma. Addressing the environment that allows bullying to thrive means teaching all students the importance of empathy, respect for differences and managing emotions. Social emotional learning (SEL) incorporates the skills that serve to prevent bullying behavior. Teaching all students those skills arms them against participating, on any level, in bullying.
The Michigan Model for Health™ (MMH) is a Pre-K-12, comprehensive school health education curriculum recognized by the Collaborative for Social and Emotional Learning (CASEL) as an evidence-based SEL program. Evaluators found in a 2011 randomized control study that students who received the MMH curriculum showed statistically significant positive changes, including better interpersonal communication skills, stronger social and emotional health skills, and less reported aggression in the past 30 days. SEL is a structured way to improve a wide range of students' social and emotional competencies and impact bullying at the individual and peer levels.</td></tr>
</table>

ESM 12.1 - Percent of CSHCS clients age 18 to 21 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider
NPM 12 – Percent of adolescents with and without special health care needs, ages 12 through 17, who received services 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:	**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:	**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:	**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:	**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 10
Evidence-Based or -Informed Strategy Measure (ESM) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 1.1 - Percent of women aged 18-44 who have ever discussed reproductive life planning during a visit with a doctor, nurse, or other health professional
2016-2020: NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Increase the number of women 18-44 who have contraceptive and other reproductive health needs identified; increase the number of intended pregnancies; and ultimately lead to a reduction in adverse pregnancy-related outcomes</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
<tr><td>Numerator:</td><td>Number of female respondents aged 18-44 who indicated ‘Yes’ to having ever discussed pregnancy planning or prevention during a visit with a doctor, nurse, or other health professional</td></tr>
<tr><td>Denominator:</td><td>Total number of female respondents aged 18-44 who indicated ‘Yes,’ or ‘No'</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Data source will be the Michigan Behavioral Risk Factor Survey (BRFS). The reproductive life planning variable that will be used to quantify the identified strategy measure was a state-added question to the Michigan BRFS starting in 2015. The Centers for Disease Control and Prevention is currently in the process of weighting Michigan’s 2015 BRFS data. The final weighted data file will not be available until August 2016. Once available, the proportion of female respondents aged 18-44 who indicated ‘Yes’ to having ever discussed pregnancy planning or prevention during a visit with a doctor, nurse, or other health professional will be used as a baseline and annual targets will be developed for subsequent years. NOTE: Until the BRFS variable and baseline data are available, PRAMS data were used as a proxy measure to set annual objectives. Once available, BRFS baseline data will be used to revise the proxy annual objectives.</td></tr>
<tr><td>Significance:</td><td>Reproductive life planning provides an opportunity for providers to assess patients’ personal goals about pregnancy planning or prevention, opening the door for providers to educate patients on how their reproductive life plan impacts their contraceptive and other reproductive health decision-making, and actively involving patients in developing personal strategies to enhance their reproductive health and wellness (e.g., selecting a contraceptive method that fits well with their life circumstances). Reproductive life planning has the potential to reduce unintended pregnancies, increase the use of highly effective contraception, increase the number of adequately spaced births, and foster healthy pregnancy-related outcomes for mom and baby. The Centers for Disease Control and Prevention and the Office of Population Affairs recognize reproductive life planning as a component of quality family planning services, a national standard of care.</td></tr>
</table>

2016-2020: ESM 3.1 - Number of CenteringPregnancy sites in Michigan
2016-2020: NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Measure Status:	Active
Goal:	Support and maintain the existing CenteringPregnancy sites in Michigan
Definition:	**Unit Type:** Count **Unit Number:** 100 **Numerator:** N/A – This is a count measure **Denominator:**
Data Sources and Data Issues:	Centering Healthcare Institute https://centeringhealthcare.secure.force.com/WebPortal/ListOfCenteringSites?stateName=MI
Significance:	The CenteringPregnancy group prenatal care model has been proven effective in reducing premature births and eliminating racial disparities. Funding for new CenteringPregnancy sites is not secured beyond FY2017; therefore, the goal of this ESM currently focuses on maintenance and support of existing sites. Maintaining and helping to strengthen the current sites in Michigan will assist in improvements in the NPM and associated NOMs.

2016-2020: ESM 5.1 - Number of birthing hospitals trained on infant safe sleep
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Increasing the number of birthing hospitals trained on infant safe sleep will help ensure parents receive safe sleep messaging and that infant safe sleep is modeled by hospital staff, thereby reducing the number of sudden unexpected infant deaths.</td></tr>
<tr><td>Definition:</td><td><table>
<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></td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Data Source will be the Infant Safe Sleep Program. The Infant Safe Sleep Program will track all trainings provided to birthing hospitals.</td></tr>
<tr><td>Significance:</td><td>When health care providers, including nurses, are educated on infant safe sleep, families are more likely to follow recommended infant safe sleep practices. One study showed that those who are educated on safe sleep by their health care provider were more likely to intend to sleep safely and follow-through with that intention (Factors Associated with Choice of Infant Sleep Position, http://pediatrics.aappublications.org/content/140/3/e20170596). Nursing education and role modeling increases parental adherence to infant safe sleep practices (TodaysBaby Quality Improvement: Safe Sleep Teaching and Role Modeling in 8 US Maternity Units, http://pediatrics.aappublications.org/content/early/2017/10/11/peds.2017-1816).</td></tr>
</table>

2016-2020: ESM 10.1 - Of the health care providers who complete the Motivational Interviewing web course and the Motivational Interviewing professional development training, the percent who report skills in effectively counseling youth on changing risky behaviors
2016-2020: NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>The completion of both trainings will lead to skills in counseling adolescents on behavior change and in communicating with adolescents overall; thereby promoting a better provider-patient relationship and increased access of preventive services.</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
<tr><td>Numerator:</td><td>Number of providers who complete both the Motivational Interviewing web course and professional development training that report skills to effectively counsel youth on changing risky behavior.</td></tr>
<tr><td>Denominator:</td><td>Number of providers who complete both the Motivational Interviewing web course and professional development training</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>MDHHS (participant assessment tool)</td></tr>
<tr><td>Significance:</td><td>Quality adolescent care is delivered in a developmentally-appropriate, adolescent-friendly and confidential manner. Positively impacting adolescent care requires significant system changes aimed at addressing known barriers to quality care: health professional lack of training, lack of effective communication skills, and low self-efficacy in providing adolescent preventive services. The combined impact of completion of both the Motivational Interviewing web course and professional development training will lead to higher quality care for adolescents. Increased skills in not only counseling adolescents on behavior change, but in communicating with adolescents overall, promotes a better provider-patient relationship and increases the likelihood that adolescents will access care (including preventive services) with that provider.</td></tr>
</table>

Form 11
Other State Data

State: Michigan

The Form 11 data are available for review via the link below.

Form 11 Data

Form 12
MCH Data Access and Linkages

State: Michigan

Annual Report Year 2020

	Access				Linkages	
Data Sources	(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:

Field Level Notes for Form 12:

None