Maternal and Child Health Services Title V Block Grant

Michigan

FY 2019 Application/ FY 2017 Annual Report

Draft

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I. General Requirements

I.A. Letter of Transmittal

[A formal Letter of Transmittal will be submitted with the grant application in July 2018.]

May 22, 2018

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

Dear Grants Management Officer:

With this letter of transmittal, I am pleased to submit Michigan's application for the Title V Maternal and Child Health Services Block Grant. The 2019 Application and 2017 Annual Report will be submitted through the Title V Information System (TVIS) as required.

If you have any questions concerning this application, please contact me.

Sincerely,

Lynette Biery, Director
Bureau of Family Health Services
Michigan Department of Health and Human Services

I.B. Face Sheet

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

I.C. Assurances and Certifications

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

I.D. Table of Contents

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

II. Logic Model

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

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

Michigan's Title V Maternal and Child Health (MCH) program[1] supports a wide range of critical MCH programs and services across the state. Its overarching goal is to improve the health and well-being of the state's 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 Bureau of Family Health Services (BFHS) which is housed in the Population Health Administration. The Children's Special Health Care Services (CSHCS) Division, which is housed in the Bureau of Medicaid Care Management and Quality Assurance within the Medical Services Administration, serves as the Title V CSHCN program.

The BFHS and the CSHCS Division provide leadership on MCH programs and policies, including direct oversight of MCH programs and coordination of statewide partnerships and collaborative initiatives that support comprehensive, coordinated, and family-centered services. For example, in 2017 Michigan created a Maternal Infant Strategy Group to align maternal and infant goals and strategies; facilitate collaboration among private and public stakeholders; and provide guidance on operationalizing a health equity lens to address social determinants of health and reduce racial disparities in maternal and infant health outcomes in Michigan. Partnerships with local health departments, community-based providers and health care systems act as the local "arm" of MCH activities. Other established partnerships include coordination with managed care plans, universities, Medicaid, Michigan Department of Education, and MDHHS program areas such as epidemiology, mental health and substance abuse, chronic disease, communicable disease, injury prevention, and public health preparedness. Michigan's MCH work is intended to impact health outcomes through the use of clear performance measures coupled with evidence-based practices, innovative strategies, and program evaluation. MDHHS is also working to align objectives and goals across public and private systems.

In 2015, MDHHS leadership and MCH stakeholders completed a five-year statewide needs assessment to establish state priorities for 2016-2020. Per Title V requirements, the needs assessment was used to identify needs for preventive and primary care services for women, mothers, infants, and children as well as services for CSHCN. Leaders with expertise in each of the Title V population domains were engaged in the planning and implementation processes. The goals of the needs assessment were to:

- Engage a diverse group of stakeholders to assess needs and system strengths and capacity;
- Utilize existing data as well as stakeholder experience and expertise to identify strategic issues or unmet needs that, if addressed, would improve health in each of the population domains; and
- Identify priority unmet needs in each population domain and strategies for addressing those needs.

Through the needs assessment process, Michigan assessed quantitative and qualitative data, MCH population needs, program capacity, funding status, and the potential to impact change. Based on the findings, the following priority needs were identified:

- Reduce barriers, improve access, and increase the availability of health services for all populations
- Support coordination and linkage across the perinatal to pediatric continuum of care
- Invest in prevention and early intervention strategies
- Increase family and provider support and education for Children with Special Health Care Needs
- Increase access to and utilization of evidence-based oral health practices and services
- Foster safer homes, schools, and environments with a focus on prevention

- Promote social and emotional well-being through the provision of behavioral health services

After identifying these priority needs, National Performance Measures (NPMs) and State Performance Measures (SPMs) were chosen to align with each need. State action plans were then developed, which include Evidence-based or -informed Strategy Measures (ESMs). Performance monitoring for all NPMs and SPMs occurs on an annual basis. Program planning also occurs on an ongoing basis; for example, MCH program staff review program results, client and family feedback, best practices, and emerging evidence to determine whether adjustments and improvements can be made to programs or policies to improve outcomes for the populations served.

Based on the new Title V Guidance that was issued December 31, 2017, and in conjunction with ongoing needs assessment activities, Michigan reevaluated its original NPMs and SPMs and made adjustments to better align with current program and funding priorities. Detailed state action plans (which include program objectives, strategies, and performance data) are included in Section III.E. A summary by population domain is below.

Women/Maternal Health

The first goal in this population domain is to increase the percent of women with a past year preventive medical visit. Although 67.0% of women between the ages of 18 and 44 years received a preventive medical visit in Michigan during 2013, significant disparities exist, with only 47.3% of women who were uninsured receiving a preventive medical visit[2]. Thus, a key role for MDHHS is to help women access insurance and connect with primary care providers. The Title V plan focuses on ensuring women have the reproductive and health care services they need to achieve optimal health, including planning for pregnancy. Key objectives are to maintain a high percentage of women who use a most effective or moderately effective contraceptive method and to increase the percentage of women who discuss reproductive life planning with a health professional.

The second goal in this domain is to increase the percent of women with a preventive dental visit during pregnancy. The needs assessment found that only 44.5% of women had their teeth cleaned during their most recent pregnancy[3]. Michigan has seen improvement on this measure, with the most recent data indicating that 53.6% of women received a preventive dental visit.[4] Strategies to address this issue include increasing access to the WIC oral health module; training medical and dental providers who treat pregnant women; and disseminating perinatal oral health guidelines.

Perinatal/Infant Health

The first perinatal/infant health goal is to increase the percent of very low birth weight infants born in a hospital with a Level III+ NICU. While Michigan has seen improvements over time—from 78.0% in 2008 to 89.5% in 2016[5]—the needs assessment revealed challenges in Michigan's perinatal to pediatric continuum of care, such as racial disparities in first trimester prenatal care, preterm births, and infant mortality. Regional perinatal care systems are a key strategy to assure the most vulnerable infants and mothers receive appropriate services. Therefore, Michigan is supporting and expanding regional perinatal care systems; promoting the use of evidence-based programs such as home visiting and CenteringPregnancy; and expanding quality improvement efforts to prevent and respond to perinatal substance abuse.

The second goal is to increase the percent of infants who are ever breastfed and the percent of infants breastfed exclusively through six months. While breastfeeding rates have increased in Michigan over the past several years, they are still short of the Healthy People 2020 objectives (81.9% of infants ever breastfed and 25.5% of infants exclusively breastfed through six months). In Michigan, 75.9% of infants are ever breastfed and 22.6% are exclusively breastfed through six months[6]. To impact breastfeeding rates, MDHHS is implementing strategies to increase the number of Baby-Friendly© hospitals and reduce the gap in breastfeeding rates between non-Hispanic white and non-Hispanic black women.

A third goal is to increase the percent of infants placed to sleep in safe sleep environments. This goal includes infants being placed to sleep on their backs, alone, without objects in their crib, bassinet, or pack and play. In 2016, the SUID Case Registry Project reported that 142 infants in Michigan died of sleep-related causes. For several years, sleep-related death has been the leading cause of death for infants 28 days to one year old and is considered the most preventable. According to the SUID Case Registry Project, three out of four sleep-related infant deaths in Michigan occurred in an unsafe sleep location. While Michigan has seen a steady increase in the percent of infants placed to sleep on their backs and without objects, progress in sleeping alone has remained more challenging. MDHHS strategies to impact safe sleep include training home visitors to use motivational interviewing with safe sleep; training staff at birthing hospitals on safe sleep; and increasing provider use of the SOPHE SCRIPT. Additionally, a key goal is to reduce the gap between non-Hispanic white women and non-Hispanic black women who implement safe sleep guidelines.

Child Health

Michigan continues to focus on increasing the percent of children who have a preventive dental visit. In 2012, fewer children had preventive dental visits as compared to 2007[7]. To address this issue, Michigan is working to expand the SEAL! Michigan program; to increase the number of children who receive dental sealants through schools; and to collaborate with school nurses and other school professionals on oral health issues and education.

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 positive capillary test. Between 1998 and 2015 Michigan made progress reducing lead poisoning in the state, with the percentage of birth to six-year-old children in Michigan with blood lead levels $\geq$ 5 ug/dL decreasing from 44.1% to 3.4%[8]. However, some communities still experience higher rates of lead poisoning. Many primary care providers and WIC clinics use point-of-care capillary testing machines to test blood lead levels, which are prone to false positives. Therefore, elevated capillary results need to be confirmed with a venous test to facilitate clinical and environmental 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 22.1% in 2017. MDHHS is focusing on children enrolled in Medicaid Health Plans and is also leading efforts related to surveillance data, nurse case management, and home abatement.

MDHHS is also working to increase the percent of children 19-36 months of age who have received a completed series of recommended vaccines. Within some populations, Michigan has experienced declining immunizations rates and has not met Healthy People 2020 goals. For example, the percent of 19 to 35 month olds who received a full schedule of age appropriate immunizations fell from 82.0% to 74.8% between 2008 and 2014[9]. Michigan continues to experience challenges keeping children on schedule, including increased parental hesitancy toward vaccines. Strategies to address these challenges include a statewide “I Vaccinate” media campaign and work with private providers and local health departments to examine vaccination rates and to identify effective, targeted vaccination practices.

Adolescent Health

A goal in the adolescent health population domain is to increase the percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year. High-quality preventive care can help to address adolescent health issues (such as healthy lifestyles and access to care) and build on Michigan’s success in other areas, such as the declining teen pregnancy rate. Among youth ages 12-17 years, 81% had one or more preventive visits in the previous 12 months[10]. However, from 2013-2016, only 52.45% of youth ages 12-17 years with Medicaid received a comprehensive well-care visit within the previous 12 months[11]. MDHHS is therefore working to increase the percent of adolescents enrolled in Medicaid with a preventive medical visit; train health care providers on motivational interviewing; and increase the percent of clients in Child and Adolescent Health Centers who have documented

follow-up after a positive depression screen.

A second goal in this population domain is to increase the percent of adolescents who have received a completed HPV vaccine series. In Michigan, 77% of 13-18 year olds are complete with immunizations, but that percentage drops to 38% when HPV series completion is considered[12]. Although Michigan doubled the HPV vaccination completion rate from 2015 to 2017, it is still below the coverage rate for other vaccines. To boost immunization rates, MDHHS generated letters to parents of adolescents with overdue immunizations. Work continues with local providers and health departments to implement quality improvement efforts, especially providers with low immunization rates. BFHS is also partnering with the American Cancer Society and the MDHHS Cancer Program to promote awareness about HPV vaccination and cancer prevention.

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. The needs assessment found that the percentage of CSHCN receiving the services needed for transition to adult health care was below the Healthy People 2020 target. To improve transitions to adult care, Michigan is expanding the use of transition planning; increasing youth, family, and provider awareness of the transition process; and increasing the percent of CSHCS clients aged 18 to 21 who transfer from a pediatric to an adult provider.

Lastly, a key goal is to increase the percent of CSHCN enrolled in CSHCS who receive timely medical care and treatment without difficulty. While access to public and private health insurance has improved under the Affordable Care Act, CSHCN require and use more health care services than other children. These health care costs can pose significant challenges and burdens for families, even if they have access to private insurance. CSHCS helps to cover the costs of medical services and treatment including prescription and pharmacy services, medical supplies and equipment, and disease treatment and management. In FY2017, 44,164 clients were served in the CSHCS program. Strategies to provide high-quality services include covering specialty care and treatment costs for qualifying conditions; expanding the use of telemedicine; and partnering with CSHCN and their families to identify gaps and needs.

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[1]For the purposes of this application, the "Title V MCH Program" includes 1) MCH programs and services supported by the Title V block grant; 2) MCH programs and services included in the total state match; and/or 3) MCH programs and services under the direction of the Title V MCH director or Title V CSHCN director.

[2] Michigan Behavioral Risk Factor Surveillance System

[3] Michigan PRAMS

[4] Michigan PRAMS

[5] Linked birth certificate and hospital data on NICU levels from American Academy of Pediatrics

[6] National Immunization Survey 2017 Breastfeeding Report Card

[7] National Survey of Children's Health (NSCH), 2011/2012

[8] 2015 Data Report on Childhood Lead Testing and Elevated Blood Lead Levels: Michigan

[9] National Immunization Survey & Michigan Care Improvement Registry (MCIR)

[10] NSCH, 2016

[11] Michigan Medicaid Data Warehouse, 2016

[12] MCIR

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

Together with state MCH funds and other federal funds, Title V funding provides a critical source of funding for MCH priority needs in Michigan. As per federal requirements, a minimum of 30% of Title V funding supports services for children with special health care needs (CSHCN) and a minimum of 30% of funding supports preventive and primary care services for children. In Michigan, Title V funding is used to support medical care and treatment for CSHCN as well as a variety of services for children including immunizations, oral health and dental sealants, lead poisoning prevention, fetal alcohol syndrome disorder, and pregnancy prevention for adolescents. Services for women and infants are supported by Title V funding, including regional perinatal care systems, infant safe sleep, and maternal and infant mortality surveillance. Administrative activities such as ongoing needs assessment, PRAMS, training, and Title V staff are supported. Title V funding also supports the MCH work of 45 local health departments (LHDs), which collectively receive approximately one-third of Michigan's Title V dollars. LHDs serve as Michigan's local public health "arm" and focus on Michigan's identified NPMs and SPMs, as well as locally identified MCH priority needs.

III.A.3. MCH Success Story

The Regional Perinatal Quality Collaborative (RPQC) Initiative was launched in FY 2015 as an effort to improve the existing Perinatal Care System in Michigan. Under the administration of Governor Rick Snyder, Michigan was divided into ten Prosperity Regions. The Prosperity Regions were used when launching regional perinatal quality improvement efforts. As of FY 2017, perinatal quality improvement projects had been launched in four of the ten Prosperity Regions, with two additional regions gearing up to launch in FY 2018. The RPQCs were in both urban, rural, and urban/rural blended regions. The FY 2017 projects received Title V funding as well as state general funds. Each region supplemented federal and state funding with in-kind resources and leveraged other funds, including the Michigan Health Endowment Fund. Multi-sector stakeholders make up the memberships of each RPQC including, but not limited to: families, local health departments, hospitals, clinical providers, Medicaid Health Plans, community organizations, Healthy Start projects, evidence-based home visiting programs, substance use providers and others. RPQC quality improvement projects in FY 2017 were focused on addressing preterm and low birth weight rates/percentages by increasing enrollment and retention in evidence-based home visiting programs and addressing perinatal substance use.

III.B. Overview of the State

Geography, Demographics, and Economy

Michigan encompasses 56,804 square miles of land and is the only state made up of two peninsulas. Composed of 83 counties, Michigan is the eleventh largest state (by total square mileage) and the eighth largest state (by population). According to the U.S. Census Bureau, Michigan's population is 9,962,311 (July 2017). Michigan has seen a steady decrease in birth rates over the past 20 years, including a decline in teen births. The majority 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 citizens live in rural areas. Out of the current total population, approximately 22% are age 0-17 and 78% are age 18 and over. According to 2016 Vital Records and Health Statistics, Michigan's population is 80.7% White, 15.0% Black or African American, 3.4% Asian and Pacific Islander, and 0.9% Native American. Out of the total population, 5.0% identify as Hispanic or Latino.

Michigan's economy has seen significant improvements over the past nine years, with the seasonally adjusted unemployment rate decreasing from 14.9% in June 2009 to 4.1% in March 2018. The median household income in Michigan in 2015 was $51,084 (U.S. Census Bureau). However, the state still faces significant challenges that impact the maternal and child health (MCH) population. For instance, certain areas of the state continue to experience high unemployment. In February 2018, Detroit's unemployment rate was 9.50%. Additionally, according to the 2017 ALICE (Asset Limited, Income Constrained, Employed) report, the majority (62%) of jobs in Michigan are low wage jobs, paying less than $20 per hour; out of those jobs, two-thirds pay less than $15 per hour.

Poverty has also remained a significant problem, especially for Michigan's children. According to Kids Count in Michigan (2018), 23.3% of children (444,100) ages 0-17 live in poverty. Statewide, the percentage of students eligible for free or reduced price lunches has steadily increased in recent years. With a 30% increase over a nine-year span, 45.8% of students are eligible for free or reduced price lunches.

Of additional concern are findings from the 2017 ALICE report which found that even in households with earnings *above* the federal poverty level (FPL), 40% of households struggle with basic necessities of housing, child care, food, health care and transportation. In addition to households *below* the FPL in Michigan, this equates to more than 1.54 million households struggling to meet basic needs.

Given this environment, family support programs continue to be an important source of assistance. For example, in 2017 30.6% of pregnant mothers enrolled in Michigan's Women, Infants, and Children (WIC) program during their first trimester. Out of families enrolled in WIC, 89.4% lived at or below 150% of the FPL. In 2016, 54.5% of babies born in Michigan were enrolled in WIC.

Agency Roles and Priorities

The Title V program is administered by the Bureau of Family Health Services (BFHS) in coordination with the Children's Special Health Care Services (CSHCS) Division which are both housed in the Michigan Department of Health and Human Services (MDHHS). The corresponding organizational chart illustrates the placement of BFHS and CSHCS within the Population Health Administration and the Medical Services Administration, respectively. MDHHS was created in 2015 through the merger of the Michigan Department of Community Health and the Michigan Department of Human Services. As such, MDHHS oversees a wide range of health and human service programs, including but not limited to public health; environmental health; food and cash assistance; Medicaid and other health care coverage; migrant and refugee services; child support; juvenile justice; children and adult protective

services; foster care and adoption; and communicable and chronic disease.

Title V aligns with the MDHHS mission to provide opportunities, services, and programs that promote a healthy, safe, and stable environment for residents to be self-sufficient. For example, Michigan's MCH work aligns with several MDHHS scorecard metrics, including:

- Percent of pediatric immunization rates of 19-36 month old children completed for 4:3:1:3:3:1:4 series
- Percent of children participating in rural evidence-based home visiting who have received their last recommended well-child visit, as defined by the American Academy of Pediatrics (AAP) Bright Futures schedule
- Number of students in grades K-12 screened forsealants through SEAL! Michigan Program
- Percent of adolescents 13 through 17 years of age who complete the HPV vaccine series
- Number of primary care visits through Child and Adolescent Health Centers

As a key indicator of the health status of the state, infant mortality is also a critical focus of MDHHS. Governor Snyder identified the reduction of infant mortality as a top priority, and MDHHS is committed to eliminating preventable infant deaths and disparities. In 2012, Michigan published its first Infant Mortality Reduction Plan which recommended strategies to address the multiple, complex causes of infant mortality, including social determinants of health. The plan emphasized collaboration between government, health care providers, local health departments (LHDs), universities, professional organizations, businesses and community leaders. In 2015, MDHHS updated the 2016-2019 infant mortality reduction plan with an increased focus on achieving health equity and eliminating racial and ethnic disparities. In 2015 MDHHS also released "Practices to Reduce Infant Mortality through Equity (PRIME): Guide for Public Health Professionals." The guide was shared with state and national stakeholders and is a resource for transforming public health through equity education and action.

In 2018, Michigan is beginning the process of developing the next iteration of the infant mortality reduction plan, which is transitioning to the 2019-2022 Maternal Infant Health Improvement Plan. This process will be guided by the BFHS in close coordination with the Maternal Infant Strategy Group (MISG). The MISG is a group of decision makers who were convened in 2017 to create synergy between organizations and providers by aligning maternal and infant health goals and strategies, facilitating collaboration among stakeholders, and providing guidance on achieving health equity in Michigan. Two key stakeholder groups, the Infant Mortality Advisory Council (IMAC) and the Michigan Alliance for Innovation in Maternal Health (MI-AIM) provided essential guidance on the plan's development. The broader stakeholder community and families will be engaged via town hall meetings across the state.

Early childhood system building is also an MDHHS priority. Governor Snyder defined a set of prenatal to age 8 outcomes and created an Office of Great Start (OGS) within the Michigan Department of Education to lead the integration of the state's health, development and early learning investments. BFHS collaborates with OGS and other partners to support the development of early childhood systems that are integrated and designed around the needs of children and families. One example is Michigan's cross-systems work to build a trauma-informed approach into programs and services for young children, with a focus on the mitigation of adverse childhood experiences (ACEs) and toxic stress. Michigan's implementation of the Maternal Infant and Early Childhood Home Visiting (MIECHV) Program also involves collaboration across early childhood systems to best meet the needs of families.

Strengths and Challenges that Impact the MCH Population

Many strengths and opportunities are being leveraged to support and expand Michigan's MCH infrastructure and delivery system. Strengths include collaboration and coordination across state and local public health systems; a commitment to eliminating preventable infant, maternal, and child deaths; recognition and expansion of the significant impact of early life experiences on health and wellness across the life course; integration of the patient-

centered medical home model; and strong leadership and expertise within public health systems. MDHHS also has a long-standing relationship with Michigan's LHDs. These 45 LHDs serve Michigan's 83 counties and the City of Detroit. LHDs act on behalf of the state health department to deliver public health prevention and control programs in communities throughout Michigan. This local oversight and delivery of public health services provides strong, locally-based leadership of public health programs while maintaining state-level oversight.

Michigan's Home Visiting Initiative highlights the state's commitment to prevention, early childhood, and collaboration between public health, healthcare, and other sectors that impact health outcomes. Michigan's system includes the Maternal Infant Health Program (MIHP), an evidence-based model available to every pregnant woman and infant receiving Medicaid, as well as Nurse Family Partnership, Healthy Families America, Early Head Start-Home Based, Parents as Teachers, and Family Spirit. By leveraging federal and state funding opportunities, Michigan is creating a system of home visiting services that can meet the diverse and complex needs of families with young children, particularly in communities facing elevated risk of adverse outcomes. In 2017, the Michigan Home Visiting Initiative served over 34,000 families with a combination of state and federal funds, improving maternal and child health, development, and family safety, as well as creating pathways for families to access the resources they need. The reauthorization of MIECHV will make it possible for Michigan to continue creating a robust system of supports for families and young children.

Another strength is the launch of the Integrated Service Delivery (ISD). The ISD is intended to reform how MDHHS interfaces with customers through technology and by making the service delivery system more focused on customer needs. The concept originated with the merger of the former Departments of Community Health and Human Services, which managed hundreds of unique programs that customers interacted with in a variety of ways. The goal was to examine programs and program access to achieve a more person-centric flexibility. Through workforce innovation, modernization of technology systems and stronger partnerships with communities the ISD will enable MDHHS to focus more on serving people rather than administering programs. The current ISD transformation focuses on five critical innovations: strategic alignment, holistic assessment, common connector and plan, robust self-service and streamlined renewal. As a first step, MDHHS prioritized policy and process changes that promote integration among programs with high customer overlap such as the MI Bridges web portal for clients and community partners accessing MDHHS programs such as the Healthy Michigan Plan and Medicaid, as well as assistance programs such as food, cash, child care and emergency relief. MI Bridges is undergoing significant changes to make it more user-friendly, enabling residents to not only apply for benefits and manage their case, but to also locate other resources in their community. This is a transformative opportunity to connect families to needed resources in an efficient, streamlined system.

Despite these strengths and the state's health care infrastructure, significant challenges still exist. Both nationally and in Michigan, health care costs are driven by competing factors such as payment systems, malpractice regulations, chronic disease incidence, nursing care costs, emergency room "super utilizers," population demographics, prevalence of adverse health behaviors and the absence of access to hospitals and physicians in rural areas. According to U.S. Census Bureau data, many geographic regions in Michigan face provider shortages with the greatest provider shortage occurring among nurse practitioners. Using the U.S. Department of Health and Human Services designation for primary care professional shortage areas, 18.2% of Michigan's population has insufficient access to primary care. According to the Kaiser Family Foundation, Michigan currently has 361 Primary Care Health Professional Shortage Designations.

Access to all forms of health care is a problem for many Michigan residents, particularly those living in rural areas. The ratio of population to primary care providers in Michigan overall is 1240:1. However, in some rural counties the ratio was greater than 6500:1. According to Kids Count, the proportion of children aged 0-17 without health insurance in Michigan is 3.0%. While 3.0% are uninsured, 35% are publicly insured only and another 5% are covered

by both public and private payers. The greatest *number* of uninsured children resides in large urban counties, while the greatest *proportion* of uninsured children resides in low-income rural counties with relatively high unemployment rates. Lack of providers, health care facilities and lack of transportation all underscore the need for safety net services such as those provided to the MCH population by LHDs and programs supported by MDHHS.

Particularly in rural areas and the Upper Peninsula, transportation continues to be a challenge. This includes not only the method of transportation, but also the time and distance that needs to be covered to reach services. Securing transportation providers and appropriate levels of reimbursement is also challenging for the CSHCS population. Families who need to take a child to specialized care often travel long distances with overnight stays. This requires extended time away from work as well as additional child care and other expenses.

Another factor is the complexity of embracing an upstream approach to health and wellness to impact the systemic conditions that contribute to poor health outcomes. The knowledge that health begins during preconception—and optimal health and development must occur during the earliest stages of life to improve adult health—is still growing in the broader population. Additionally, redirecting resources to early life stages is difficult to achieve because of the acute needs of individuals already requiring costly and often long-term care. Among key stakeholders who work with Michigan's most at-risk families, there is a growing understanding of and commitment to reducing early life adverse experiences and strengthening protective factors. However, the challenge is to translate these concepts into actionable strategies that compel resource and policy support.

Addressing social determinants of health holds the same challenge. Stakeholders increasingly understand that access to education, adequate and sustainable income, transportation, and social and cultural supports are critical to achieving and maintaining health. However, knowing how to impact these factors in communities—and having the resources to do so—is not easy. Furthermore, the layered funding that communities receive from federal, state, local and private sources can be difficult to align or sustain.

Finally, economic disadvantage is dispersed inequitably among racial and ethnic groups in our state, particularly for African American children, who are roughly five times more likely to live in poverty than an Asian child and three times more likely than a White child. Half of the state's African American children and one-third of Hispanic children live in poverty. Poverty is linked with conditions such as substandard housing, homelessness, inadequate nutrition and food insecurity, inadequate child care, lack of access to health care, unsafe neighborhoods and under-resourced schools. Poorer children and teens are also at greater risk for poor academic achievement, school dropout, behavioral and social-emotional problems and physical health problems (such as higher rates of asthma, higher exposure to environmental contaminants such as lead, exposure to violence and developmental delays). These effects are compounded by the barriers children and their families encounter when trying to access health care.

Components of the State's Systems of Care

Michigan's health care system includes 147 hospitals (including 21 hospitals with Neonatal Intensive Care Units); 45 Federally-Qualified Health Centers with over 260 delivery sites; over 100 school-based/school-linked health centers; 30 Family Planning agencies providing services at 93 clinic sites; and 195 rural health clinics.

Health Care Reform

Since its passage in 2010, the Affordable Care Act (ACA) has impacted how health care is accessed and delivered across the country. In Michigan, the impact has been particularly significant since the implementation of the Medicaid expansion in 2014. Given the current uncertainty surrounding health care legislation, Michigan continues to monitor activities related to ACA and other possible changes to health care access and delivery. MDHHS remains committed to assuring that access to health care continues to stabilize and improve even as payment systems and

providers may change.

To date, health care reform via ACA has significantly impacted Michigan's MCH population. ACA coverage expansions provided Michigan consumers with two new options: the Healthy Michigan Plan (HMP) and the Health Insurance Marketplace (Marketplace). In January 2014, eligible individuals above 133% of the FPL could enroll in private health insurance coverage through the Marketplace. In April 2014, Michigan expanded its Medicaid program to cover residents aged 19 to 64 who were at or below 133% of the FPL, and who were not previously eligible for traditional Medicaid. Between the HMP and the Marketplace, Michigan insured over 700,000 people in less than a year, exceeding initial enrollment expectations.

As of April 2018, 683,769 beneficiaries had HMP coverage. HMP benefits include preventive/wellness services, chronic disease management, prenatal care, oral health and family planning services. Most HMP beneficiaries are required to pay some level of cost-sharing in the form of monthly contributions and co-pays based on income. Some populations are excluded from cost sharing, such as individuals enrolled in CSHCS, under 21 years of age, pregnant women, and those with no income. Enrollees who complete a health risk assessment and agree to maintain or address healthy behaviors, as attested by their primary care provider, are eligible for cost-sharing reductions or other incentives.

For CYSHCN, ACA consumer protections have improved access to private insurance by eliminating preexisting condition exclusions and discrimination based on health status, the two most frequently encountered enrollment barriers for families. The ACA also expanded access to parent employer coverage for adults 19-26. The HMP covers approximately 969 individuals who are dually enrolled in CSHCS. LHDs, Family Resource Centers and designated state staff work with families and community partners to help families understand and access all available private and publicly-funded resources to meet individual needs.

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

Finally, ACA provided significant funds through HRSA to expand access to primary care by increasing the number of Community Health Centers in Michigan. The number of Federally Qualified Health Centers (FQHCs) grew as additional centers were funded and look-alike sites were approved. According to the Michigan Primary Care Association, Michigan has 45 Health Centers that provide care at over 260 delivery sites and are health care homes to more than 680,000 individuals.

In addition to ACA, Michigan has entered into a cooperative agreement with the Center for Medicare and Medicaid Innovations to test its State Innovation Model (SIM) for health care payment and delivery system transformation. The final product of the SIM grant planning process, the *Blueprint for Health Innovation*, will guide the state as it strives for better care coordination, lower costs and improved health outcomes. The Blueprint will focus on transforming service delivery and payment models by concentrating on patient-centered medical homes and integration among health care and community resources. Its goals are better health, better care, and lower costs. While the model is

being tested and continues to evolve, these goals and associated metrics will also evolve to better reflect what is occurring on the ground and other external factors. Current milestones include evaluating and selecting the five SIM regions, identifying backbone organizations for the regions, designing an evaluation plan, hosting statewide webinars for participants and stakeholders, and executing Collaborative Learning Network design and planning. An updated summary of Michigan's SIM work was released in March 2018.

Integration of Services

Michigan's Title V and Title XIX programs share the common goal to improve the overall health and well-being of the MCH population through implementation of affordable health care delivery systems, expanded coverage, and implementing strategies to address social determinants of health and reduce health disparities. Areas of collaboration include maternal and infant care, adolescent health, perinatal care, developmental screening and referral, home visitation, oral health, and CSHCS. Like programs located within the BFHS, Michigan Medicaid employs a population health management framework to build a Medicaid managed care delivery system that maximizes the health status of beneficiaries, improves beneficiary experience, and lowers cost. Medicaid supports 11 contracted Medicaid Health Plans (MHPs) in achieving these goals through evidence-based and value-based care delivery models, supported by health information technology, and robust quality strategies to prevent chronic disease and coordinate care.

The BFHS 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 home visiting population-based program available to all Medicaid-eligible pregnant women and infants up to age one. Effective January 1, 2017, MIHP services provided to beneficiaries enrolled in an MHP are administered by the MHPs.

Another area of coordination is for CSHCN, as more than 80% of individuals with both CSHCS and Medicaid coverage are enrolled in a MHP. MHPs are responsible for the medical care and treatment of CSHCS members while assistance with community-based services beyond medical care and treatment is provided through the LHD's CSHCS office. MHPs are responsible for coordinating and collaborating with LHDs and the Children's Multidisciplinary Specialty Clinics to make a wide range of essential health care and support services available to enrollees. MHPs are also responsible for the coordination and continuity of care for enrollees who require integration of medical, behavioral health and/or substance abuse services.

MDHHS recognizes the importance of integrating both physical health and behavioral health services to effectively address enrollee needs and improve health status. To meet this goal, MHPs are required to work with MDHHS to develop initiatives to better align services with Community Mental Health Services Programs/Prepaid Inpatient Health Plans to support behavioral health integration. 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. Examples of CHW services include conducting home visits; participating in office visits; arranging for social services; and helping enrollees with self-management skills.

As part of Public Act 107 of 2017, the Michigan legislature directed MDHHS to "implement up to 3 pilot projects to achieve fully financially integrated Medicaid behavioral health and physical health benefit and financial integration demonstration models. These demonstration models shall use single contracts between the state and each licensed Medicaid health plan that is currently contracted to provide Medicaid services in the geographic area of the pilot project." In March 2018, MDHHS announced the following three pilot sites: Muskegon County Community Mental Health and West Michigan Community Mental Health; Genesee Health System; and Saginaw County Community Mental Health Authority.

On October 1, 2016, the Healthy Kids Dental program was expanded statewide to cover all children with Medicaid under the age of 21. It currently provides dental services to approximately 1 million youth. MDHHS has also submitted a request to amend the Comprehensive Health Care Program (CHCP) 1915(b) waiver. The waiver amendment includes a change that expands managed care dental coverage for non-HMP Medicaid eligible pregnant women. The managed care dental benefit, which will be administered through a contracted MHP dental vendor, is intended to provide greater access to dental services and overall comprehensive prenatal care. The anticipated effective date of the amendment is July 1, 2018.

Additionally, due to recent collaborative efforts between BFHS, MSA and other state partners, Michigan Medicaid intends to update its hospital reimbursement policy effective October 1, 2018, to change how hospitals will be paid for Long Acting Reversible Contraceptives (LARCs) including intrauterine and implant devices.

Health Services Infrastructure

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

MDHHS also developed and implemented CareConnect360 (CC360), a statewide web-based care management system that allows for the bi-directional exchange of health care information. CC360 allows for the identification and coordination of services to Medicaid enrollees with significant behavioral health issues and complex physical co-morbidities to facilitate sharing of cross-system information between plans and the Community Mental Health/Prepaid Inpatient Health Plans. CC360 makes it possible to assess and analyze healthcare program data, manage and measure programs, and improve enrollee health outcomes.

State Statutes Relevant to Title V

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

In FY 2018, state funding for MCH and CSHCS programs was appropriated through Public Act 107 of 2017 (House Bill 4323). CSHCS is mandated by the Michigan Public Health Code, Public Act 368 of 1978, in cooperation with the federal government under Title V of the Social Security Act and the annual MDHHS Appropriations Act. State general fund dollars for MCH programs are itemized in Sec. 117 of Public Act 107 of 2017, whereas CSHCS is addressed in Sec. 119. Additional MCH details are provided in Sec. 1301-1309. 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. Statutory requirements in the FY 2018 omnibus 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.

III.C. Needs Assessment

FY 2019 Application/FY 2017 Annual Report Update

Michigan's Title V program engages in ongoing needs assessment activities to identify emerging needs, changing conditions, and system capacity. In FY 2017, Michigan's Title V program strengthened its needs assessment processes by:

1. Expanding performance monitoring to include more routine monitoring at the division and program levels;
2. Supporting local health departments through a local MCH needs assessment process; and
3. Developing logic models by Title V population domain.

Expanding Performance Monitoring Processes

Starting in FY 2017, the Title V Steering Committee reviews Michigan's NPMs and SPMs on an annual basis during its spring meeting. State epidemiologists present available data, comparing Michigan and national data over time and in relation to Michigan's annual objectives. The second of these meetings took place in March 2018. Steering Committee members viewed data and asked clarifying questions. Of note are the following:

- Overall, the state is continuing to see positive trends in measures related to risk-appropriate deliveries, breastfeeding initiation and duration, infants placed to sleep on their backs and without objects in their cribs, follow-up for elevated blood lead levels, preventive dental care during pregnancy, and HPV vaccinations.
- The state is experiencing relatively flat trends in measures related to well-women visits, infants placed to sleep alone in a crib or pack-n-play, and immunization rates among children 19 to 36 months.
- Changes in survey questions and methodology make it more difficult to understand trends for several measures, including adolescent well-visits and transition. For example, the National Survey of Children's Health (NSCH) was revised and previous data are not comparable to current data.
- Given changes to and increased flexibility in the new Title V Guidance, Michigan retired three performance measures in 2018. Due to space limitations in this section, rationale is discussed in the state action plans by population domain.
- Michigan's original five-year targets were set for 2015-2020. Per HRSA requirements, new targets must extend beyond the original five-year cycle and project five years out. An MCH epidemiologist annually reviews and sets these new targets. Methodologies are included in the Supporting Documents. In particular, new 2019-2023 targets were established for all measures using the new NSCH.

In addition to continuing the high-level review of Michigan's progress toward its NPMs and SPMs, in 2017 MCH epidemiologists and Title V staff met individually with program staff who work on specific NPMs and SPMs. Participants discussed current data and performance monitoring activities as well as any data needs or gaps. Information on the Federally-Available Data (FAD) and stratifier data was also shared, as available. The initial goal was to identify any data needs, data gaps, or other challenges within program areas and how to address those issues. The long-term goal is to help impact performance metrics and improve program outcomes. State epidemiologists will continue to support data-driven assessment and planning, particularly as Michigan moves into its next five-year needs assessment cycle.

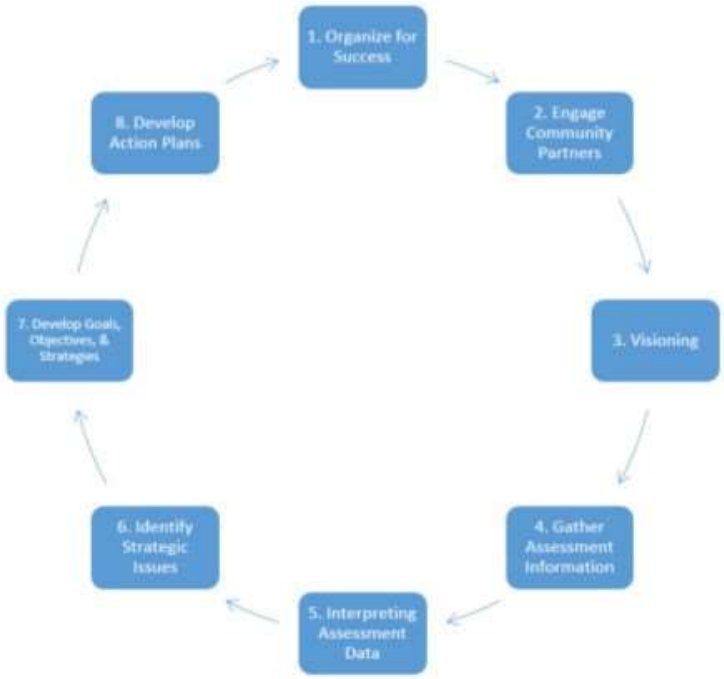
Local MCH Needs Assessment

Michigan's 45 local health departments (LHDs) each receive Title V funds to address local MCH needs. These Local Maternal and Child Health (LMCH) grants play an important role in building LHD infrastructure and supporting the statewide delivery of MCH programs and services. After the five-year needs assessment was completed in 2015,

the Title V Steering Committee determined that it was important both to support LHDs in realigning with the state's new priorities and performance measures and to assure continuity of infrastructure, programs, and services at the local level.

To achieve these goals, Michigan's LHDs were offered $15,000 grants in conjunction with training and technical assistance, to complete local MCH needs assessments from January to December 2017. The design of the needs assessment was informed by NACCHO's Mobilizing Action through Planning and Partnerships (MAPP) framework, the Public Health Accreditation Board's (PHAB) Standards and Measures, the National Public Health Performance Standards Program (NPHPSP), the MCH Essential Services, and a variety of other community health improvement tools. Additionally, the LMCH needs assessment was designed using the life course approach. The assessment included eight steps as depicted in Figure 1.

Figure 1. Needs Assessment Process



The process was introduced one step at a time. LHDs received training via webinar and then implemented what they learned before receiving training on the next step. Additionally, LHDs submitted documentation after each step and received feedback on strengths and opportunities to expand their assessment approach. This strategy was selected to make the process more manageable, to support the LHDs in spreading activities over the available months, and to support capacity building.

Assessment activities included looking at population-level data, gathering community input, and assessing system capacity to deliver MCH services. Information gathered from community input (e.g., through focus groups, input walls, brief interviews, photovoice projects, etc.) offered valuable insights that influenced the way LHDs articulated their strategic issues and selected priorities.

To date, 41 of Michigan's 45 LHDs completed the full needs assessment. In order to gather feedback on the strengths and limitations of the process, LHDs were invited to complete an online survey. The survey had a 76% response rate. The findings suggested that respondents found the webinars helpful; felt the communication they received from their technical assistance providers was timely and appropriate; found the needs assessment tool

easy to understand; and were satisfied with the process. Additionally, two-thirds of participants reported that the needs assessment led to identifying new MCH priorities within their communities. While feedback was overall positive, respondents indicated that they need more support in 1) moving from assessment to planning; 2) identifying evidence-based strategies; and 3) using data to inform how they use Title V funding at the local level. MDHHS has identified several strategies to address these needs:

- The LMCH plan, which LHDs complete to describe how they will use Title V funds, was revised to align with the needs assessment to make the translation from needs assessment to planning more straightforward.
- All LHDs were invited to participate in a webinar that provided a detailed overview of each component of the LMCH plan and how it related to the needs assessment, and offered guidance on areas that can be especially challenging, such as writing SMART objectives, distinguishing outcomes and outputs, and selecting effective strategies that go beyond health education.
- LHDs are receiving detailed feedback on their LMCH plans.
- Additional training, both in-person and web-based, is planned to help move from assessment to planning and selecting evidence-based strategies.

Local MCH needs assessment findings will be used at the state level to inform Michigan's next five-year needs assessment, which is due in 2020. Michigan is currently in the process of completing a detailed analysis of findings, focusing on what can be learned from the selected priorities and the community input gathered at the local level. Preliminary results suggest that over one-third of LHDs selected at least one priority that does not align with a current Title V NPM or SPM. Furthermore, the most commonly identified local priority that aligned with an NPM was breastfeeding, with 21 health departments prioritizing a breastfeeding related strategic issue.

Logic Models by Population Domain

To better understand and articulate goals and objectives across the size and complexity of the Title V program, in 2018 Michigan undertook a logic model process. Title V and program staff at the state level worked together to develop logic models for state level activities by population domain and individual performance measures. This process began with Title V staff creating draft logic models based on state action plans, and convening program staff by population domain to review each component of the logic model and make updates based on plans for FY 2019. The logic models will be treated as living documents, changing as the needs of the population change and as strategies are strengthened or refined. Additionally, they were used to support writing the state action plan sections of the Title V application.

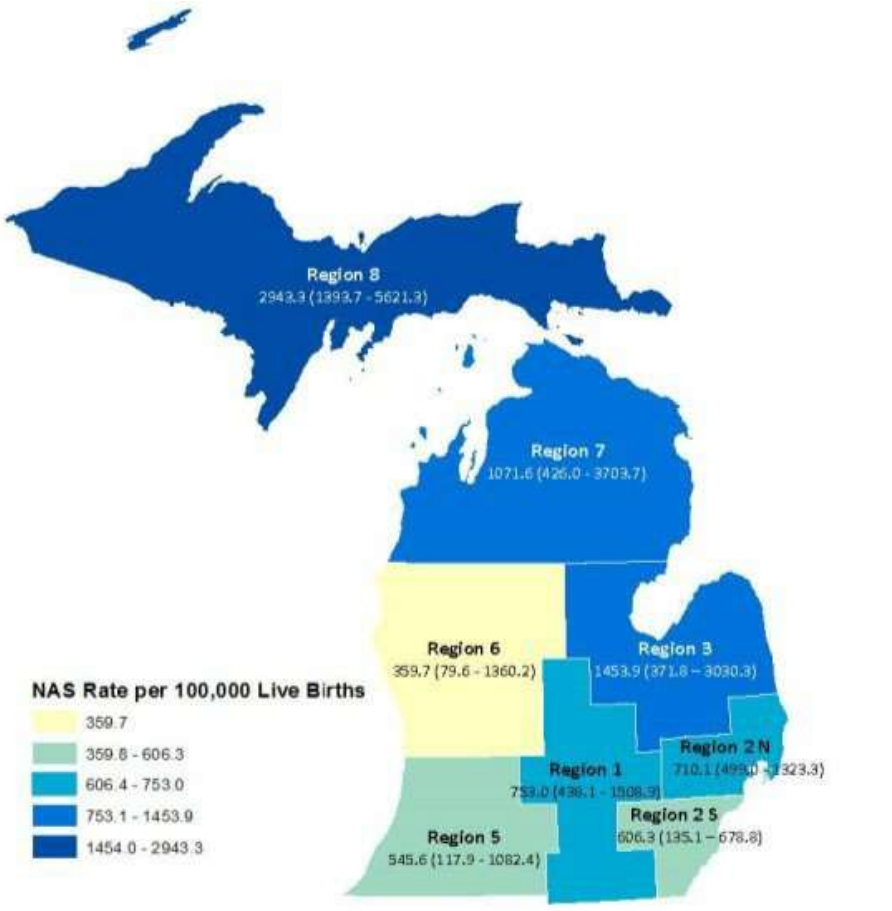
Changes in Health Status and Needs

As discussed above, Michigan continues to monitor all NPMs and SPMs on an annual basis. Other key MCH data are also observed. In particular, MDHHS continues to closely monitor both infant and maternal mortality and has seen the following trends and emerging concerns. The infant mortality rate in Michigan for 2016 was 6.4 deaths per 1,000 live births—the state's lowest rate since 2011. While we have made great strides with overall infant mortality over the last decade, racial and ethnic disparities—particularly among Black, non-Hispanic and American Indian/Alaskan Native populations—persist and remain a major focus of our work. The maternal mortality rate within Michigan for 2011-2013 was 8.5 maternal deaths per 100,000 live births. Due to the nationwide opioid epidemic, addressing maternal mortality remains an important component of our Title V work. Michigan's maternal mortality committees have centered their efforts on developing recommendations that will help prevent current and expecting mothers from developing opioid use disorders. Racial and ethnic disparities remain a concern with maternal mortality as well. Operationalization of these data, as well as the needs assessment findings discussed above, is addressed throughout the application.

Emerging Public Health Issues

As discussed above, infant and maternal mortality remain two critical public health issues in Michigan. In addition, two emerging public health issues have been opioid use and the hepatitis A outbreak. Michigan continues to experience an increase in opioid use during pregnancy and, as a result, an increase in the number of infants diagnosed with Neonatal Abstinence Syndrome (NAS). Figure 2 details the incidence of NAS by region. As illustrated by the map, rural areas of Michigan have been hardest hit by this epidemic.

Figure 2. Map of 2016 NAS Rates by Perinatal Region



Prepared by the MCH Epidemiology Section
Data Source: MDHHS Division for Vital Records and Health Statistics. Michigan Resident Live Birth File linked to the Michigan Inpatient Hospital Database, 2016.
Michigan Resident Inpatient Files, created using data from the Michigan Inpatient Database obtained with permission from the Michigan Health & Hospital Association Service Corporation
Neonatal Abstinence Syndrome Symptomatic and needed pharmacologic treatment (ICD-10-CM P96.1)
The NAS rates of perinatal regions and the ranges of NAS rates of counties in the specific perinatal region are shown in the map.

The number of drug exposed infants increased by 67% from FY 2010 to FY 2013, from 2,589 to 3,866 infants[1]. Additionally, infants hospitalized and treated for drug withdrawal symptoms has increased[2]. 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 2016, the number of infants with a diagnosis code of P96.1 (ICD-10-CM) increased to 863 infants. This represents a jump from 41.67 per 10,000 live births in 2010 to 76.12 in 2016. The opioid epidemic has also impacted maternal deaths, as illustrated by Figure 3.

Figure 3. Opioid-Related* Maternal Deaths in Michigan (2007-2015)

Year	Opioid Deaths	Total Maternal Deaths	% of Maternal Deaths
2007	2	67	3%
2008	4	44	9%
2009	5	52	10%
2010	8	70	11%
2011	10	70	14%
2012	13	58	22%
2013	6	59	10%
2014	16	81	20%
2015	18	78	23%
Total	**82**	**578**	**14%**

*Includes prescription and illegal overdoses; identified by underlying cause of death on death certificate (ICD-10 codes X40-X44, X60-X64, X85, Y10-Y14) with the contributing cause of death as opioids (T40.0-T40.4, T40.6). Source: Division for Vital Records and Health Statistics, MDHHS, 2007-2015.

To improve systems collaboration and policy development, MDHHS participated in the Substance Abuse and Mental Health Administration (SAMHSA) 2017 Policy Academy: Improving Outcomes for Pregnant and Postpartum Women with Opioid Use Disorders and Their Infants, Families and Caregivers. The Michigan Policy Academy team included representation from multiple systems[3]. Michigan's goals include the following: promote opioid use disorder prevention for pregnant and parenting women, and women of childbearing age; increase screening and identification of opioid use disorder; maintain data collection and reporting on opioid use disorder; optimize resource allocation to target resources to those in greatest need; develop a quality improvement system; and improve workforce development and training programs.

Michigan has a strong foundation of family support services within the community and hospital setting. Home visiting services are critical in addressing opioid use disorders among pregnant and parenting women. Home visitor education and training has been inclusive of motivational interviewing and other evidence-based interventions. Hospital personnel have been trained in the identification of NAS and the importance of linking families to ongoing support services after hospital discharge.

Another emerging public health issue is the hepatitis A outbreak. Since the outbreak began in 2017, Michigan has experienced the largest hepatitis A outbreak in the United States during the post-vaccination era, with over 800 cases and 25 deaths. What began in Southeast Michigan as a clustered outbreak with a few cases in the most populated, largest counties has now spread across the western and northern parts of the state. Transmission appears to be through direct person-to-person spread and illicit drug use. In response to the outbreak, public health officials have been working to promptly identify cases and contacts, provide education, and ensure access to vaccination for vulnerable populations. Multiple state agencies have been engaged including Medicaid, Department of Corrections, Department of Housing, HIV, Communicable Disease, Epidemiology, Local Health Services, Labs, Communications, Community Mental Health, Substance Use Disorders plus many external partners including Michigan Hospital Associations, HUD, and Michigan Association of Local Public Health. Michigan activated the Community Health Emergency Communications Center to centralize all communications regarding the outbreak and assist with education and information distribution. All LHD jurisdictions beginning with the Southeast outbreak areas were supplied with additional state support and funding as well as public vaccine to aid in responding to the

outbreak. The Centers for Disease Control has been in communication throughout the duration of the response as an ongoing consult to MDHHS.

[1] Based on data from Michigan's Services Worker Support System (SWSS).

[2] Based on data from Michigan Inpatient Hospitalization Files.

[3] Membership includes Behavioral Health Treatment, Maternal and Child Health/Public Health, Child Welfare, Justice and Medicaid.

FY 2018 Application/FY 2016 Annual Report Update

Michigan's Title V program engages in ongoing needs assessment activities in order to identify emerging needs, changing conditions, and system strengths. In FY 2016, Michigan's Title V program selected three priorities for ongoing needs assessment to be carried out in FY 2017:

1. Develop a process for tracking performance data on an annual basis;
2. Facilitate needs assessments with local health departments; and
3. Assess family and consumer engagement across MCH programs, as a step toward increasing stakeholder input.

Priority 1: Performance Monitoring

In March 2017, the Title V Steering Committee—which is comprised of managers and program staff who oversee Title V priority areas and performance measures, including the director of the Family Center for Children and Youth with Special Health Care Needs—convened to review Michigan's Title V performance measures. This process was designed to inform ongoing decision making and to help monitor the implementation and progress of state action plans.

MCH Epidemiology staff presented available data on each NPM[1], SPM, and ESM. The presentation compared Michigan and national data over time, to the extent possible, as well as progress toward annual objectives. Additionally, the presentation highlighted the Federally Available Data (FAD) as a resource for exploring stratifier information for each NPM and NOM.

After viewing the data, the group discussed takeaways and ideas for enhancing the performance monitoring process in future years. The following main points emerged:

1. The State appears to be making progress toward annual goals for several of the NPMs and SPMs (e.g., breastfeeding, vaccination, dental visits in pregnancy).
2. The State's progress toward a few annual goals appears to be slower than anticipated (e.g., well woman visits and developmental screening).
3. For some measures, it is difficult to assess progress because data are collected infrequently (e.g., measures using the National Survey of Children's Health).
4. For many measures, the lag time between when data are collected and when data are available makes it difficult to contextualize current performance.
5. In addition to a broad review of performance data, it may be helpful to implement a more comprehensive review of data specific to each performance measure or program area.

Priority 2: Local MCH Needs Assessments

Michigan's 45 local health departments (LHDs) each receive Title V block grant funds to address locally identified MCH needs. These Local Maternal and Child Health (LMCH) grants play an important role in building LHD infrastructure and supporting the delivery of programs and services. After the five-year needs assessment was completed in 2015, the Title V Steering Committee determined that an important next step was to support LHDs in realigning with the state's new priorities and performance measures while also supporting continuity of local infrastructure, programs, and services.

An internal LMCH workgroup was convened to design an LMCH needs assessment process in partnership with the Michigan Public Health Institute (MPHI) to help LHDs identify:

- MCH strengths and areas for improvement in their community;
- Disparities in MCH outcomes;
- The perspective of community partners and families regarding MCH needs;
- Strengths and gaps in the community's MCH infrastructure;
- Priority MCH needs;
- Clear goals and SMART objectives that respond to priority MCH needs; and
- Strategies for improving MCH infrastructure and outcomes.

The design of the needs assessment was informed by NACCHO's Mobilizing Action through Planning and Partnerships (MAPP) framework, the Public Health Accreditation Board's (PHAB) Standards and Measures, the National Public Health Performance Standards Program (NPHPSP), the MCH Essential Services, and a variety of other community health improvement tools and resources. Additionally, the LMCH needs assessment incorporates the life course framework, which understands health as the product of exposures and experiences from preconception through each stage of life.

The LMCH needs assessment process began in January 2017 and will conclude in September 2017. Although this activity was not required, all 45 LHDs chose to participate. The LMCH needs assessment was designed to be flexible and based on local capacity. LHDs were provided with $15,000 in one-time funding to support this activity. The LMCH workgroup recognized that the budget may not fully fund all assessment activities, and that LHDs vary in their assessment and planning needs. As such, at each stage of the assessment, a range of approaches were offered. However, LHDs were asked to include four critical components in their needs assessments:

1. Engage partners in the process, especially families and consumers most impacted by health inequities;
2. Use multiple types of data to identify both strengths and needs;
3. Engage in the process without pre-determined outcomes, such that evidence is used to select priorities and set objective targets; and
4. Ground strategies for improvement in evidence-based public health practice.

The LMCH needs assessment includes eight steps that align with the MAPP framework, which was selected because it is comprehensive and widely used. The steps are depicted in Figure 2.

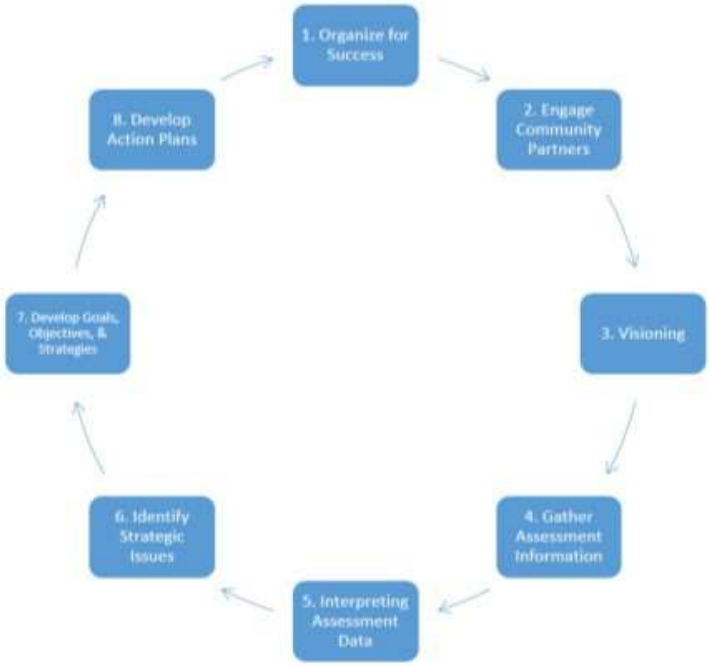


Figure 2: Steps in the Needs Assessment Process

LHDs were guided through each stage by Michigan's LMCH Needs Assessment Tool and through a series of webinars and targeted technical assistance. To make the process more manageable and to support capacity building, the process was introduced one step at a time. After each step, LHDs received feedback on strengths and opportunities to expand their assessment approach.

During the first step of the process, Organize for Success, LHDs developed a strategy for completing the assessment. They worked through a timeline, identified who would lead the process, and determined who would participate. Some LHDs formed a new group for the purposes of this assessment, whereas others accessed an existing group of MCH partners. LHDs also put a plan in place to support families and consumers as partners in the assessment process.

During the second step, LHDs engaged their partners. They considered traditional and non-traditional partners, and they expanded existing partnerships based on gaps that they identified during this step. LHDs developed or adapted invitation materials and formally reached out to partners for their participation. They also reached out to family members and consumers to invite their participation in the process.

The third step, Visioning, involved bringing together community partners to develop a shared vision for MCH for their community. Some groups decided to adapt existing vision statements, whereas others completed a visioning process.

Currently, LHDs are in the process of completing the assessments and interpreting their findings (steps 4 and 5). The first assessment involved gathering input from community members. LHDs were provided with an orientation to several methods of direct data collection, including community input walls, focus groups, intercept interviews, and photovoice. The second assessment involved reviewing MCH measures across the life course. The LMCH workgroup, MPHI, and MCH Epidemiology staff selected measures that included Michigan's NPMs and SPMs as well as other important measures including health outcomes, health behaviors, the service system, and social determinants of health. These measures were pulled at the state level and at either the county, LHD, or regional level.

Measures were provided to LHDs in an Excel file and through supplemental documents. The third assessment, which was optional, asked LHDs to examine their MCH service system. LHDs were provided with a tool that asks LHDs and their partners to discuss their local MCH system's capacity to deliver the 10 essential MCH services. The tool was set up as a discussion guide that would lead to a description of current status, strengths, and opportunities for improvement.

Through the LMCH needs assessment process, Michigan's Title V program expects LHDs will:

1. Align local MCH priorities with Michigan's MCH priorities and NPMs and SPMs submitted to HRSA for the 2016-2020 block grant cycle;
2. Develop local MCH plans with measureable objectives and evidence-based strategies to address local MCH needs as well as Michigan's Title V priorities and performance measures; and
3. Determine the most effective use of Title V dollars, particularly in relation to core public health functions and infrastructure.

Priority 3: Family and Consumer Engagement

Michigan's Title V program is committed to increasing stakeholder input in programs and services, especially from consumers and families. MDHHS recognizes that understanding issues and challenges from the service recipients' perspective helps programs strengthen services and achieve better outcomes. Many MCH programs currently involve families and consumers (on advisory committees, through program improvement efforts, etc.). However, systematic information about the levels and methods of family and consumer engagement used by MCH programs has not historically been gathered. Additionally, limited information was gathered directly from families and consumers in Michigan's last five-year needs assessment.

To address this gap and strengthen future engagement processes, in 2016 Michigan's Title V program decided to conduct an assessment of current family and consumer engagement across Michigan's MCH programs. To obtain this "baseline" information, a Family and Consumer Engagement Survey[2] was disseminated in March 2017 to MCH program managers. The survey solicited feedback on current practices, challenges, and benefits of engagement. Survey methods and preliminary results are presented in the Family/Consumer Partnership section of this application. The full survey results will be used to assess strengths in engaging families and consumers, as well as barriers and opportunities for improvement.

FY 2018 Needs Assessment Plans

In FY 2018, Michigan's Title V program will build on the progress and initiatives that have been implemented to date. Anticipated activities include:

1. Track performance data and work with program staff to identify program-specific data that would support evaluation or improvement efforts.
2. Summarize LHD needs assessment results to better understand needs and gaps in maternal and child health across the state.
3. Use results from the 2017 Family and Consumer Engagement Survey to inform next steps and strategies for increased stakeholder input within MCH programs.

Performance Monitoring

In FY 2018, the Steering Committee will again convene to review Michigan's performance measures—including NPMs, SPMs, ESMs, and other relevant data. This review and subsequent discussions will provide information

about successes, challenges, and emerging issues that could inform Michigan's MCH priorities and state action plans. Additionally, Title V leadership and MCH epidemiology staff will work with program areas to identify data sets (e.g., FAD or life course metrics) that would be useful for further program assessment.

LMCH Needs Assessment

Michigan's Title V program will receive comprehensive LMCH needs assessment results by December 2017. Results will describe assessment findings related to needs and strengths and will identify priority MCH health issues for each local health department in the state. The Title V Steering Committee plans to use this information at the state level to better support LHDs and to enhance Michigan's next Title V five-year statewide needs assessment.

Family and Consumer Engagement

The Family and Consumer Engagement Survey closed in April 2017. In total, 37 MCH program areas completed the survey. In the fall of 2017, survey results will be reviewed in collaboration with program staff and partners, to identify strengths, gaps and opportunities for improvement in FY 2018 and beyond. Methods for increasing family and consumer engagement will be identified or developed in FY 2018, depending on resource availability. For example, activities may include training or technical assistance for program staff; targeted support and resources for MCH programs that wish to strengthen family or consumer engagement; and sharing of best practices. A long-term goal is to increase family and consumer input in Michigan's MCH programming and ongoing needs assessment process. It is anticipated that information from the survey, as well as activities implemented in 2018, will inform and strengthen Michigan's next statewide needs assessment.

[1] Data and charts from TVIS web reports were utilized. Additional charts were created by MCH Epidemiology staff.

[2] The survey was adapted with permission from a survey developed by the Association of Maternal and Child Health Programs.

FY 2017 Application/FY 2015 Annual Report Update

In FY 2016, Michigan's Title V needs assessment activities focused on gathering information about local health departments' maternal and child health (MCH) needs and priorities for use of block grant funds. Michigan's 45 local health departments each receive Title V Block grant funds to address locally identified MCH needs. These Local Maternal and Child Health (LMCH) grants play an important role in building local health department infrastructure and supporting the delivery of programs and services. After the five-year needs assessment was completed in 2015, the Title V Steering Committee (which evolved out of the Needs Assessment Planning Committee, as discussed in the Needs Assessment Summary section, and includes key MDHHS leadership from across the MCH population domains) determined that it was important to support local health departments in realigning with the state's new priorities and performance measures, and to assure continuity of infrastructure, programs, and services at the local level.

In order to achieve these goals, an internal LMCH workgroup was convened to complete a LMCH needs assessment. This group completed two types of assessment activities. First, it reviewed LMCH-funded activities to identify areas of alignment and variance with the state's revised priorities, NPMs, and SPMs. The workgroup reviewed all 45 LMCH plans and budgets and completed a crosswalk between the activities in these plans and the state's priorities and performance measures. The group also examined the degree to which funding was focused on building infrastructure to deliver the 10 essential services or was focused on delivering direct or enabling programs and services. Second, the LMCH workgroup held discussions with local health departments, both individually and collectively, to share information; gather input regarding the new priorities and performance measures; and obtain feedback and suggested revisions to the new annual plan format and narrative.

The workgroup found that LMCH plans substantially aligned with the state's priorities and performance measures. However, several local health departments were using LMCH funds to support improving immunization rates within their communities. Although the importance of improving immunization rates was recognized, it was not identified as a priority during the 2015 needs assessment. Yet Michigan's immunization rate has been declining among some populations; the state has a high percentage of kindergarten exemptions for vaccines required for school entry; and the state has a low rate of adolescents who have completed the HPV series.

The workgroup also found that LMCH plans emphasized using funding to deliver programs and services, and less on building public health infrastructure. Given high levels of community need, declining public health funding, the lack of flexible funding for local health departments, and the relatively recent expansion of health insurance coverage, it was clear that LMCH funds have served a critical role in assuring MCH services. However, as Title V continues to evolve at the federal and state level, it was also clear that local health departments will need support in assessing changing community needs and in rebuilding their public health infrastructure to meet those needs.

In summary, two main outcomes emerged from FY 2016 needs assessment activities:

1. Based on state data and local priorities, the Title V Steering Committee added a State Performance Measure (SPM) focused on immunizations. Described in detail in its associated state action plan, the measure will track: A) Percent of children 19 to 36 who have received a completed series of recommended vaccines, and B) Percent of adolescents 13 to 18 years of age who have received a completed series of the HPV vaccine. The decision to focus on these two measures was made in coordination with Title V leadership and Division of Immunization staff.
2. Moving forward, Michigan's Title V program plans to offer one-time "transition" funding to local health departments to assist them in transitioning to the new state priorities and performance measures, as needed. This transition funding will support local capacity building, strengthen the statewide needs assessment, and provide a foundation for thinking beyond direct services to systems-level solutions to community health issues and needs. This proposal is discussed in more detail below.

2017 Plans

In order to assure Michigan's Title V priorities continue to align with the most important needs in our state, the Steering Committee discussed a variety of options for FY 2017 needs assessment activities. The group sought ideas that 1) would generate meaningful and timely information that could be used to refine priorities or action plans, 2) could be carried out efficiently, and 3) would engage a wide variety of stakeholders in the process. The Steering Committee selected three main strategies for ongoing needs assessment that will be initiated in FY 2017:

1. Develop a process for tracking and monitoring performance data on an annual basis;
2. Facilitate transition planning with local health departments; and
3. Increase stakeholder input by developing or strengthening strategies, systems and processes to regularly hear from state and local partners and consumers about needs and strengths of the MCH system.

Performance Monitoring

In FY 2017, the Steering Committee will engage with MDHHS's Life Course Metrics project to identify a core set of measures, which include Michigan's NPMs and SPMs, to track annually. The Life Course Metrics project is led by Michigan's MCH director. The intent of this effort is to identify core measures across the life course and at the population, community, and system level that can be used to inform decision making at the state and local level. Working with the Life Course Metrics team, the Steering Committee will identify a process for monitoring Michigan's current NPMs and SPMs. On an annual basis, the Title V Steering Committee will review performance on these measures. These conversations will focus on identifying emerging issues that could inform Michigan's priorities and opportunities for adjusting Michigan's action plans to improve progress toward outcomes.

Facilitate Transition Planning with Local Health Departments

Michigan's Title V program plans to provide one-time funding to the state's 45 local health departments that receive Title V block grant funding to undergo a local transition process tailored to the health department's needs. For example, the process will support capacity building at the local level; inform the state level needs assessment; and support alignment of LMCH plans with Michigan's Title V priorities, performance measures, and emphasis on system building. In addition to funding, the state Title V program will support the local transition process by providing instruction via webinar and phone consultation on each step of the process and providing local health departments with key MCH data. Local health departments will also be expected to pull from existing community needs assessment results and any supplemental local data to determine priority needs of their MCH population. Health departments will be encouraged to engage families and consumers in the process, and to use this input to more deeply and comprehensively understand unmet need in their communities.

Through a facilitated transition and needs assessment process, Michigan's Title V program expects local health departments will:

i. Align local MCH priorities with Michigan's key MCH priorities and NPMs and SPMs submitted to HRSA for the 2016-2020 block grant cycle;
ii. Develop local MCH plans with measureable objectives and evidence-informed or evidence-based strategies to address Michigan's Title V priorities, NPMs, and SPMs;
iii. Allocate more Title V dollars for capacity building around core public health functions and infrastructure development; and
iv. Ensure funds used for direct and enabling services are gap-filling.

Notably, the transition process was already begun in FY 2016. The internal LMCH workgroup drafted a revised LMCH application, which was shared with a small group of local health department representatives for review and revision before broader distribution occurred. This revised LMCH local plan format and guidance will be fully operationalized with FY 2017 contracts, utilizing measurable objectives and activities to address Michigan's Title V priorities, NPMs, and SPMs (as well as locally-identified MCH needs). DFCH representatives presented the revised local plan at several statewide local health department workgroups that regularly convene throughout the year. The response to the new format was positive. Local health departments were invited to join a webinar in May 2016 to review the new plan format and guidance.

Strengthen Stakeholder Input

While the Needs Assessment Planning Committee convened a broad group of stakeholders to help identify strengths and needs of the MCH population in the five-year needs assessment, a future goal is to increase family and consumer partnerships to allow for more consumer feedback. Strategies to address this gap will be developed in FY 2017. Steering Committee members will develop or build on existing strategies, systems, and processes to regularly hear from community and state family leaders, community members, and state and local partners about needs and strengths of the MCH system. The Steering Committee will develop multiple methods for gathering input

that work best for each priority area, MCH program, and consumer population, depending on time and resource availability. Methods may include but are not limited to: consumer satisfaction surveys, town hall meetings, focus groups, key informant interviews, and direct observations. Gathering consumer input will help to identify gaps or barriers in the MCH system that prevent women, mothers, and children, including those with special health care needs, from achieving health and wellness. The Steering Committee will use data collected through these methods to identify emerging priorities and improve state action plans.

Five-Year Needs Assessment Summary
(as submitted with the FY 2016 Application/FY 2014 Annual Report)

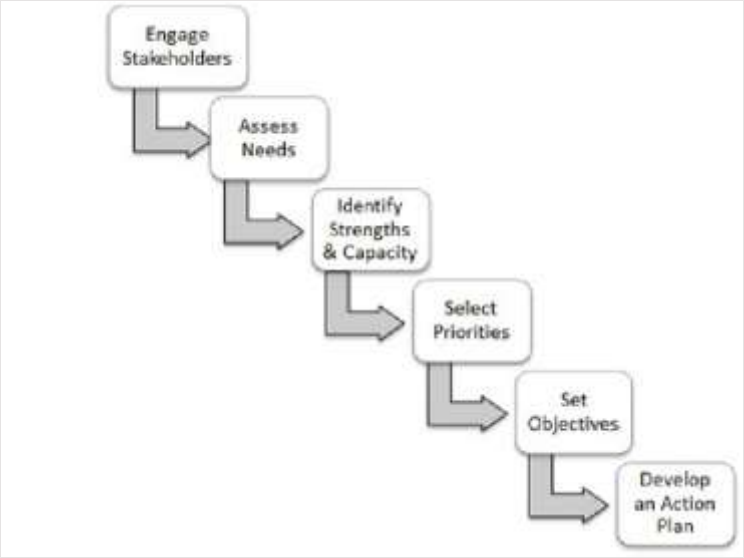
II.B.1. Process

MDHHS completed a statewide five-year needs assessment in order to identify needs for preventive and primary care services for women, mothers, infants, and children as well as services for children with special health care needs (CSHCN). The findings of the needs assessment drove the identification of strategic issues (i.e., the fundamental or critical challenges that must be addressed to improve maternal and child health outcomes), priority needs, and a five-year action plan. The needs assessment was led by Michigan's Title V Director and the Bureau of Family, Maternal and Child Health (BFMCH). As noted, the BFMCH organizational structure aligns with a life course approach. Leadership with expertise in each of the six population health domains identified in the Title V MCH Block Grant Guidance were engaged in needs assessment planning and implementation. The six population health domains that guided the structure of the Needs Assessment Planning Committee (NAPC) and the needs assessment process included women/maternal health, perinatal/infant health, child health, CSHCN, adolescent health, and cross-cutting/life course. The goals of the needs assessment process were to:

- Engage a diverse group of stakeholders to assess both needs and system strengths and capacity;
- Utilize existing data and stakeholder experience and expertise to identify strategic issues or unmet needs, that, if addressed, would improve health in each of the six population health domains; and
- Identify priority unmet needs in each of the population health domains and strategies for addressing those needs.

The needs assessment process was modeled after the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau's conceptual framework for the Title V needs assessment. HRSA's framework is designed to improve outcomes for MCH populations and strengthen partnerships. The HRSA framework maintains that stakeholder engagement is necessary, and that needs assessment should be an ongoing activity. While HRSA's framework includes 10 steps, Michigan's needs assessment was abbreviated to align with time and resource constraints. Michigan's process is illustrated in Figure 1 and described below.

Figure 1. Michigan's Needs Assessment Process



Engage Stakeholders

The NAPC included a team of individuals representing key leadership (and the aforementioned population domains) across the BFMCH. The NAPC was responsible for determining the goals of the needs assessment, identifying major steps of the needs assessment process, providing feedback on planning documents, assuring the completion of each stage of the process, and selecting strategic priorities. Core MDHHS representation on the NAPC is listed in Table 1.

Table 1. Core MDHHS Representation on NAPC
Bureau of Family, Maternal, and Child Health
Division of Family and Community Health
Children's Special Health Care Services Division
Family Center for Children and Youth with Special Health Care Needs
Women and Maternal Health Section
Early Childhood Health Section
Child, Adolescent, and School Health Section
Division of Life Course Epidemiology and Genomics
Maternal and Child Health Epidemiology Section

In order to assure broad stakeholder representation in the needs assessment process, the NAPC convened three stakeholder workgroups that reflected the six population health domains. The first group included maternal/women's health and perinatal /infant health stakeholders. The second group included child and adolescent health stakeholders. The third group included children and youth with special health care needs (CYSHCN) stakeholders. Stakeholders were identified by members of the NAPC who worked most closely with each population group. Each stakeholder group included state and local MCH staff; state and local MCH system partners; consumers and/or parent representatives; and partners with expertise in health equity. Stakeholders were invited to participate in the process to identify strategic issues facing each population group based on data and their experience and expertise in the MCH system.

Assess Needs

The primary types of information used to identify unmet needs included population health data, program evaluation data and consumer input data. Due to time and resource constraints, other features of the MCH system—namely program and workforce capacity, organizational relationships, and family and consumer partnerships—were discussed and assessed, but not formally evaluated. In future needs assessment processes, Michigan plans to incorporate additional types of data.

In order to identify population health data to include in the needs assessment, a comprehensive list of health status measures was compiled by population group. The list included the NPMs and National Outcome Measures (NOMs) in the Title V MCH Block Grant Guidance, as well as Michigan's Life Course Metrics. The list was prioritized by the NAPC through a survey process.

Using these measures, the Maternal and Child Health Epidemiology Section within the Bureau of Epidemiology and the Children's Special Health Care Services (CSHCS) Policy and Program Development Section led the compilation and presentation of data. From the prioritized list, epidemiology staff reviewed health status data by race/ethnicity, trends and geography. A variety of different sources were used, such as the Michigan Behavioral Risk Factor Surveillance System (MI BRFSS), the Youth Risk Behavior Surveillance System (YRBSS), Vital Records, the National Immunization Survey (NIS), the American Community Survey (ACS), the National Survey of Children's Health (NSCH), the National Survey of Children with Special Healthcare Needs (NSCSHN) and the Pregnancy Risk Assessment Monitoring System (PRAMS). Epidemiology staff then selected indicators that suggested an unmet need (based on several factors). These indicators were reviewed by program staff, who suggested additional indicators to include.

Additionally, an online survey was developed to gather existing evaluation and consumer feedback information. Members of the NAPC reached out to program staff to complete the survey. Participants were asked to report on any program evaluation findings or consumer feedback data collected in the past five years that suggested unmet needs related to maternal and child health.

Next, the three stakeholder groups—which included a total of 84 participants—were convened to review the data and

participate in a consensus workshop designed to identify strategic issues. Core indicators were presented to the stakeholders and additional metrics and analysis were provided as data sheets. The presentations and data sheets formed the basis of a rich discussion of emerging issues, unmet needs, data gaps and disparities. Stakeholders were engaged throughout the process and provided information from their own perspective and experience. Throughout the presentations, participants were asked to note the unmet needs suggested by the data as well as their own experiences. After discussing the data, participants were asked to write down the 7-10 unmet needs they felt were most critical to improving health for the population group over the next five years. Participants then worked in small groups to build consensus around 6-8 unmet needs. After the small groups reached consensus, the entire workgroup built consensus around a set of strategic issues that reflected the unmet needs. Each of the three workgroups developed between 10 and 15 strategic issues, for a total of 37 strategic issues across the six MCH population domains. Out of these strategic issues, the NAPC selected Michigan's state priorities.

Examine Strengths and Capacity

To inform the process of identifying strategic issues, each stakeholder group also participated in a focused conversation designed to gather information about system strengths and capacity. Each of the three workgroups was asked to reflect on the ways the MCH system supports each population group by identifying the following:

- Accomplishments of MCH programs in improving health status in the past five years
- Strengths of the MCH system for promoting health
- Programs and services that are working well
- Programs and services that have greatest capacity to address MCH health needs

Feedback from each group was captured and summarized.

Select Priorities

The NAPC was responsible for reviewing the strategic issues identified by stakeholder workgroups and selecting strategic priorities. In April 2015, the NAPC selected the strategic priorities that will guide the implementation of the Title V Block Grant. The list of strategic issues was first narrowed by the leadership group by considering the following factors:

- The strategic issue could be addressed through means other than Title V Block Grant funding,
- The strategic issue was not within the control or influence of the state MCH program, or
- The strategic issue was not aligned with programmatic, state and federal priorities.

After narrowing the list, the remaining strategic issues were prioritized using a matrix methodology. Each issue was rated against two scales. The first scale was related to the difficulty of achieving change through a focused programmatic effort and the second was related to the potential to achieve an improved outcome or impact. Members of the leadership group were asked to focus on the population domain they were most familiar with and rate the issue on each scale. They were asked to consider system strengths and capacity, their organizational structure and relationships, and existing priorities. Based on the matrix rating and their own expertise, the NAPC selected seven strategic priorities.

Select Performance Objectives

The NAPC selected NPMs based on the final priorities and the strategies that might be used to address those priorities. The selection of NPMs was also informed by current performance on the measure. Additionally, the NAPC identified priorities that will require state performance measures (SPMs) starting in FY 2017. Annual objectives (i.e., targets) for the five-year period were calculated by MCH epidemiology staff, with feedback from program staff. That process is discussed in Section II.D.

Develop an Action Plan

NAPC members were responsible for overseeing development of action plans for the strategic priorities that were related to their population domain. For example, staff within the Child, Adolescent, and School Health Section developed an action plan for priorities and NPMs related to adolescent health. In order to facilitate this process, a guidance document and an example action plan were created and provided to staff. Several strategic issues identified by the workgroups were considered important overarching principles and were woven throughout the action plan for each population domain.

II.B.2. Findings

Michigan's priorities were selected based on identifying MCH population needs, the capacity of Michigan's MCH and CSHCN programs, and partnerships that expand the reach of these programs. A summary of the findings that supported the selection of priorities is presented here.

II.B.2.a. MCH Population Needs

MCH population needs were identified based on reviewing key measures in each of the six MCH population domains; gathering evaluation and consumer feedback findings; and accessing the expertise and experience of key stakeholders using the process described above. A summary of system strengths and unmet needs for each population health domain is presented. This is not a comprehensive description of all the data that were reviewed as part of the needs assessment.

Women/Maternal Health: The MDHHS Maternal and Child Health Epidemiology Section and the Women and Maternal Health Section reviewed 27 measures of women's and maternal health. Measures that suggested an unmet need were identified and presented to key stakeholders. Additionally, stakeholders identified areas of strength and system capacity. Areas of unmet need suggested by the data and based on the experience of stakeholders were related to smoking and alcohol use, as well as access to and coordination of care and services.

In Michigan, the overall percent of women aged 18-44 who smoked cigarettes every day or some days decreased from 23.9% in 2011 to 22.1% in 2013 (MI BRFSS). This trend was not significant and smoking rates remained above the U.S. rate of 18.7%. Additionally, disparities continued to be high with more than 30% of women who have a high school education or less reporting current smoking. About 20% of women 18-44 reported binge drinking in the last 30 days in 2013, a slight but insignificant increase from 2011 (MI BRFSS). The rate of binge drinking among women in Michigan exceeded the U.S. rate of 17.2%.

Data from the needs assessment revealed strengths as well. The percent of women 18-44 who reported having a preventive medical visit in the past year increased significantly from 62.2% in 2011 to 67.0% in 2013 (MI BRFSS). This exceeded the U.S. rate of 66.1%. However, disparities persisted in this indicator, with 47.3% of women who were uninsured receiving a preventive medical visit.

Additionally, stakeholders identified system strengths that could provide the foundation for improving access to care and service coordination. Stakeholders noted an increase in collaboration and integration of services in and between health departments, hospitals and state and local community-based organizations. Stakeholders also felt that programs for women have an increased awareness and capacity for addressing social determinants of health, adverse childhood experiences and health inequities.

Using the consensus process described above, stakeholders used the data presented and their experience and expertise to identify strategic issues that, if addressed, would improve women/maternal health in Michigan over the next five years. Strategic issues are presented in Table 2.

Table 2. Strategic Issues Identified by MCH Stakeholders	
Population Domain	Strategic Issues
Women/Maternal Health	i. Support coordination and linkage across the perinatal to pediatric continuum of care ii. Integrate CHWs to improve systems navigation iii. Improve access to and education about reproductive life planning iv. Assure quality accountable MIHP services v. Support access to appropriate obstetrical care vi. Access to and integration of improved health services including substance use, IPV, and mental health
Perinatal/Infant Health	i. Support coordination and linkage across the perinatal to pediatric continuum of care ii. Community level support for breastfeeding iii. Take a family-centered approach iv. Engage and support fathers v. Increased parenting support and strategies to facilitate bonding vi. Assure quality accountable MIHP services
Child Health	i. Invest in prevention and early intervention strategies (e.g., screening) ii. Foster safer homes, schools and environments with a focus on prevention iii. Invest in high quality early childhood programs and services (e.g., quality child care) iv. Implement a coordinated approach to health promotion that contributes to development and academic success
Adolescent Health	i. Support evidence-based bullying prevention programs ii. Foster positive adolescent sexual health education and development iii. Implement a coordinated approach to health promotion that contributes to development and academic success iv. Ensure social and emotional well-being through the provision of a continuum of behavioral health services v. Reduce barriers, improve access, and increase availability of health services
Children and Youth with Special Health Care Needs	i. Better utilization of data measuring performance and outcomes ii. Assure that all components of a medical home are put into practice iii. Increase coordination and collaboration in Systems of Care iv. Assure residents in all areas of the state have access to appropriate primary and specialty providers v. Care based on need not funding or program criteria vi. Remove barriers to access to improve health equity vii. Bridge mental, behavioral, developmental, and physical health viii. Lack of early and continuous screening ix. Lack of transition planning over the life course x. Increase family/provider support and education xi. Improve quality of life, healthy development and healthy behaviors across the life course
Cross-cutting/Life Course	i. Provide culturally and linguistically competent services to address disparities and achieve health equity ii. Promote equity in funding, services, and health outcomes iii. Foster safer homes, schools and environments with a focus on prevention (e.g., opportunities for physical activity, lead poisoning prevention, preventing toxic stress & ACEs) iv. Improve quality of life, healthy development, and healthy behaviors across the life course v. Collaborate to improve access to basic needs vi. Early initiation and promotion of health education across the lifespan (e.g., obesity, smoking, parent education) vii. Support families to navigate the system viii. Ensure social and emotional well-being through the provision of a continuum of behavioral health services ix. Increase access to and utilization of evidence-based oral health practices x. Support the emotional health of the frontline workforce xi. Reduce barriers, improve access, and increase availability of health services

Perinatal/Infant Health: A total of 61 perinatal and infant health measures were reviewed. Measures that suggested an unmet need were prioritized and presented to stakeholders. Based on the data and the experience of key stakeholders, areas of unmet need included access to and coordination of care and services; health risks during pregnancy; disparities in infant mortality and safe sleep; and breastfeeding.

Disparities were identified across several measures of health during pregnancy. In 2012, about 77% of women reported receiving prenatal care in the first trimester, exceeding the U.S. rate of 73.1% reported in 2010 (CDC NCHS) and approaching the Healthy People 2020 target of 77.9%. However, while about 80% of White women reported receiving care in the first trimester, only 67% of Black women and 69% of Hispanic women reported receiving first trimester prenatal care in 2012 (MI Resident Live Birth File). (Note: Rates reported as White and Black include only non-Hispanic White and non-Hispanic Black populations.)

Among women who had a live birth and were enrolled in Medicaid, Black women reported a diagnosis of hypertension during pregnancy at higher rates than all other racial/ethnic groups (9.6% Black, 6.4% White, 6.1% Hispanic, and 5.9% Native American women; Michigan Medicaid 2013). Native American (7.1%) and Black (8.4%) women receiving Medicaid were twice as likely to experience obesity during pregnancy as White (4.8%) and Hispanic (4.3%) women (Michigan Medicaid, 2013).

More White women reported smoking during the last three months of pregnancy than any other racial/ethnic group. In 2011, 16.8% of White women smoked during the last three months of pregnancy compared to 12.6% of Black women (PRAMS). However, the percent of women reporting that smoking was allowed in the home after delivery was much higher for Black women than White women (16.8% vs. 6.3% respectively, PRAMS). Overall, 14.7% reported smoking during the last three months of pregnancy and 8.4% reported that smoking was allowed in the home after delivery. Michigan's rates of smoking during pregnancy and in the home exceed U.S. rates, as reported by 25 states. In 2011, about 10.2% of women in the U.S. reported that they smoked during the last three months of pregnancy and 4.8% of women reported that smoking was allowed in the home after delivery (PRAMS).

Michigan has the 8th highest pregnancy-related mortality rate in the country. The Michigan pregnancy related mortality rate was 22.2 per 100,000 live births compared to the U.S. rate which was 15.6 per 100,000 live births (NVSS 1999-2010). The Healthy People 2020 target for reducing the rate of maternal mortality is 11.4 per 100,000 live births.

While the infant mortality rate steadily decreased in Michigan from 8.2 per 1,000 live births in 2000 to its lowest rate of 6.6 per 1,000 live births in 2011, the 2013 rate of 7.0 per 1,000 live births exceeded both the Healthy People 2020 target (6.0 per 1,000) and the U.S. rate (6.0 per 1,000). Additionally, racial disparities in infant mortality persisted. In 2013, the Black infant mortality rate was 13.1 per 1,000 live births compared to the White infant mortality rate which was 5.7 per 1,000 live births (MI Resident Birth and Death Files).

In 2013, the sleep-related infant death rate for Black infants (20.6 per 10,000 live births) was twice the rate of all sleep-related infant deaths in Michigan (10.3 per 10,000 live births) and nearly three times the rate of sleep-related infant deaths for White infants (7.6 per 10,000) (MI Resident Infant Mortality File). Although in 2011 78.7% of Michigan infants slept on their back, which exceeded the Healthy People target of 75.9%, the percent of infants who slept in safe sleep environments was only 37.8% (MI PRAMS). Only 29.4% of Black mothers reported their infants sleep in safe sleep environments compared to 39.9% reported by White mothers (MI PRAMS). Furthermore, Black mothers had the lowest reported percent of infants who are put to sleep on their backs (59.5%) compared to Hispanic mothers (79.5%) and White mothers (83.4%) (MI PRAMS).

In 2011, the total percent of infants ever breastfed in Michigan was 79.8% compared to 83.9% of infants in all PRAMS states (PRAMS). Michigan's rate of breastfeeding did not meet the Healthy People target for breastfeeding initiation, which is 81.9% of infants. Black mothers and mothers with the lowest level of education had the lowest rates of breastfeeding. About 65.1% of Black mothers reported ever breastfeeding their infant compared to 84.0% of White mothers and 88.2% of Hispanic mothers (MI PRAMS). About 60.9% percent of mothers with less than a high school education and 75.6% of mothers with a high school diploma reported ever breastfeeding their infants compared to 92.4% of mothers with college degrees (MI PRAMS). In 2011, the percent of infants breastfed exclusively through six months in Michigan was 16.2% compared to 18.8% in the U.S. (CDC NIS). Michigan's rate of exclusive breastfeeding through six months falls below the Healthy People target of 25.5%.

Stakeholders discussed strengths of the system for improving perinatal outcomes including increased access to health insurance, expanding home visiting services, and increased engagement of community health workers to connect families with resources. They also noted increased collaboration and integration of services for mothers and babies, movement toward more holistic care, greater utilization of quality improvement methods, and an increased focus on social determinants of health.

Based on the data presented and the experience and knowledge of the stakeholders, strategic issues were identified for improving perinatal and infant health, which appear in Table 2.

Child Health: The MDHHS Maternal and Child Health Epidemiology Section and the Child Health Section reviewed 39 measures of child health; those that suggested an unmet need were identified and presented to key stakeholders. Areas of improvement suggested by the data relate to early development and school performance, as well as child maltreatment. System strengths suggested by measures related to immunization and lead poisoning prevention were also highlighted.

In Michigan, in 2011, 25.3% of parents of children aged 10-71 months who had a health care visit in the past 12 months reported completing a standardized developmental screening tool (NSCH). The U.S. rate in the same year was 37.2%. Additionally, 58.6% of children aged 0-17 received care within a medical home, while only 33.7% of Black children received

care within a medical home (NSCH). The U.S. rate in 2011 was 54.4%, while the Healthy People 2020 target is 63.3%.

In order to understand school performance, the NSCH promoting school success summary measure was reviewed. To meet all criteria in the measure, children had to have positive responses on the following: 1) Usually/always engaged in school; 2) Participate in extracurricular activities; 3) Usually/always feel safe at school. In 2011, 64.3% of parents reported their children are experiencing school success; however, school success was less frequently reported by Black parents (40.9%). The percent of children experiencing school success in the U.S., in 2011, was 61.0%. State data on school performance were reviewed as well. Third grade reading proficiency as measured by a state-based standardized test (the Michigan Education Assessment Program) is one measure on Michigan's dashboard. In 2013-14, 61.3% of children were proficient in reading by the end of third grade. However, in the same year only about 37.3% of Black or African American children were reading proficiently.

According to data reported by Kids Count (datacenter.kidscount.org), in 2008 there were 11 substantiated cases of child maltreatment per 1,000 children aged 0-17, compared to 15 cases per 1,000 children in 2012. The U.S. rate in 2012 was nine substantiated cases per 1,000 children, while the Healthy People 2020 target is 8.5 maltreatment victims per 1,000 children. In Michigan, in 2012, 42% of victims of child maltreatment were aged 0-4 and 31% were aged 5-10. In 2012, 84% of victims were victims of neglect, 40% were victims of emotional abuse and 25% were victims of physical abuse.

The needs assessment revealed areas of strength as well. Since 2010, the percentage of 19-36 month old children who have received the full schedule of age appropriate immunizations rose steadily from 60% in 2010 to 74% in 2014 (MCIR). Additionally, rates of lead testing increased and the percent of tested children with blood lead levels greater than 5 ug/dl decreased from 9.8% in 2008 to 4.6% in 2012 among tested children less than six years of age (Childhood Lead Poisoning Prevention Program). However, testing rates in certain areas of the state were low and lead poisoning rates remained high such as the city of Detroit, which had over half the state's lead poisoning cases in 2012.

Child health stakeholders reported that evaluation, quality improvement, interdepartmental collaboration, and a commitment to evidence-based practice were system strengths for promoting child health. Furthermore, stakeholders identified developmental screenings, evidence-based home visiting programs, school-based services, and maternal child health nutrition programs as services that have the greatest capacity to improve child health.

Using a consensus process, stakeholders used the data as well as their experience and expertise to identify strategic issues that, if addressed, would improve child health in Michigan over the next five years. Strategic issues are listed in Table 2.

Adolescent Health: The MDHHS Maternal and Child Health Epidemiology Section and the Adolescent Health Section reviewed 42 measures. Measures that suggested an unmet need were presented to stakeholders. Opportunities for improvement as suggested by the data included bullying, suicide mortality rates, healthy lifestyles and access to care. System strengths related to motor vehicle accident mortality, adolescent condom use and teen birth rate were also highlighted.

The Youth Risk Behavior Survey (YRBS) provides data on bullying on school property among adolescents. Michigan saw an increase on this measure from 22.7% in 2011 to 25.3% in 2013 (YRBS). This exceeded the 2013 U.S. rate of 19.6% and the Healthy People 2020 target of 17.9%. Additionally, the percent of adolescents who felt sad or hopeless has remained stable from 27.4% in 2009 to 27.0% in 2013 (YRBS). The U.S. percent in the same year was 29.9%. According to data reported by the MI Resident Death File, the suicide mortality rate for adolescents aged 15-19 increased from 6.8 per 100,000 in 2007 to 10.5 per 100,000 in 2013. The national rate of adolescent suicide mortality was 8.3 per 100,000.

The percent of adolescents aged 12 through 17 with a preventive medical visit in the past year was 85.6% in 2012 (NSCH). This exceeded the national rate of 81.7%. Additionally, 58.6% of children aged 0-17 received care within a medical home, which also exceeded the U.S. rate in 2011 of 54.4%. However, only 39.1% of Hispanic children and 33.7% of Non-Hispanic Black children received care within a medical home compared to 68.0% of Non-Hispanic White children (NSCH). The Healthy People 2020 target for this measure is 63.3%.

The needs assessment revealed areas of strength as well. In 2009, 11.5% of sexually active adolescents in Michigan reported not using any form of contraception at last sexual encounter, compared to 8.9% of adolescents in 2013 (YRBS). The U.S. rate in 2013 was 13.7%. Additionally, since 2009 the live birth rate per 1,000 females aged 15-19 decreased from 31.9 to 23.6 in 2013 (MI Resident Live Birth File). According to the National Center for Health Statistics, the U.S. rate was

26.5 per 1,000 adolescents in 2013. Furthermore, the percent of live births among females aged 15-19 that were repeat births decreased slightly from 17.7% in 2009 to 16.4% in 2013 (MI Resident Live Birth File). According to the National Center for Health Statistics, 17% of births to 15-19 year-olds in the U.S. were to females who already had one or more babies.

Additionally, both motor vehicle and homicide mortality rates have decreased among adolescents aged 15-19. The motor vehicle accident mortality rate decreased from 14.4 per 100,000 individuals aged 15-19 in 2009 to 8.5 per 100,000 in 2013 (MI Resident Death File). According to the MI Resident Death File, in 2009 there were 13.3 homicides per 100,000 individuals aged 15-19, compared with 8.3 homicides per 100,000 in 2013.

Adolescent health stakeholders reported that evaluation and interdepartmental collaboration were system strengths for promoting adolescent health. Stakeholders identified school-based health programs, reproductive health education, and behavioral and mental health programs as services that have the greatest capacity to improve adolescent health.

Using a consensus process, stakeholders used the data as well as their experience and expertise to identify strategic issues that, if addressed, would improve child health in Michigan over the next five years. Strategic issues are listed in Table 2.

Children and Youth with Special Health Care Needs: The Policy and Program Development Section within MDHHS CSHCS Division reviewed 45 measures and identified measures to present to stakeholders. Areas of improvement suggested by the data related to medical home, transition services, developmental screening and adequate insurance coverage. System strengths suggested by measures related to early and continuous screenings and shared decision-making were also highlighted.

According to the NSCH 2011/2012, 47.8% of MI CSHCN had a medical home compared to 46.8% in the U.S. However, only 35.1% of CSHCN with more complex needs had a medical home compared to 61.4% of non-CSHCN and 68.2% of CSHCN with less complex health needs (NSCH). The Healthy People target for the percent of CSHCN having a medical home is 54.8%.

In addition, in 2011, 33.9% of CSHCN with more complex needs had difficulty getting needed referrals compared to 19.8% of non-CSHCN (NSCH). In the U.S. during the same period, 26.4% of CSHCN with more complex needs had difficulty getting needed referrals compared to 18.5% of non-CSHCN (NSCH). In 2011, 52.6% of CSHCN with more complex needs received effective care coordination, and 77.2% of CSHCN with less complex needs received effective care coordination (NSCH). Non-CSHCN reported effective care coordination at 72.9% during the same time period (NSCH). While 45.2% of non-CSHCN met the quality of care summary measure (which includes children having adequate insurance, receiving ongoing and coordinated care within a medical home, and at least one preventative health care visit in the past 12 months) only 24.2% of CSHCN with more complex medical needs met all quality of care criteria (NSCH). In comparison, 27.7% of U.S. CSHCN with more complex medical needs met all quality of care criteria.

In 2009, 47.5% of parents of CSHCN aged 12 months to 5 years in Michigan who had a health care visit in the past 12 months reported completing a standardized developmental screening tool (NSCHCN). In comparison, only 37.4% of all U.S. parents of CSHCN reported completing the standardized developmental screening tool in the same year. Additionally, in Michigan, 79.3% of CSHCN were screened early and continuously, which was higher than the U.S. rate of 78.6% (NSCSHN). However, only 61.1% of Hispanic children were screened early and continuously compared to 76.8% of Non-Hispanic Black children and 80.5% of Non-Hispanic White children.

In 2010, 41.2% of children in Michigan with special health care needs aged 12-17 received the services needed for transition to adult health care, work and independence compared to 40.0% of CSHCN aged 12-17 receiving services needed for transition in the U.S. (NSCHCN). The Michigan rate, however, does not meet the Healthy People 2020 target which is 45.3%. Furthermore, only 15.1% of Hispanics and 27.7% of Blacks reported receiving necessary services needed for transition (NSCHCN).

CSHCN stakeholders reported family-professional partnerships and local health departments (LHDs) as system strengths for promoting the health of children and youth with special health care needs. Furthermore, stakeholders identified comprehensive medical homes, telemedicine and transition services as having the greatest capacity to improve the health of CSHCN.

Stakeholders used the data as well as their experience and expertise to identify the strategic issues that, if addressed, would improve health for CYSHCN in Michigan over the next five years, which appear in Table 2.

Cross-Cutting/Life Course: The MDHHS Maternal and Child Health Epidemiology Section reviewed 35 cross-cutting measures. Selected measures were presented to all three stakeholder groups. Data related to the identified priorities across populations are reported.

In Michigan, the overall percent of individuals with annual household incomes below the federal poverty level (FPL) increased from 14.4% in 2008 to 17.0% in 2013 (ACS). In 2013, 34.6% of Black individuals and 26.7% of Hispanic individuals reported annual incomes below the FPL compared with 13.0% of White individuals (ACS). In 2013, about 15.8% of individuals in the U.S. were living below the FPL (ACS).

The overall percent of children with no health insurance in Michigan significantly decreased from 5.2% in 2008 to 4.0% in 2013 (ACS). However, 10.5% of Native American children were uninsured and 5.6% of Hispanic children were uninsured. According to the ACS, about 7.1% of children nationally were uninsured in 2013.

Overall, 13.3% of women reported that their household sometimes or often doesn't have enough food to eat; however, this value varied by race and insurance status. About 22.9% of Black women reported not having enough food to eat compared to 11.1% of White women (MI BRFSS). More than 25% of uninsured women reported not having enough food to eat in 2013 compared to about 11% of insured women (MI BRFSS).

In 2011-12, 77% of all students in Michigan graduated within four years compared to 81% of all high school students in the U.S. (datacenter.kidscount.org). Michigan's four-year graduation rate is also lower than the Healthy People target of 82.4%. White (82.1%) and Asian (87.9%) students graduated at higher rates in four years than Hispanic (67.3%), Native American (64.1%) and Black (60.5%) students (Michigan Department of Education).

In Michigan, in 2011, 86.9% of households with children aged 0-17 reported that they felt their child was safe in their community as compared with 86.6% of U.S. households (NSCH). Feelings of safety were less frequently reported by Black households (64.8%) and Hispanic households (73.9%).

Oral health measures were also reviewed. In 2011, although 57.7% of women reported having their teeth cleaned in the 12 months prior to pregnancy compared to 56.6% of all total reporting states, there were disparities on this measure (PRAMS). Hispanic women least frequently reported having their teeth cleaned (43.2%), followed by Black women (46.9%). 61.9% of White women reported having their teeth cleaned (MI PRAMS). Additionally, in 2008, 44.5% of women in Michigan reported having their teeth cleaned during their most recent pregnancy (MI PRAMS). However, only 24.5% of Black women reported having their teeth cleaned during pregnancy, compared to 50.7% of White women.

The number of children aged 1 to 17 with at least one oral health problem in the past 12 months decreased from 25.4% in 2007 to 15.7% in 2012 despite the fact that the percent of children who had preventive dental visits in the past year decreased from 83.0% to 77.4% during the same period (NCHS). However, 28.1% of Black children had one or more oral health problem compared to 12.9% of White children (NSCH). Only 71.3% of Black children had a preventive dental visit compared to 81.2% of White children. In comparison, in the U.S., the percent of children with at least one oral health problem was 18.7% and the percent of children with a preventive dental visit was 77.2% (NSCH).

Cross-cutting strategic issues that, if addressed, would impact health outcomes across the life course were identified by the three stakeholder groups. These appear in Table 2.

II.B.2.b Title V Program Capacity

While the needs assessment process did not include a formal assessment of program capacity, assessment and discussions occurred internally within BFMCH. Key components of Michigan's Title V program capacity are described below. In the future, BFMCH will also consider options for completing a formal assessment of its MCH program capacity and workforce.

II.B.2.b.i. Organizational Structure

The Title V program is operated by the BFMCH within MDHHS. The Bureau Director is also the Title V Director. The Bureau includes the Division of Family and Community Health (DFCH), Children's Special Health Care Services (CSHCS) Division, and the WIC Division. Structurally, the Title V Director reports to the Senior Deputy Director for Population Health and Community Services who reports to the Director of MDHHS (see attached organization chart). The MDHHS Director reports directly to the Governor. The BFMCH is responsible for the administration of programs carried out with allotments under Title V. The mechanisms by which the BFMCH administers Title V in Michigan are described throughout this grant.

II.B.2.b.ii. Agency Capacity

BFMCH has a longstanding history and proven capacity to promote and protect the health of all mothers and children, including CYSHCN. The majority of Title V services and programs are delivered through DFCH, while services focused on children and youth with special needs are administered by CSHCS. Collaboration between CSHCS and DFCH is meant to assure that attention to services for CYSHCN are integrated into all Title V programs, as CYSHCN have similar child and adolescent health issues as their peers.

The DFCH is responsible for assessing need; recommending policy; developing and promoting best practices and service models; and advocating for the development of capacity within communities to provide high quality, accessible, culturally competent services. DFCH focuses on improving the health, well-being, functioning and quality of life for infants, children, adolescents, women of childbearing age and their families. The maternal and child health programs in this division focus on health status assessment, priority health issue identification, and development and support of programs and systems that address these health issues in the context of health care reform, systems integration and life course theory.

The life course approach is the model for the DFCH organizational structure and strategic plan and is central to the MDHHS goal “to protect, preserve and promote health with special attention to the needs of the vulnerable and underserved.” Priority is placed on increasing health promotion and prevention activities to improve socio-environmental, medical and behavioral health by integrating public health, mental health, substance abuse and Medicaid services for all ages. Although each section concentrates on their respective stage of the life course, they coordinate, complement and build on adjacent life stages.

DFCH provides ongoing public health focus, capacity building, technical assistance, epidemiologic support and infrastructure-building activities across five of the six population health domains. Specifically, Title V services are prioritized and maintained through the following sections:

Women and Maternal Health Section: Provides leadership, expertise, program management and public health focus for the Women/Maternal Health and Perinatal/Infant Health population domains. The focuses are preconception, interconception, maternal and perinatal health for women, newborns and infants.

The *Reproductive and Preconception Health Unit* focuses on preconception and interconception health planning and promotion through the delivery of equitable, quality contraceptive and reproductive health services. This program makes available general reproductive health assessment, comprehensive contraceptive services, health education and counseling, and referrals to other needed services. Services provided by a network of local providers are available to the general population; however, the primary target population is low-income men and women. The unit has recently become the epicenter of statewide breastfeeding promotion and planning and is a major promoter of prenatal smoking cessation.

The *Health Equity and Perinatal Systems Unit* has two focuses: promote and guide the division-wide effort on achieving health equity and promote a healthy perinatal period with positive pregnancy outcomes. The target populations are pregnant and postpartum women and their newborns through their first year of life. Current efforts work to reduce infant mortality and morbidity; eliminate infant mortality disparity; and implement risk-appropriate community perinatal care systems. Historically, this unit has also been responsible for conducting MCH Block Grant subrecipient consulting and monitoring to Michigan’s local public health system on the appropriate use of these funds.

The *Maternal Health Unit* monitors and assures fidelity to Michigan’s statewide home visiting program for Medicaid beneficiaries, the Maternal & Infant Health Program (MIHP). The program’s certified local provider network provides assessment, case management and support services to pregnant women and infants to improve birth outcomes. Additionally, this unit provides oversight and supports state efforts to reduce maternal mortality, morbidity and eliminate disparity; and to prevent and identify Fetal Alcohol Syndrome Disorders. This unit also links with perinatal oral health

planning and promotion.

Early Childhood Health Section: Provides leadership, expertise, program management, and public health focus for the Infant Health and Child Health population domains.

The *Infant Health Unit* is responsible for infant health promotion and initiatives to reduce fetal and infant deaths; increase the percentage of infants sleeping in safe environments; promote screening and evidence-based treatment for known chronic conditions in newborns; and increase the proportion of newborns that receive hearing screens, evaluations and services. This unit oversees the Early Hearing Detection and Intervention Program which includes screening, diagnosis and intervention for newborns with congenital hearing loss; the Safe Delivery Program which by state law allows for the anonymous surrender of an infant within 72 hours of birth to an Emergency Service Provider; and the Infant Death Prevention and Bereavement Program. The Michigan Fetal Infant Mortality Review (FIMR) Program aims to reduce infant mortality by informing target communities about risk factors and issues contributing to poor pregnancy outcome and infant health and safety issues. FIMR brings together multidisciplinary community teams to review confidential, de-identified cases of infant and fetal death for the purpose of making recommendations to improve care, services and resources for women and families.

The *Early Childhood Systems Unit* administers programs and initiatives that improve early child wellness across all domains of development; increase family ability to understand and promote child wellness; support the development of an integrated and comprehensive early childhood system that spans public/private organizations and includes promotion, prevention and intervention activities; and collects and analyzes data to improve systems and service outcomes. Initiatives within the unit include: Childhood Lead Poisoning Prevention, Parent Leadership in State Government initiative, and the Trauma-Informed System ECCS grant. This unit serves as a liaison between Public Health and Part C/Early On and Race to the Top, which are administered by the Michigan Department of Education (MDE). The unit collaborates with internal and external partners on initiatives to improve early childhood systems coordination and seeks to include and empower parents as partners in decision making, community collaboration and communication.

The *Home Visiting Unit* administers the MIECHV grant and state dollars with the goal of strengthening home visiting infrastructure to achieve positive outcomes for children and families. The unit engages stakeholders in a collaborative process to build a more effective and efficient system as well as improve and expand home visitation services within high-need communities. MDHHS recognizes the need to coordinate with all home visiting models, including Healthy Start. The MDHHS annual home visiting conference brings together all of the models currently in Michigan for “Model Day,” creating an opportunity for continued collaboration. Additionally, the unit plans for a Model Consultant position that will be charged with supporting the Healthy Start model among other models in Michigan as part of the Home Visiting Initiative.

Child, Adolescent and School Health (CASH) Section: Improves the health and well-being of Michigan’s school-aged children, adolescents and young adults by addressing a range of adolescent and school health issues and providing leadership, expertise, program management and public health focus for the Child Health and Adolescent Health population domains.

The *Child & Adolescent Health Systems Unit* oversees three federal teen pregnancy prevention programs including the Personal Responsibility & Education Program (PREP), the Title V State Abstinence Education Program (which funds the Michigan Abstinence Program) and Pregnancy Assistance Funds used to implement the Michigan Adolescent Pregnancy and Parenting Program. All three programs work collaboratively with state and local partners including MDE, the former Department of Human Services, faith-based organizations, schools, LHDs and other stakeholders. This unit will also house a DFCH position dedicated to the MCH Block Grant and an MCH liaison position with the State Innovation Grant.

The *Child & Adolescent Health Center (CAHC) Unit* oversees Michigan’s school-based/school-linked health center program, funding 100 health centers and related programs in medically underserved, high-need communities. CAHCs provide comprehensive primary care and behavioral health services, health education, Medicaid outreach and enrollment, and screening/case finding to K-12 students and young adults up to age 21. This unit also oversees the state’s school nurse program, mental health in schools initiative, adolescent health demonstration grants and a new telehealth pilot. MDHHS and MDE co-manage the CAHC program and have two shared staff members, the State School Nurse Consultant and the State School Mental Health Consultant.

The *School Health Unit* provides a range of public health and education programs aimed at school-aged children. This unit

works extensively with MDE, collaboratively overseeing initiatives such as Coordinated School Health and Michigan's comprehensive school health education program, the Michigan Model for Health. This area also houses the preschool and school-aged Hearing & Vision Screening Program, which provides early screening and follow up to eligible children throughout the state. This unit coordinates extensively with local schools, intermediate school districts, early childhood partners, and health organizations to bring services to where kids spend much of their day—at school.

CSHCS Division: CSHCS focuses on identifying and addressing the health needs of CYSHCN. CSHCS achieves this aim by partnering with families, community providers and other state agencies to ensure that quality services are accessible to children with special needs and their families. CSHCS creates and administers policies, provides oversight and support to local partners, promotes evidence-based care models, and facilitates positive change through the extensive involvement of family advocates. CSHCS's goal is to help children with special needs achieve optimal health and an improved quality of life.

II.B.2.b.iii. MCH Workforce Development and Capacity

Michigan has many long-standing leaders in the MCH field who provide strategic leadership and oversight to the various programs and initiatives that reside in the Department. Currently, 1.5 State civil servant positions are supported by Title V funding. These positions are located in the BFMCH and support Title V administratively. Senior level leadership and program staff includes:

- ***Rashmi Travis***, ***MPH, CHES, Director, Bureau of Family, Maternal and Child Health*** has 12 years of local public health experience and currently serves as Bureau Director at the state level. She possesses a dual bachelor's degree in Microbiology and Communications and a Master's of Public Health Degree with a concentration in Behavioral and Community Health Sciences. She is a Certified Health Education Specialist.
- ***Brenda Fink***, ***A.C.S.W., Director, DFCH*** has over 35 years of clinical and administrative public sector experience at both local and state levels, directed toward improving the lives of at-risk children, families and adults. Ms. Fink is administratively responsible for managing the majority of Michigan's MCH services and initiatives using a life course approach that seeks to address equity and social determinants of health.
- ***Lonnie Barnett***, ***MPH, Director, CSHCS Division*** has over 20 years of state and local public health experience in a variety of areas including community health assessment, planning, policy and primary care systems development. Mr. Barnett has served as the Title V CYSHCN Director since 2011.
- ***Stan Bien***, ***MPA, Director, WIC Division*** has over 37 years of state-level experience in public health, administration and nutrition programs. Mr. Bien was appointed by USDA and U.S. Secretary of Agriculture to the National WIC Advisory Council and elected by his peers to chair the council. He was elected to the Executive Committee of the National WIC Association and recently served as its Treasurer.
- ***Sarah Davis, MPA, Departmental Specialist, Bureau of Family, Maternal & Child Health*** has 15 years of work experience in the public and private sectors, including eight years of state-level experience in the child abuse and neglect prevention field.
- ***Paulette Dunbar-Dobynes***, ***Women and Maternal Health Section Manager*** has over 30 years of state-level experience working in maternal and child health, overseeing a range of programs such as Title X Family Planning, the Maternal & Infant Health Program, Infant Mortality Prevention and Maternal-Infant Death Review.
- ***Nancy Peeler***, ***Early Childhood Section Manager*** has over 30 years of experience working in research impacting early childhood development, and in local and state-level service and early childhood system design and implementation.
- ***Carrie Tarry***, ***MPH, Child, Adolescent & School Health Section Manager*** has over 15 years of state-level experience working in child health, adolescent and school health, and teen pregnancy prevention programs and initiatives.
- ***Patti McKane, MCH Epidemiology Section Manager*** has over five years of state-level experience with epidemiologic analysis and interpretation to inform and guide MCH program leaders and policymakers about the health of MCH populations.

The following individuals (including parents, CSHCN and their families) also serve critical roles in supporting Title V work:

- ***Karen Wisinski, Early Hearing Detection Intervention Parent Consultant, Infant Health Unit, Early Childhood***

Section, is the parent of a child who is hard of hearing and is dedicated to guiding families through diagnosis, acceptance, intervention and advocacy related to their children's deafness or hearing loss.

- ***Candida Bush, Certified Family Life Educator, Director, Family Center for CYSHCN*****,** is a parent of two children with special health care needs and has over 25 years of experience working to support, empower and increase access to services for CYSHCN.
- ***Bambi VanWoert, Parent Consultant, Family Center for CYSHCN****,* has over 25 years in the dental and health care fields and has extensive training in Autism strategies. She is a caregiver to a child with Autism.
- ***Kristy Medes, Parent Consultant, Family Center for CYSHCN,*** is a parent of two children with special health care needs and has over 10 years of experience working with families and children to connect them with community-based resources and supports.
- ***Lisa Huckleberry, Parent Consultant, Family Center for CYSHCN,*** is a parent of a child with special health care needs and has over 10 years of experience advocating, educating and supporting individuals with special health care needs.
- ***Amanda Larraga, Secretary/Administrative Assistant, Family Center for CYSHCN*****,** is a parent of a child with special health care needs and has over three years of experience working to raise awareness and increase services to children with special health care needs.

Several projected shifts are expected to occur over the next five years related to the MCH workforce, including the need to build additional state infrastructure across key areas of maternal and child health such as administration and program coordination, epidemiologic support and data analysis. Key positions that were historically established as full-time contractual staff may also be moved into civil servant positions. More details on the MCH workforce are included in Section II.F.2.

MDHHS promotes and provides culturally competent services through several mechanisms, many of which are coordinated through the Practices to Reduce Infant Mortality through Equity (PRIME) initiative. PRIME supports MCH staff training to understand equity concepts and to focus programming and policy to consider historic, social, economic and environmental factors that impact MCH outcomes. Additionally, PRIME developed and piloted Health Equity Learning Labs with WIC staff with a goal of incorporating equity thinking, perspectives and action into daily work responsibilities. After participating in a Lab, WIC staff developed a plan to increase outreach to the American Indian community. The plan is currently being piloted.

The PRIME Local Learning Collaborative (LLC) was established in 2011 and includes members from Healthy Start projects, local health departments and community-based organizations. The LLC was formed to share local lessons learned from addressing racism and health equity to improving maternal and infant health. The LLC has disseminated information on their experiences with other stakeholders throughout Michigan. LLC members have also provided input in shaping the practices and policies developed in PRIME for application at the state level.

PRIME also conducted Michigan's first PRAMS survey for mothers of American Indian infants. The process included development of MOUs for each tribe and data agreements with the Inter-Tribal Council of Michigan (ITCM) and the Great Lakes Inter-Tribal Epidemiology Center. Cultural sensitivity training was developed in collaboration with ITCM and provided to staff that made calls to mothers, which resulted in a 50% response rate. PRIME also disseminated Michigan's first Health Equity Status Report highlighting 14 indicators related to the social context in which women and children live.

The Health Disparities Reduction and Minority Health (HDRMHS) Section also promotes the provision of culturally competent services. HDRMHS sponsored a BRFS for Arab/Chaldean Americans, Hispanic/Latinos and Asian Americans. HDRMHS was awarded an Office of Minority Health grant that led to a 'Developing Culturally and Linguistically Appropriate Services through the Lens of Health Equity' workshop available to MDHHS staff and partners. To strengthen broad community partnership and address some aspect of racial and ethnic health disparities, HDRMHS funds agencies through its Capacity Building Grant Program. It also developed a Health Equity Toolkit to increase awareness around health and racial equity.

MDHHS is supporting the provision of culturally competent services through initiatives such as a data inventory and quality improvement project to standardize collection and use of race, ethnicity, sex, language and disability status data. The project has expanded to include six additional measures including a postpartum care measure. Additionally, MDHHS Human Resources includes a question on health equity in hiring, and developed managerial annual performance evaluations that include a measure related to inclusion of equity work or addressing disparities.

MCH programs also implement specific strategies to provide culturally competent services. For example, the Home Visiting

Program developed contractual requirements to use specific data analysis (Kitagawa) to develop outreach plans to enroll the most at-risk moms. This method uses data analysis of infant mortality disparities to identify minority populations with the greatest need and aids in setting recruitment goals.

II.B.2.c. Partnerships, Collaboration, and Coordination

While the needs assessment did not include a formal assessment of partnerships, BFMCH has continuous internal discussions and will consider options for completing a formal assessment of its MCH partnerships in the future. Currently, the ability to meet MCH population needs with a coordinated approach is facilitated by the organizational structure of BFMCH, which allows for collaborative work and sharing of best practices across divisions and programs. In addition to CSHCS, the DFCH manages programs within the scope of reproductive health; perinatal and infant health; and child, adolescent and school health. The BFMCH is located in the Population Health and Community Services administration, as are the Bureau of Local Health and Administration Services (Vital Records and Health Statistics, Chronic Disease and Injury Control which is where the oral health office resides) and the Bureau of Disease Control, Prevention and Epidemiology (Immunizations, Lifecourse Epidemiology and Genomics, Communicable Disease). Other administrations within MDHHS include Health Services and Family Support where the state Medicaid program is housed and the Behavioral Health Services Administration.

MDHHS has long-standing relationships with numerous public and private organizations and service providers to carry out the scope of work within the MCH Block Grant. MDHHS contracts with LHDs, making Title V MCH Block Grant funds available to address identified MCH needs within their jurisdictions through local program implementation and direct service delivery. MDE is a close partner in numerous programs supporting early childhood, school health and child and adolescent health at the state, intermediate and local school district levels. MDE and MDHHS have a long history of integrating funding around early childhood, Child and Adolescent Health Centers, and Hearing and Vision school-based screenings. They have created shared state-level positions to address school nursing and social-emotional health support needs in local districts. MDHHS also has strong collaborative partnerships with the Michigan Family to Family Health Information Center and Parent to Parent of Southwest Michigan.

MDHHS also partners with many non-governmental organizations. Advocacy organizations such as the Michigan Association for Local Public Health, Maternal and Child Health Council, Early Childhood Investment Corporation, School-Community Health Alliance of Michigan, Michigan Association of Health Plans, Michigan Health and Hospital Association, Michigan Family Voices, Michigan Alliance for Families and Michigan Primary Care Association provide a voice for policy and funding considerations. 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 advocacy efforts and offer services (e.g., 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 engage the consumer voice through consumer representation on various permanent and ad-hoc advisory boards, councils and task forces.

III.D. Financial Narrative

	2015		2016	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$18,682,500	$18,033,339	$18,734,500	$18,705,857
State Funds	$41,309,700	$44,147,168	$42,520,600	$41,384,612
Local Funds	$0	$0	$0	$0
Other Funds	$1,009,300	$469,940	$1,008,900	$478,187
Program Funds	$67,522,400	$63,984,361	$67,996,600	$62,550,223
SubTotal	$128,523,900	$126,634,808	$130,260,600	$123,118,879
Other Federal Funds	$316,990,885	$289,178,732	$309,508,839	$303,421,934
Total	$445,514,785	$415,813,540	$439,769,439	$426,540,813

	2017		2018	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$19,025,100	$20,986,297	$18,959,000	
State Funds	$50,849,000	$40,501,426	$45,199,700	
Local Funds	$0	$0	$0	
Other Funds	$450,000	$562,110	$500,000	
Program Funds	$68,027,100	$63,683,177	$68,201,100	
SubTotal	$138,351,200	$125,733,010	$132,859,800	
Other Federal Funds	$320,292,289	$289,596,875	$373,642,410	
Total	$458,643,489	$415,329,885	$506,502,210	

	2019	
	Budgeted	**Expended**
Federal Allocation	$19,193,200	
State Funds	$46,999,800	
Local Funds	$0	
Other Funds	$500,000	
Program Funds	$68,309,200	
SubTotal	$135,002,200	
Other Federal Funds	$381,595,500	
Total	$516,597,700	

III.D.1. Expenditures

Financial Narrative Overview

The 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. Approximately one-third of Title V funding supports Children with Special Health Care Needs (CSHCN) and an additional one-third supports the MCH work of 45 local health departments across the state. The remaining one-third of Title V funding supports other critical MCH priorities such as regional perinatal care systems, immunization, lead poisoning prevention, oral health, infant safe sleep and breastfeeding initiatives, reproductive health, infant and maternal mortality reduction strategies, health equity initiatives, and PRAMS. State general funds are used for Michigan's required state match. To assure alignment with Title V requirements, a Title V budget workgroup meets throughout the year to review Michigan's MCH expenditures across all program and budget areas. Expenditures for FY 2017 and budget plans for FY 2019 are discussed in Sections III.D.1 and III.D.2, respectively.

Expenditures (FY 2017 Annual Report Year)

In FY 2017, Title V funds were spent on an array of MCH programs and initiatives. This 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 79% of Michigan's state match is comprised of state general funds for CSHCS medical care and treatment. The remaining 21% includes state general funds that support health and wellness initiatives, family planning local agreements, prenatal care and outreach, non-emergency medical transportation for CSHCN, and bequests for care and services for CSHCN. Fluctuations in actual State MCH Funds expended can occur each year based on significant one-time costs for CSHCS medical care and treatment. Form 2, line 5, "Other Funds" in the Annual Report Expended represents the Children with Special Needs Fund. Approximately $1 million was authorized for FY 2017, but CSHCS only spends the earnings of the fund, which is approximately $500,000 per year. 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 also supported by a variety of other federal funds in FY 2017 including: Women, Infants and Children (WIC); State Systems Development Initiative; Title XIX (Medicaid); Oral Health; Vaccines for Children; and Title X (Family Planning). MCH priorities across the Title V population health domains were supported by federal and state dollars in FY 2017. For example, in the Title V child health domain, a state priority is to foster safer homes, schools and environments with a focus on prevention. Michigan's performance measures for this state priority focus on safe sleep environments and lead poisoning prevention. Other federal awards help 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 is 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; and a maximum of 10% of total funding can be expended for Title V administration. In FY 2017, expenditures were tracked by CSHCN; preventive and primary care for children ages 1-21; pregnant women, mothers and infants; and other. Earmarked expenditures track the required amount, variance, percent of total and percent required to assure legislative compliance. In FY 2017, 35% of Title V expenditures were for medical care and treatment for CSHCN; 33.7% of expenditures were for preventive and primary care for children (including immunizations, oral health, Local MCH, Family Planning for adolescents, lead poisoning prevention, and teen pregnancy prevention); and 5.2% of expenditures were for Title V administrative costs. The remaining 26.1% of expenditures were for pregnant women, mothers, infants and others. Funding for these populations supported safe sleep, Local MCH, pregnancy prevention, Perinatal Care System Quality Improvement Collaboratives, and surveillance mechanisms such as maternal mortality surveillance and fetal and infant mortality reviews.

To assure the 30/30/10 requirement is properly documented and to record expenditures by the MCH Pyramid of Services, the Local MCH (LMCH) program has specific budget project titles in the Electronic Grants Administration & Management System (EGrAMS). The FY 2017 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 LMCH project titles in EGrAMS to record and document expenditures for medical care, treatment and case management services.

For the 30% children requirement, Michigan tracks related expenditures including immunizations for children and adolescents, oral health services for school-age children, Family Planning expenditures for adolescents, teen pregnancy prevention, and expenditures for childhood lead poisoning prevention and case management, as well as special projects such as services for children with Fetal Alcohol Syndrome Disorder (FASD).

Title V administrative costs account for less than 10% of the budget. In FY 2017 expenditures were 5.2% of the total budget. Administrative expenditures in FY 2017 were slightly higher than budgeted due to establishment of a one-time information technology project to support the continued development and enhancement of the CSHCS database. Database enhancements led to improved monitoring and reporting for care coordination and case management services and improved support for non-emergency medical transportation processing. In Form 2, Annual Report Expended, the following line items were greater or less than 10% of the Annual Report Budgeted, for the following reasons:

- Federal Allocation, FY 2017 Annual Report Expended, was higher than budgeted due to accounts payable adjustments and contracts not expending their total allocations in the previous fiscal year, resulting in one-time increased funding and one-time expenditures in FY 2017.
- Line 1A, Preventive and Primary Care for Children, FY 2017 Annual Report Expended, was higher than budgeted due to realignment of expenditures in Preventive and Primary Care for Children.
- Line 3, State MCH Funds, FY 2017 Annual Report Expended, was lower than budgeted due to lower than anticipated Children's Special Health Care Services general funds available for the Title V state match.
- Line 5, Other Funds, FY 2017 Annual Report Expended, was higher than budgeted due to greater than anticipated revenue from the Children with Special Needs Fund.

Local MCH

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

Table 1 summarizes LHD spending 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 plus adolescents 10-19.

Table 1. LMCH Spending by MCH Pyramid of Services

MCH Category	Number of LHDs Selecting	Amount Expended	Number of Clients Served
Direct Services Children	17	$1,501,961	102,093
Direct Services Women	7	$226,155	2,823
Enabling Services Children	25	$1,169,638	26,727
Enabling Services Women	31	$1,990,780	67,012
Public Health Functions & Infrastructure (included LMCH needs assessment funding)	45	$2,273,864	172,201
Total		**$7,162,398**	**370,856**

For FY 2017, each LHD was encouraged to select at least one NPM in addition to SPMs and/or locally-identified measures. Eleven LHDs chose one performance measure, 16 chose two performance measures, seven chose three performance measures, five chose four performance measures, and four chose five performance measures. The two largest health departments chose six and eight performance measures, respectively. Table 2 summarizes the number of LHDs choosing each performance measure and the amount expended. Note that this table reflects Michigan’s “original” NPMs and SPMs, which were active in FY2017.

TABLE 2. LMCH by Performance Measures

Performance Measure	Number of LHDs selecting	Amount Expended
NPM 1 (Well-woman Visit)	5	$242,421
NPM 3 (Risk-appropriate Perinatal Care)	0	$0
NPM 4 (Breastfeeding)	16	$653,212
NPM 6 (Developmental Screening)	2	$414,392
NPM 10 (Adolescent well-visit)	6	$143,539
NPM 11 (Medical Home)	2	$7,761
NPM 12 (Transition)	3	$58,029
NPM 13 (Preventive Dental Visit)	7	$270,031
SPM 1 (Lead Poisoning Prevention)	11	$603,274
SPM 2 (Safe Sleep Environment)	9	$275,360
SPM 3 (Depression across the Life Course)	5	$315,133
SPM 4 (Provision of Medical Services and Treatment for CSHCN)	6	$228,025
SPM 5 (Immunizations)	14	$1,402,453
Local Performance Measure defined by LHD	24	$1,951,614
MCH Needs Assessment (Began in FY 2017)	45	$597,154
TOTAL		**$7,162,398**

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. The estimated total count of individuals served was 491,940. The Form 5a count reflects individually-delivered direct or enabling services (i.e., the top two levels of the MCH Pyramid of Services) without full reimbursement. This count includes individuals who received a service funded by total federal and non-federal dollars as reported on Form 2, line 8. For FY 2017 reporting, data on individuals served were collected from Local MCH, Nurse Family Partnership, Rural Home Visiting, Centering Pregnancy/Parenting, Perinatal Oral Health, 3rd grade sealants, childhood lead support and education, safe sleep, Family Planning, Fetal Alcohol Syndrome Disorder, immunizations, Michigan Adolescent Pregnancy and Parenting Program (MI-APPP), Taking Pride in Prevention, bereavement counseling 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 levels of the MCH Pyramid of Services. 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, Title V served an estimated 41% of pregnant women, 100% of infants, 43% of children, 8% of CSHCN and 4% of others which includes males and non-pregnant women of childbearing age. For more details, see the Form 5 field notes.

Michigan is exploring a variety of ways to expand the reach of Title V. For example, Regional Perinatal Care System Quality Improvement (RPCSQI) Collaboratives began work in one region of the state in 2015. Each year since, additional RPCSQIs have expanded throughout the state and six out of ten prosperity regions are now working on RPCSQI, with support from Title V. Other areas of Title V expansion in FY 2017 included the statewide LMCH needs assessment process, PRAMS oversampling, and a health equity initiative.

Payer of Last Resort

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

Challenges

There are some challenges related to the Title V budget. For many years, Title V supported a variety of MCH projects and served as a gap-filling funding source. With the Title V transformation and the most recent five-year needs assessment, new state priorities were identified. Previous state priorities may not have reemerged as priority issues, but still required funding to continue the level of service provision. Likewise, some of the current state priorities are underfunded in relation to other emerging or priority needs. For example, the Flint water crisis necessitated MCH expenditures due to an unforeseen event. Some priority areas, especially in the adolescent health population domain, currently rely on other funding sources such as state general funds and competitive grants.

Budget (FY 2019 Application Year)

Together with state general funds and other federal funds, the Title V MCH block grant is used to address Michigan's MCH priority needs, improve performance related to targeted MCH outcomes, and expand systems of care for the MCH and CSHCN populations. Michigan's Title V Leadership Team—which includes the Title V MCH director, Title V CSHCN director, and key Title V administrative staff—meets on a regular basis to discuss all aspects of Title V, including the budget and how federal and non-federal funds are used to address the state's MCH needs. Table 1 illustrates projected Title V funding allocations for FY 2019.

Table 1. Title V FY 2019 Appropriations

Appropriation Name	FY 2019 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
Administration	$507,400
MCH Special Projects	$374,100
Dental Programs	$335,400
Sudden Infant Death Syndrome Prevention	$321,300
Pregnancy Prevention Services	$185,500
Bequests for Care and Services	$105,200
Indirect Costs	$64,500
Total	**$19,193,200**

Through state level programs and initiatives as well as local health department activities, these appropriations will be used to support work related to the following National Performance Measures (NPMs):

- 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 (Preventive Dental Visit)

At the state level, NPMs 4, 10, and 12 do not currently have direct Title V allocations in FY 2019. This is in part due to the most critical and immediate MCH needs, as well as the need to fill funding gaps that would otherwise exist without Title V funding. Additionally, activities related to NPM 10 are largely supported through state general funds for Child and Adolescent Health Centers, which are administered by the Division of Child and Adolescent Health within the Bureau of Family Health Services (BFHS). NPM 4 and NPM 12—which are housed within the BFHS and CSHCS, respectively—currently have program staff designated for state-level work. In FY 2019, the Title V program will revisit these NPMs to determine whether additional Title V support is needed. Notably, at the local level, health

departments have identified program work across all NPMs with the exception of NPM 3.

Title V funds will also be used at the state level to directly support the work of Michigan's State Performance Measures (SPMs), as follows:

- SPM 1 (Lead Poisoning Prevention)
- SPM 4 (Medical Care and Treatment for CSHCN)
- SPM 5 (Immunizations—Children)
- SPM 6 (Immunizations—Adolescents)

All SPMs have robust and continuing line item allocations in the FY 2019 Title V budget, as reflected in Table 1. The SPMs are no longer consecutively numbered because Michigan transitioned its "original" SPM 2 (Safe Sleep) to an NPM in 2018. Additionally, the original SPM 3 (Depression across the Life Course) was retired in 2018 and its adolescent focus has been integrated into NPM 10. In part, the decision to make changes to the selected NPMs and SPMs in 2018 was to better align with the Title V budget and budget priorities. Local health departments will also be implementing work on the SPMs, as indicated in their work plans.

The state programs and activities that will support work on the above NPMs and SPMs in FY 2019 are detailed in the state action plans. Furthermore, in 2018 local health departments—which collectively receive approximately one-third of Michigan's Title V funding—completed an LMCH needs assessment process that began in 2017. The results of these community-based needs assessments have informed the creation of FY 2019 LMCH plans for each local health department, including a focus on the state's identified NPMs and SPMs as well as distinct local priorities and needs. Preliminary results indicate that the top five Title V needs assessment priorities at the local level (in order of prevalence) are breastfeeding, well-woman visit, safe sleep, depression across the life course, and adolescent well-visit. The top three performance measures selected in FY 2019 within LMCH plans are NPM 4 – Breastfeeding (16 LHDs); SPM 5 and 6 – Immunizations (12 LHDs), and SPM 1 – Lead Poisoning Prevention (11 LHDs). Sixteen local health departments selected a local measure based on their MCH needs assessments.

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 2019, this commitment is again reflected in Form 2 (Lines 1A, 1B, and 1C) in the Application Budgeted. For FY 2019, 35.8% of the total Title V budget is designated for preventive and primary care for children; 36.4% is designated for Children with Special Health Care Needs; and 3.9% is designated for administrative costs. Title V leadership will hold budget discussions throughout the fiscal year (in coordination with our MDHHS Health Services Budget Division liaison) to assure that the budget and spending are on track, and to address any new or unplanned MCH needs.

Form 2

MDHHS meets the required Title V state match which is a $3 match in non-federal funds for every $4 of federal Title V funds. Michigan exceeds the required match in budgeting. Michigan's "State MCH Funds" (Form 2, line 3) of $46,999,800—which is also considered the state's applied Maintenance of Effort for Title V—is composed of state general funds from the following appropriations: medical care and treatment for CSHCN; health and wellness initiatives; Family Planning local agreements; prenatal care and outreach; CSHCS administration; non-emergency medical transportation; and bequests for service. The majority of this match (approximately 85%) 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. Form 2, line 5, "Other Funds" reflects income from the Children with Special Needs Fund. Michigan's "Program Income" (Form 2, line 6) includes WIC

rebates and Newborn Screening follow-up. The majority of this program income (approximately 88%) is related to WIC rebates. Other federal funds anticipated in FY 2019 are indicated in Form 2, line 9, and are similar to funds noted in the Expenditures section.

Form 3

Each year, Michigan's Title V administrative staff completes an extensive assessment of "Types of Individuals Served" and "Types of Services" provided by Title V funding at the state and local level, as reflected in Form 3a and 3b, respectively. Title V funds support essential services as identified in the Title V MCH Pyramid of Services (i.e., direct services, enabling services, and public health services and systems). As explained in the Expenditures section, budget categories in the EGrAMS system for LMCH reflect the Pyramid of Services categories. Additionally, local health departments are required to set up work plans and activities based on both the NPM/SPM and service categories. For state level activities, all state Title V budgets and expenditures are assessed to determine where activities fall in the Pyramid of Services.

For example, Michigan's Title V state priority need to "Reduce barriers, improve access, and increase the availability of health services for all populations" 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 to "Support coordination and linkage across the perinatal to pediatric continuum of care" aligns with both the middle (enabling services) and bottom level (public health services and systems) of the pyramid through NPM 4 and NPM 3, respectively. State level activities for NPM 4 (Breastfeeding) focus on breastfeeding education and support to help improve breastfeeding initiation and duration rates. State level activities for NPM 3, which focus on risk-appropriate perinatal care, are being implemented through Regional Perinatal Quality Collaboratives and other systems-level work.

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 Bureau of Family Health Services (BFHS) which includes the Division of Maternal and Infant Health, the Division of Child and Adolescent Health, the Division of Immunization, and the Women, Infants and Children (WIC) Division. The Children's Special Health Care Services (CSHCS) Division, which is housed in the Bureau of Medicaid Care Management and Quality Assurance within the Medical Services Administration, serves as the Title V CSHCN program and is active in Michigan's Title V leadership. Title V activities and services in Michigan align with the broader purpose of Title V, including:

- Assuring access to quality MCH services for mothers and children
- Reducing the infant mortality rate
- Increasing the number of children appropriately immunized against disease
- Providing access to rehabilitative 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, the BFHS and CSHCS serve as coordinators and conveners of initiatives and partnerships that support and guide Michigan's MCH work. For example, in 2017 the BFHS created a new Maternal Infant Strategy Group (MISG). The purpose of the MISG is to strategically align maternal and infant health goals between maternal and infant stakeholders as well as public and private partners to improve health outcomes for mothers and infants in Michigan. MISG membership includes MCH decision makers from the public and private sector, including clinical care and sectors that address issues related to social determinants of health. The MISG will help facilitate the systems changes needed to align maternal and infant health goals and strategies, facilitate collaboration among stakeholders, and provide guidance on achieving health equity. The MISG has a vision of zero preventable deaths and zero health disparities for Michigan's MCH population.

The BFHS also coordinates the Infant Mortality Advisory Council, Michigan Alliance for Innovation in Maternal Health, the Michigan Oral Health Coalition, the Safe Sleep Advisory Council, the Michigan Home Visiting Conference, the Michigan Breastfeeding Network, and many other program-specific initiatives. It also funds and coordinates Regional Perinatal Quality Collaboratives. CSHCS coordinates the CSHCS Advisory Committee (CAC), which is comprised of professionals and family members who are involved in the care of children with special needs. The CAC makes policy recommendations and promotes public awareness of CSCHS.

The Title V program also works with and provides leadership to a broad range of partners including community health service systems such as local public health and Federally Qualified Health Centers; the private sector, especially managed care plans, nonprofit organizations, and MCH advocates; faith-based organizations; and universities. Within MDHHS, program and policy activities are coordinated with Medicaid, MIChild, mental health and substance abuse, 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. MDHHS, the Department of Education, and the Early Childhood Investment Corporation convene via the GSOT 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—including but beyond access to healthcare—shapes health outcomes. Therefore, our work to achieve optimum health for all Michigan families requires developing and applying a health equity lens; recognizing the impact of social determinants of health; implementing evidence-based programs and practices; addressing behavioral and physical health; and focusing on outcomes. The Title V program also recognizes the life course model, which emphasizes that early life experiences have a lasting impact on health and development. While each MCH program area concentrates on its respective stage of the life course, programs also coordinate with and complement adjacent life stages.

In 2018, MCH programs that support Michigan's NPMs and SPMs participated in a facilitated logic model process to strengthen the Title V program work. The goal of the process was to create logic models that illustrate the relationship between goals, strategies, outputs, and outcomes. Participants worked within their relevant population domain to assess current work plans and to create SMART objectives for their NPM or SPM. The resulting logic models were then used to inform the writing of this year's state action plan tables and narratives.

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 "develop and encourage measurable health, safety and self-sufficiency outcomes that reduce and prevent risks, promote equity, foster healthy habits, and transform the health and human services system to improve the lives of Michigan families."

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 the MDHHS in 2015—which resulted from a merger of the Departments of Community Health and Human Services—is a reflection of the state's commitment to effective, customer-focused systems that support physical and behavioral health and safety.

The state's MCH work utilizes research- and evidence-based practices and relies on national care standards from the American College of Obstetrics and Gynecology, American Academy of Pediatrics, American Dental Association, the Centers for Disease Control and Prevention, and others. Our commitment to continuous quality improvement is reflected in the monitoring of population data; investigation of health issues, such as the Hepatitis A outbreak; and education and empowerment around public health issues such as safe sleep, breastfeeding, and immunizations. To assure assessment across population groups—especially those with negative disparities—monitoring of subpopulation groups is conducted to capture data by geography, race, ethnicity, age, and other demographics. The MCH program also recommends and develops policy; promotes best practices and service models among local public health and clinical care systems; advocates for increased capacity within communities to provide high quality, accessible, culturally competent services; and supports the MCH workforce.

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

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

In this five-year cycle, Michigan has focused workforce development efforts on strengthening state level infrastructure across key maternal and child health (MCH) areas. Historically, Michigan used a small amount of Title V funding for state-level workforce infrastructure. Thus, it has been challenging to maintain or grow the MCH workforce across key positions in administration, program support, and epidemiology. To address these challenges, Michigan has utilized a small amount of additional Title V funding to support workforce infrastructure. The Title V program has also identified and filled high-need MCH positions and has worked with MDHHS Human Resources to standardize and streamline the hiring process.

Several state-level MCH positions have been backfilled or newly created during this five-year cycle, including:

- **Director, Bureau of Family Health Services (BFHS)**, provides leadership and oversight of Michigan's Title V block grant as well as administration of the Women, Infants and Children (WIC) Division, Division of Maternal and Infant Health, Division of Child and Adolescent Health, and Division of Immunization.
- **Director, Division of Child and Adolescent Health**, provides management and direction for programs and services related to child, adolescent, and school health as well as early childhood, home visiting and oral health.
- **Maternal Child Health Strategist**, researches and launches new initiatives that align priorities across BFHS and Title V. This position creates synergy within existing resources that are innovative, cross-cutting solutions that aim to integrate clinical care and public health.
- **CSHCS Policy and Program Development Section Manager**, provides oversight to staff responsible for medical transition services, specialty clinics, insurance premium payment benefit and billing assistance, as well as CSHCS policy efforts associated with hearings, policy development, and legal reviews for client eligibility and enrollment.
- **MCH Nurse Consultant**, provides oversight and coordination of MCH services funded through 45 local health departments.
- **Safe Sleep Program Coordinator**, provides oversight of Michigan's statewide program to develop and promote a consistent, comprehensive strategy to educate and support families, caregivers, and professionals to prevent infant sleep-related deaths.
- **Lead Prevention Program Coordinator**, facilitates planning, implementation and evaluation of Michigan's Childhood Lead Poisoning Prevention Program.
- Several key positions are currently in the process of being filled, including the Early On Coordinator, Home Visiting Epidemiologist, Health Equity Coordinator and Infant Mortality Reduction Coordinator.

In 2018 Michigan also experienced transitions with key MCH leadership positions, including retirements of the Maternal and Infant Health Division Director and the WIC Division Director. Transition plans are in place to ensure continuity of work.

In an effort to recruit and retain qualified MCH staff, BFHS has worked more closely with Human Resources to increase efficiencies within the hiring process. Standardized BFHS Hiring Procedures were created and disseminated to all BFHS hiring managers and additional technical assistance has been provided throughout the hiring process. Proactive strategies have also been employed to publicize vacant positions. Strategies include more broadly circulating civil servant positions through established MCH listservs or, when hiring affiliates, using additional advertisement and targeted postings.

Training and growth opportunities for Title V program staff, including family leaders from the Family Center, are continuously assessed to identify areas for professional development. Two recent opportunities included the

Health Equity Learning Labs and *Guiding NEAR* training. Three of the four divisions within the BFHS and Children's Special Healthcare Services participated in a multi-session Health Equity Learning Lab series in which program areas assessed existing policies, procedures, hiring practices, and informal processes to determine whether they are reflective of health equity and social justice principles. Staff then identified areas for growth and convened small teams to work on actionable items to ensure that internal processes and policies reflect our focus on health equity and reducing health disparities. The Guiding NEAR training provides a deep dive into NEAR science (neuroscience, epigenetics, ACEs and resilience) and its application. It is designed for emerging leaders in state government who will apply the learning to state policy and practice. The ultimate goal is to work with stakeholders to design programs and services that interrupt the progression of adversity for Michigan residents. Leaders from chronic disease, behavioral health, Children's Service Agency, and BFHS as well as staff from the Department of Education (MDE) and Department of Corrections were invited to attend this interdepartmental training.

Beyond these trainings, MCH staff participate in a wide range of conferences and professional development opportunities. For example, MDHHS hosts annual conferences that MCH staff attend, including Moving toward Solutions: Addressing Teen Pregnancy Prevention in Michigan, WIC Conference, Michigan Home Visiting Conference, Teen Parent Summit, and Maternal Infant Health Summit. An MCH team from Michigan, which includes a Parent Consultant, participates in the annual AMCHP conference. In FY 2019, Michigan also plans to offer two trainings on family partnership for MCH staff.

Finally, 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, Local Health Department Medicaid Outreach, Maternal Infant Health Program and others. Additional administrative match opportunities are being considered by MSA. Shared positions between MDHHS and MDE have enabled a funding structure to support staff that benefit both agencies including Michigan's first State School Nurse Consultant and a state-level Mental Health Consultant. Shared positions also exist across MCH sections, including a shared Communications Consultant focusing on infant mortality and home visiting and a shared Trauma-Informed Care Consultant between adolescent health and early childhood. MCH funding also supports epidemiology staff who are housed in the Bureau of Epidemiology and Genomics but directly support and work with MCH programs.

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

MDHHS strives to put the MCH service recipient at the center of programs, policies and plans. MDHHS respects the dignity of each individual and their respective culture and language, and considers these factors in program development and service provision. MCH programs understand the benefits of family and consumer partnership, including the ability to better identify and address unique population needs. Ultimately, understanding these needs helps to improve program outcomes and eliminate challenges or service barriers.

Specific strategies and the impacts of family partnerships are discussed throughout the Title V state action plans. Examples of partnerships within Michigan's MCH programs include the following:

- The Early Hearing Detection and Intervention (EHDI) program utilizes the Michigan Hands and Voices Guide By Your Side™ (GBYS) program. GBYS enables families who recently learned of a child's hearing loss to meet with parents of a child who is deaf or hard of hearing. 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. GBYS implemented a new program in which parents share their family stories at EHDI hospital site visits and hearing screening trainings. Arabic and Spanish speaking guides are also available to meet withfamilies.

- The Michigan Infant Safe Sleep State Advisory Committee includes parents as active partners. Parents and caregivers are involved in advocacy projects including sharing their stories at public events and creating training videos. MDHHS provides funding to 14 local health departments (LHDs) and the Inter-Tribal Council to develop and implement community-based safe sleep activities. LHDs involve parents in activities as parent educators, speakers and outreach workers. When developing educational materials or programming, parent and caregiver input is highly valued, both to obtain their perspective and to consider cultural and linguistic competence. The Infant Safe Sleep Program recently conducted focus groups with parents and other caregivers to gather information on attitudes and beliefs about safe sleep messaging. Results will be used to improve the effectiveness of messaging for diverse populations.

- The Parent Leadership in State Government (PLISG) initiative is an interagency effort designed to recruit, train and support parents so their voices can help shape programs and policies at the state and local level. Since 2007, several state agencies including MDHHS have collaboratively funded the PLISG. The PLISG Board includes representatives from funding agencies plus parent representatives. At least 51 percent of board members must be parents of children ages 0-18 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 which targets parents whose children use specialized services. Training topics include leadership skills; how to use your voice and tell your story; effective meetings; and handling conflict. As of September 2017, 1,250 parents have participated in the training. Participants indicate the types of public services they have used, including MCH services. For example, 73.8% of participants reported WIC; 52.3% reported MI Child; 36.9% reported Healthy Kids Dental; and 20.8% reported home visiting in 2017.

- Michigan's Maternal, Infant, and Early Childhood Home Visiting (MIECHV) grants have integrated parent and caregiver involvement. MIECHV patterned its approach on previous state-level collaboration with parents for Part C, Great Start Parent Coalitions, and Project LAUNCH. MIECHV communities receive funding to convene a home visiting Local Leadership Group (LLG). The LLGs are comprised of representatives from Head Start, substance abuse, child abuse and neglect councils, public health, mental health, education, Great Start staff, and parents who have participated in home visiting. Parents participate in MIECHV quality improvement teams and help to ensure the consumer voice is part of decision-making and policy development.

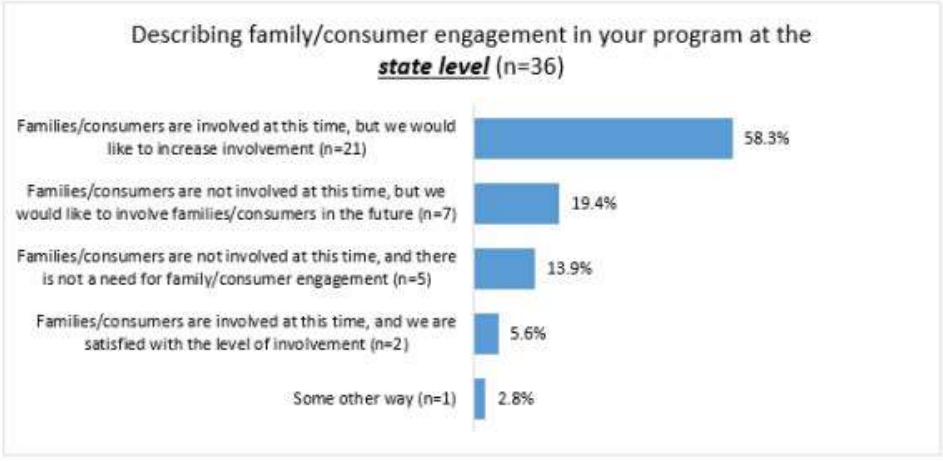
Children's Special Health Care Services (CSHCS) uses a multifaceted approach to ensure that services reflect the needs of the population served. A critical component to administering services is the involvement of families of children and youth with special health care needs (CYSHCN) in decision making.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

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

As illustrated by this discussion, parent and family engagement is integrated in many MCH programs. To further support family partnership, in 2017 the Title V program conducted a survey of state-level MCH programs to obtain "baseline" information about engagement efforts and to identify priority areas for increased support, especially related to training and technical assistance. The survey was adapted with permission from a family engagement survey administered by the Association of Maternal and Child Health Programs and included 31 questions. The survey had a total of 37 responses representing 32 programs within BFHS; three programs within CSHCS; the Childhood Lead Poisoning Prevention Program; and Oral Health. Responses included (but were not limited to) MCH program areas that align with a Title V performance measure and/or receive Title V funding.

Extended results of the survey were included in last year's Title V application and are included as a Supporting Document to this application; highlights are below. The survey provided insight into levels and types of engagement, the benefits of engagement, and barriers. For example, Figure 1 indicates current levels of engagement.

Figure 1. Level of Engagement



Figures 2 and 3 depict engagement strategies at the state and local level. Only respondents who reported current family engagement answered this question.

Figure 2: State Strategies

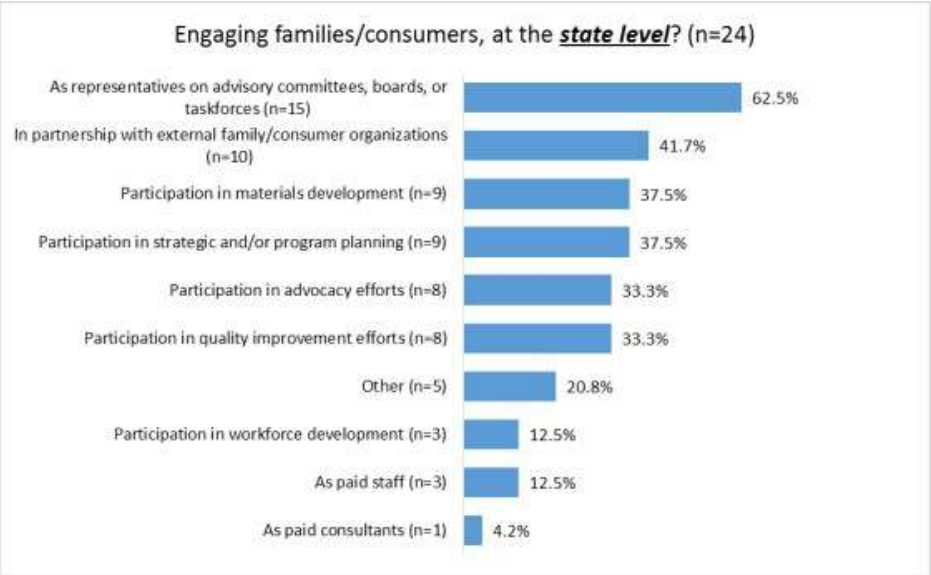
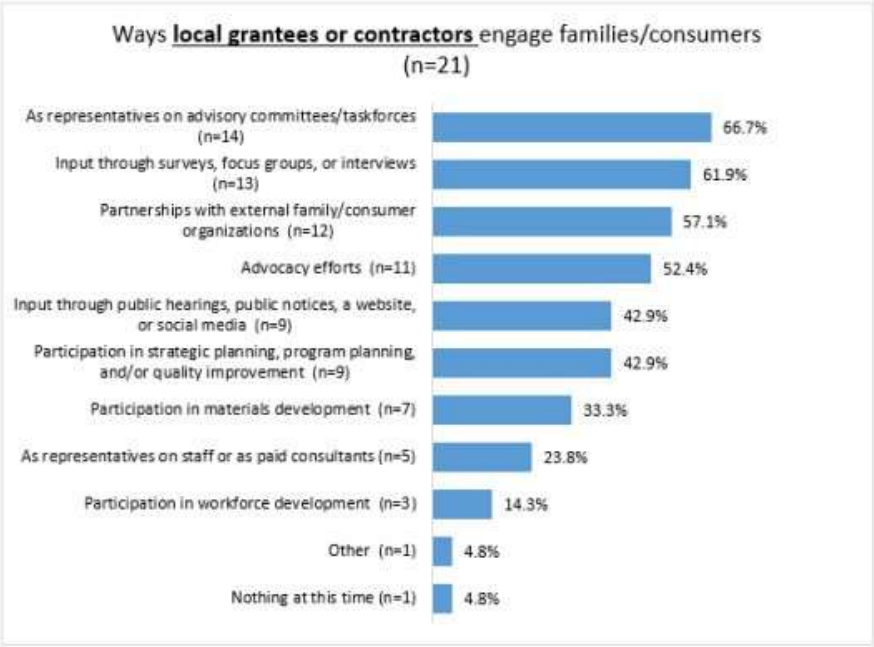
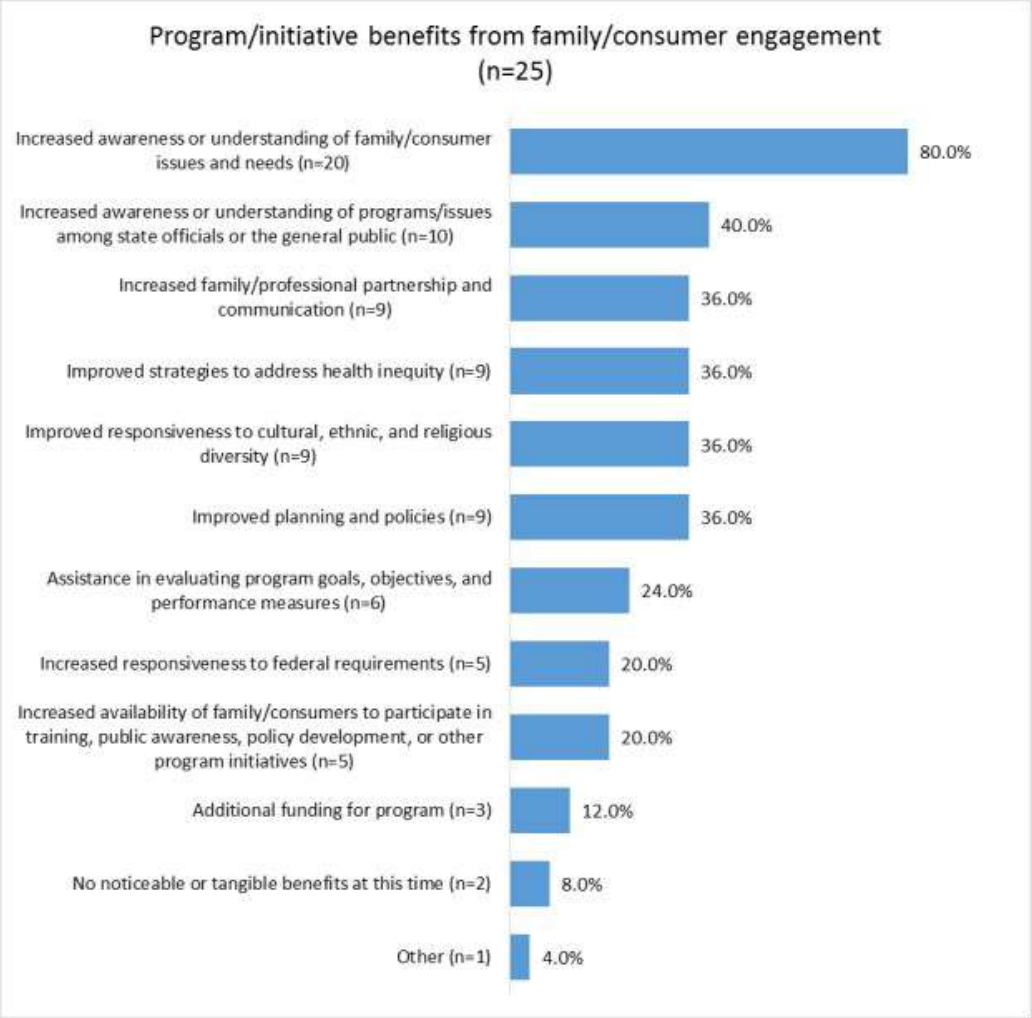


Figure 3: Local Strategies



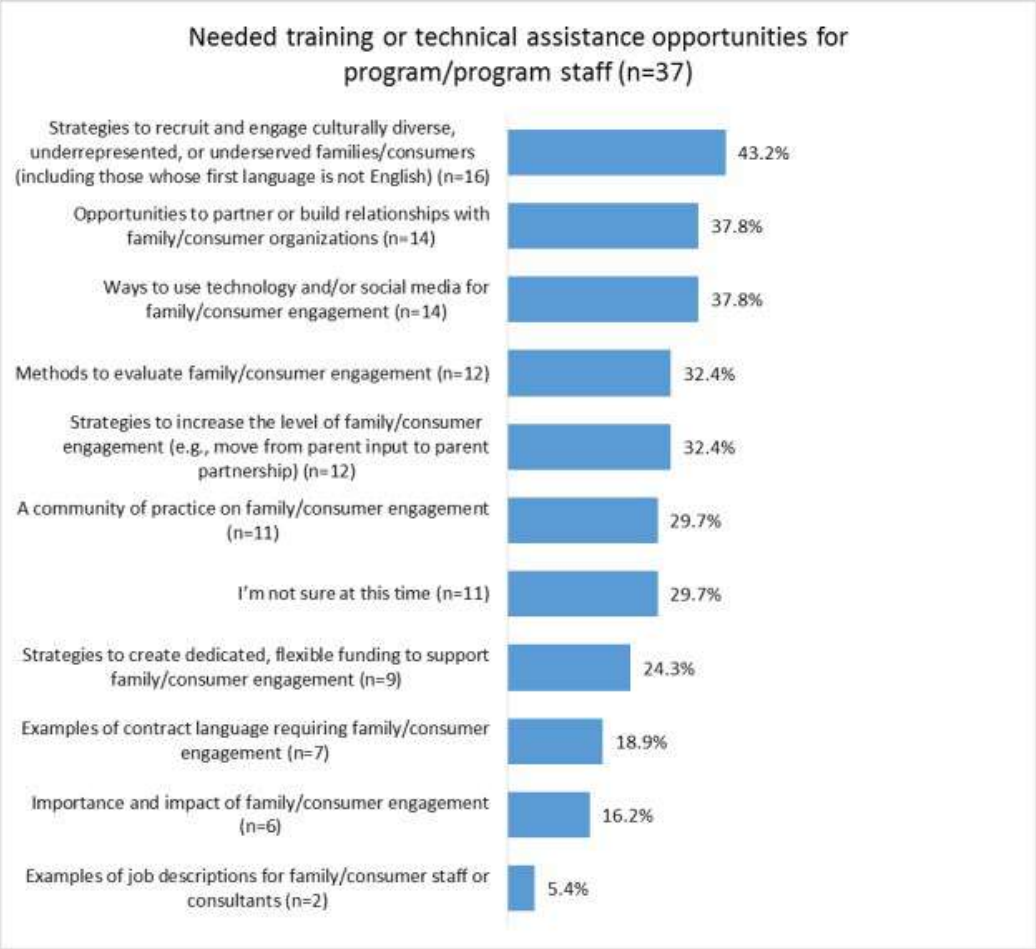
Respondents indicated an array of benefits from engagement, with the majority (80%) indicating an increased awareness or understanding of family/consumer issues and needs.

Figure 4: Benefits of Engagement



Respondents also identified training or technical assistance needs.

Figure 5: Training Needs



Overall, the findings indicated that many MCH programs engage families and recognize the benefits of this partnership. The findings also indicated a desire to strengthen and expand engagement efforts.

As an initial response to these findings and specifically the identified training needs, Title V plans to partner with two external organizations in FY 2019 to present two distinct workshops on family engagement. The first workshop will focus on effective engagement across the service population and strategies for recruitment and retention. The second workshop will focus on opportunities and benefits of partnering with family leadership organizations.

Michigan's Title V program is also taking steps to increase peer-to-peer sharing and support. As a first step, the Family Center presented to the Title V Steering Committee in March 2018. The Family Center director, who is also a Steering Committee member, shared information about the purpose and structure of the Family Center; opportunities to engage families, the family/professional partnership model; and possibilities to support and provide consultation to other MCH programs.

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

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

Michigan's SSDI activities are primarily aimed at building on existing coordination with the state Title V program and capitalizing on MCH epidemiology resources to inform the Title V block grant. The MCH Epidemiology Section Manager meets regularly with key Title V staff to make sure that epidemiologic needs are being met. Epidemiologists within the MCH Epidemiology Section work closely with Title V program staff to provide epidemiologic support to the ongoing Title V needs assessment and regularly review and update Title V performance measures and annual objectives. The MCH Epidemiology Section also assists in evaluation of the effectiveness of the selected performance measures and provides 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. MCH epidemiologists work closely with data analysts and statisticians in the DVRHS and have direct access to files relevant to their work area. In addition, specialized data sets can be provided upon request. Access and use of national survey data as well as 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. Based on the results of these data linkage assessments, MCH Epidemiology and MCH program staff will meet to develop a list of linkages that are still needed to further support the Title V program. Barriers that currently prevent these linkages from being established will be documented. Furthermore, to monitor progress toward goals, trends and subgroup analysis must be analyzed, interpreted and communicated not only to Title V staff but to MCH stakeholders working to reduce infant mortality and other adverse birth outcomes in their communities. To aid this process, the MCH Epidemiology Section Manager routinely evaluates MCH Epidemiology Section staff position descriptions to ensure there is adequate support for the continued analysis, interpretation and evaluation of the Title V state and national performance measures.

Even with the large number of linked data files that are currently available to the MCH Epidemiology Section, there is always room to expand our data capacity. Thus, the MCH Epidemiology Section will look into the possibility of establishing several new MCH-related data linkages, including Birth Defects Registry data linked to Medicaid, CSHCN, and PRAMS as well as Medicaid data linked to Vital Records and Immunizations. The MCH Epidemiology Section would also like to work with the DVRHS to improve the timeliness of the link between Birth Defects Registry and birth certificate data. Two emerging issues that the MCH Epidemiology Section is focusing on are neonatal abstinence syndrome (NAS) and maternal mortality. NAS data from the Michigan Inpatient Database (MIDB) has recently been made available to the MCH Epidemiology Section through an agreement between MDHHS and the Michigan Health and Hospital Association. The MCH Epidemiology Section will analyze the NAS data from the MIDB in accordance with Title V and MCH program needs. Furthermore, the MCH Epidemiology Section Manager will initiate discussions with appropriate MCH program staff regarding the development of expanded maternal mortality and home visiting data systems.

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

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

As of April 2018, 1,713,580 beneficiaries were enrolled in the Medicaid Health Plans (MHPs) and 636,313 beneficiaries were enrolled in fee-for-service. Medicaid employs a population health management framework to deliver care to maximize the health status and experience of beneficiaries and to lower cost. Medicaid supports contracted MHPs in achieving 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. Medicaid requires MHP annual reporting of the Healthcare Effectiveness Data and Information Set and employs a Pay for Performance Incentive Program that includes access, process and outcome metrics that support women and children.

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

One of the largest program 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. In FY 2017, MIHP provided services to 19,909 women and 23,038 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 BFHS and MSA. BFHS is responsible for developing MIHP procedures, certifying and monitoring providers, and providing technical assistance to providers. MSA is responsible for promulgating Medicaid policies, helping providers to implement Medicaid policies, entering into and monitoring contracts with MHPs and making payments to Medicaid providers. Effective January 1, 2017, MIHP services provided to beneficiaries enrolled in an MHP are administered by the MHPs; all MIHP services provided to MHP enrollees are coordinated and reimbursed by the MHP. BFHS and Medicaid focused collective efforts on a smooth and coordinated transition and continue to coordinate MIHP outreach and enrollment. MIHP has shown favorable effects on prenatal care, birth outcomes (e.g., prematurity, low birth weight), postpartum care, and well-child visits during the first year of life.

Since FY 2013, individuals with both CSHCS and Medicaid coverage are enrolled in an MHP. Of the approximately 34,000 CSHCS enrollees, 19,000 are dually enrolled in an MHP. MHPs are responsible for the medical care and treatment of CSHCS members while assistance with community-based services beyond medical care and treatment is provided through the local health department (LHD) CSHCS office. MHPs are responsible for coordinating and collaborating with LHDs and the Children's Multidisciplinary Specialty Clinics to make a wide range of essential health care and support services available to enrollees. MHPs are also responsible for the coordination and continuity of care for enrollees who require integration of medical, behavioral health and/or substance abuse services. Prior to FY 2013, MDHHS convened a collaborative team from Medicaid, CSHCS, BFHS, medical consultants, MHPs, parents, and other stakeholders to guide the transition process. MHPs and LHDs have formal agreements for data sharing, communication, quality coordination, care coordination and care planning. A CSHCS-specific Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey has been conducted. CAHPS scores for special populations including CSHCS have been included in the MHP Performance Bonus, and

CSHCS integration has been a component of the MHP onsite compliance review process.

MDHHS implemented the Healthy Kids Dental (HKD) program for children enrolled in Medicaid and CHIP. HKD provides a wide range of dental coverage and support services to approximately 1 million youth statewide; qualifying individuals include infants, children and pregnant women under the age of 21. Healthy Michigan Plan beneficiaries receive dental benefits through the MHP's dental provider network. MDHHS recently submitted a request to amend the Comprehensive Health Care Program 1915(b) waiver to expand managed care dental coverage for non-Healthy Michigan Plan Medicaid eligible pregnant women. This managed care dental benefit is intended to provide greater access to dental services and comprehensive prenatal care. The anticipated effective date of the amendment is July 1, 2018. BFHS and MSA are coordinating outreach and engagement efforts for these oral health programs via multiple avenues including MIHP and other home visiting networks.

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

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

- *Centers for Medicaid and Medicaid Services (CMS) Adult Medicaid Quality (AMQ).* This grant addressed early elective deliveries. The project resulted in a revision of MIHP maternal plans of care to ensure all pregnant women receive education on the importance of delivering at 39 weeks.
- *Center for Medicaid and CHIP Services' (CMCS) Maternal and Infant Health Initiative–A Focus on Women's Health*. The initiative aims to increase the rate of postpartum visits by 10% and improve the content of postpartum care. Medicaid facilitated the collaborative efforts with technical support from BFHS in partnership with four MHPs.
- *Adult Medicaid Quality: Improving Maternal and Infant Health Outcomes in Medicaid and CHIP.* This grant collects and reports data on the "Use of Contraceptive Methods in Women" measure. The project goal is to increase the use of effective methods of contraception among all women in Medicaid and CHIP to improve pregnancy planning and birth spacing. The initiative aligns with Michigan's Infant Mortality Reduction Plan (IMRP), the CDC 6/18 Initiative and Michigan's Title X Program Family Planning activities including Long Acting Reversible Contraceptives.
- *Medicaid Low Birth Weight (LBW) Pay for Performance Project*. In 2017, Medicaid identified LBW as a multi-year MHP Pay for Performance Project. The initiative supports and aligns with Michigan's IMRP and statewide Regional Perinatal Quality Collaborative efforts. In Michigan, deaths due to prematurity (birth prior to 37 weeks gestation) and/or LBW (less than five and a half pounds) are the leading causes of infant mortality.

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

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

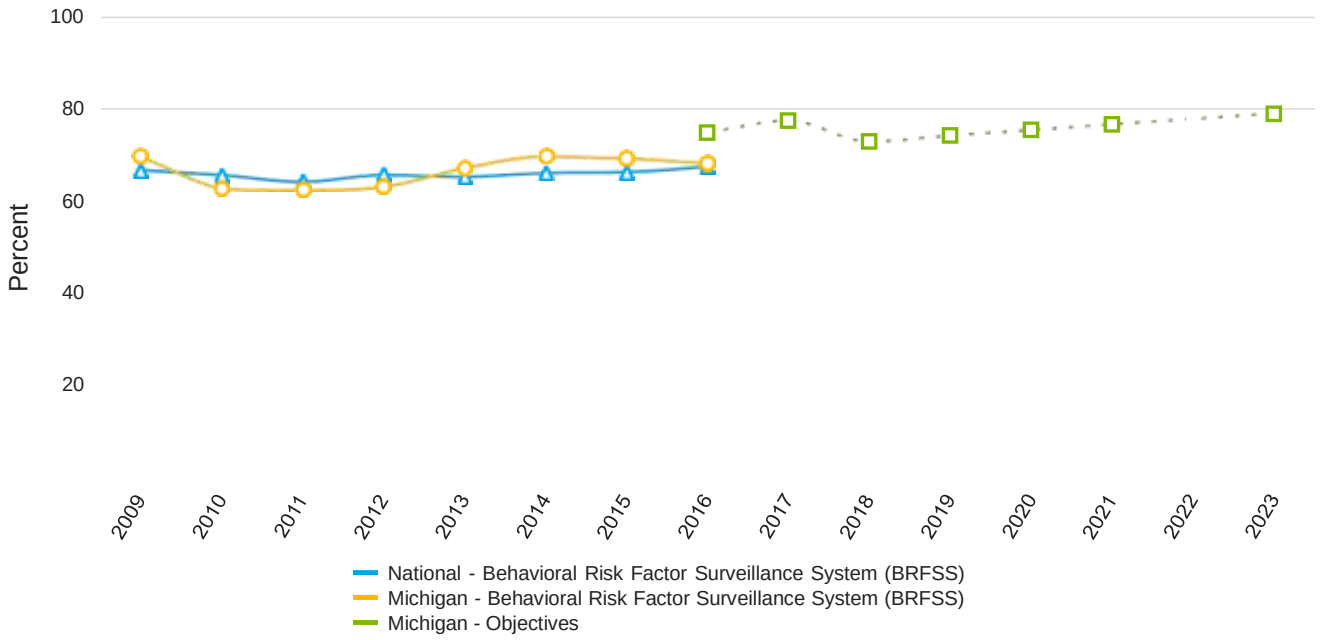
Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2015	138.6	NPM 1
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2012_2016	19.4	NPM 1
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2016	8.5 %	NPM 1
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2016	10.1 %	NPM 1
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2016	24.3 %	NPM 1
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2015	5.8	NPM 1
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2015	6.5	NPM 1
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2015	4.2	NPM 1
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2015	2.3	NPM 1
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2015	236.5	NPM 1
NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy	PRAMS-2015	6.2 %	NPM 1
NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births	SID-2015	8.3	NPM 1
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2016	10.4 %	NPM 13.1
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2016	93.2 %	NPM 13.1
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2016	17.7	NPM 1
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth	PRAMS-2015	14.1 %	NPM 1

National Performance Measures

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



Federally Available Data		
Data Source: Behavioral Risk Factor Surveillance System (BRFSS)		
	2016	**2017**
Annual Objective	74.6	77.2
Annual Indicator	69.0	68.2
Numerator	1,141,612	1,123,599
Denominator	1,654,185	1,648,059
Data Source	BRFSS	BRFSS
Data Source Year	2015	2016

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	72.7	74.0	75.2	76.4	77.6	78.7

Evidence-Based or –Informed Strategy Measures

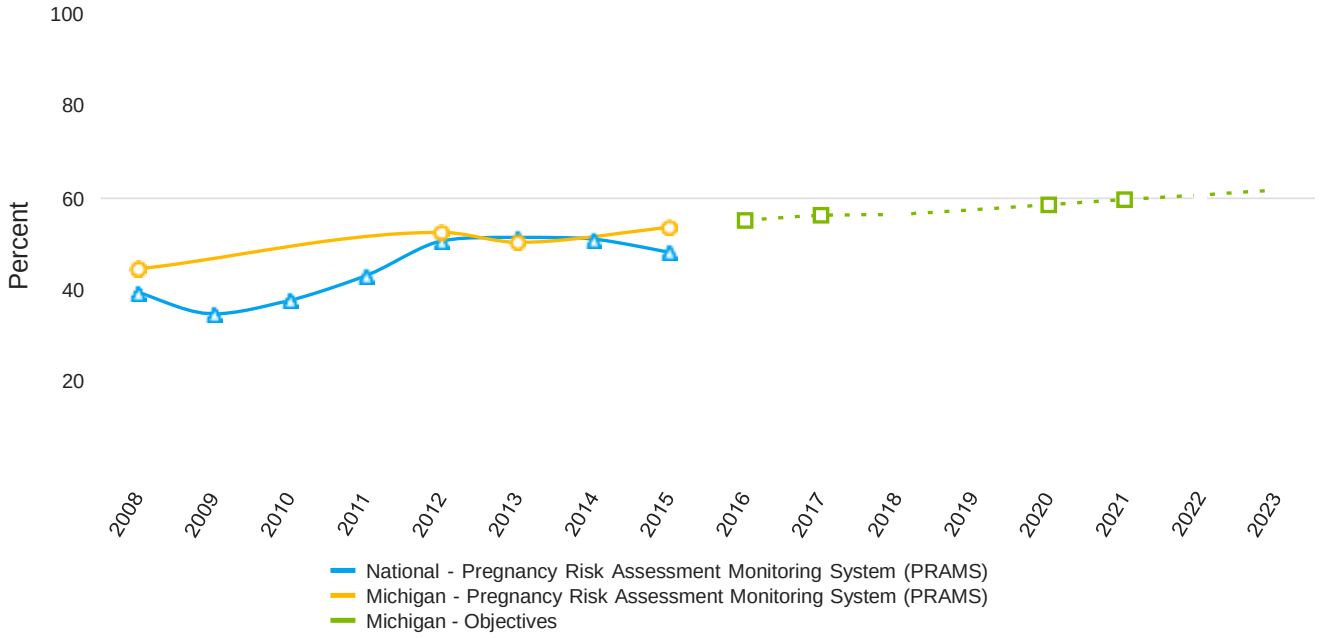
ESM 1.1 - Percent of women aged 18-44 who have ever discussed reproductive life planning during a visit with a doctor, nurse, or other health professional

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		61.3
Annual Indicator	60.3	64.3
Numerator	846,111	914,885
Denominator	1,404,213	1,423,068
Data Source	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste
Data Source Year	2015	2016
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	62.3	63.3	64.3	65.3	66.3	67.3

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



Federally Available Data		
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)		
	2016	**2017**
Annual Objective	55.1	56.2
Annual Indicator	50.3	53.6
Numerator	54,731	57,883
Denominator	108,763	108,083
Data Source	PRAMS	PRAMS
Data Source Year	2013	2015

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	56.4	57.4	58.5	59.6	60.6	61.7

Evidence-Based or –Informed Strategy Measures

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

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	390.0	410.0	430.0	450.0	470.0

State Action Plan Table

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

Priority Need

Reduce barriers, improve access, and increase the availability of health services for all populations

NPM

NPM 1 - Percent of women, ages 18 through 44, with a preventive medical visit in the past year

Objectives

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

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

C) Increase the percent of women with a past year preventive medical visit from 68% to 75% by 2020

Strategies

A1) Support the provision of contraception in 92 clinics across Family Planning's provider network A2) Evaluate Michigan's Contraceptive Access Learning Collaborative A3) Host at least one clinical practicum on the insertion and removal of long-acting reversible contraceptives (LARC) for at least five Family Planning and other health care providers A4) Educate Family Planning and other health care providers on immediate post-partum LARC insertion

B1) Discuss reproductive life planning with at least 60,000 women in the Family Planning Program B2) Expand use of pregnancy intention and preconception health education, including optimal spacing into existing state and local programs serving expectant and new mothers B3) Present on evidence-based recommendations for assessing pregnancy intention and preconception health education at one clinical conference B4) Disseminate pregnancy intention and preconception health messages on MDHHS social media accounts

C1) Promote insurance assistance and enrollment trainings and resources to Family Planning clinics and other providers C2) Promote referrals to primary care providers within Family Planning clinics C3) Assist Family Planning providers in fostering relationships with Medicaid and Medicaid Health Plans C4) Disseminate well-woman and preventive health messages on MDHHS social media accounts

ESMs	Status
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	Active

NOMs
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations
NOM 3 - Maternal mortality rate per 100,000 live births
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)
NOM 5 - Percent of preterm births (<37 weeks)
NOM 6 - Percent of early term births (37, 38 weeks)
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths
NOM 9.1 - Infant mortality rate per 1,000 live births
NOM 9.2 - Neonatal mortality rate per 1,000 live births
NOM 9.3 - Post neonatal mortality rate per 1,000 live births
NOM 9.4 - Preterm-related mortality rate per 100,000 live births
NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy
NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

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

Priority Need

Increase access to and utilization of evidence-based oral health practices and services

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 oral health care services

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

Strategies

A1) Offer and evaluate training for medical and dental professionals A2) Disseminate Perinatal Oral Health Guidelines, and promotional and educational materials

B1) Collaborate with partners to facilitate alternative models of prenatal oral health care B2) Provide education to women via the Perinatal Oral Health WIC Module B3) Develop and implement a communication plan to dental professionals

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

NOMs

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

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

State Action Plan Overview

The following state action plans provide comprehensive information—including objectives, strategies, activities, and performance metrics—on Michigan's Title V maternal and child health (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). Within these population domains, the state action plans focus on the following federally-defined National Performance Measures (NPMs) and state-defined State Performance Measures (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 (Preventive Dental Visit)
- SPM 1 (Lead Poisoning Prevention)
- SPM 4 (Medical Care and Treatment for CSHCN)
- SPM 5 (Immunizations—Children)
- SPM 6 (Immunizations—Adolescents)

As previously discussed, Michigan's NPMs and SPMs were originally chosen based on our state's five-year needs assessment and have been refined in 2018 based on changes to the Title V Guidance and ongoing needs assessment activities. In particular, in 2018 Michigan retired three performance measures: NPM 6 (Developmental Screening); NPM 11 (Medical Home); and SPM 3 (Depression across the Life Course). The rationale for retiring these measures, plus FY 2017 annual reports, are included in the following state action plans. Michigan also moved its original Safe Sleep SPM 2 to NPM 5, to better align with and inform the national work on infant safe sleep. The Immunization SPM, which was originally a two-part measure, has now been split into two distinct measures in the relevant population domains.

In 2018, Michigan's Title V program went through a facilitated logic model process to reexamine the original goals, objectives, and strategies associated with each NPM and SPM. As a result of this process, changes were made to FY 2019 state action plans and associated objectives. Therefore, the FY 2017 annual reports (based on the previous state action plans) may contain different objectives and strategies than the new FY 2019 application narrative. This information is shared to provide context to the state action plan tables and accompanying narrative. Additionally, in 2018 all NPM and SPM annual objectives were reviewed and updated for 2019-2013. Methodologies are included in the Supporting Documents. Finally, this year's application includes introductions before each NPM and SPM state action plan to provide broader context to the state of the population domain.

Women/Maternal Health Overview

The health of women and mothers is the focus of the Division of Maternal and Infant Health within BFHS, 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. Much of these resources are directed toward family planning. However, Title V funds are also used to understand and address women's health

issues more broadly, especially as they relate to maternal mortality and factors such as race, class, and gender inequity that drive disparities. In order to address non-reproductive 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, and injury and violence prevention programs within MDHHS. Additional partnerships that impact women's health include local health departments, Family Planning service providers, and the Michigan Primary Care Association.

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 and concerns. While severe maternal morbidity (138.61 per 10,000, HCUP-SID, 2015 Q1-Q3) has been consistently lower in Michigan as compared with the national average, the risk is much higher among non-Hispanic Black women (221.16). Similarly, maternal mortality (19.38 per 100,000, NVSS, 2012-2016) is lower in Michigan than the national average, but the risk among non-Hispanic Black women (38.71) is much higher. These disturbing statistics have led Michigan to place greater focus on understanding and addressing the unjust and unfair conditions that place non-Hispanic Black women at much greater risk for 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 8.53% of infants (NVSS) reported in 2016 were born with a low birth weight, 14.55% of babies born to non-Hispanic Black mothers had a low birth weight. Similarly, while 10.14% of infants (NVSS) reported in 2016 were born preterm, the percentage was much higher among non-Hispanic Black mothers (14.39). These data also suggest that Michigan is far from achieving equity in health among women in our population and improving women's health status must focus on addressing the conditions that lead to unjust outcomes for Black women. Oral health is also a concern In Michigan where 10.36% of children, including 7.44% of children under five years of age, have tooth decay or cavities (NSCH, 2016). Another trend that Michigan is attending to closely is the dramatic rise in rates of infants born with neonatal abstinence syndrome, which increased from 2.0 per 1,000 in 2008 to 8.3 per 1,000 in 2015. Partners at the state and local level are designing and implementing strategies to understand and address this crisis.

Well-Woman Visit (FY 2017 Annual Report)

In 2017, MDHHS focused on strategies to increase access and quality of services to women in need, with a focus on family planning services. Similar to national trends, the number of women served in Family Planning Programs has been decreasing over the past ten years. To improve community outreach and knowledge about the availability of services, MDHHS awarded four community outreach mini-grants to three local health departments (LHDs) and one Planned Parenthood affiliate. Applicants whose efforts were in communities with an infant mortality rate above the state average were awarded preferential scoring. The reach of the grants included 35 high infant mortality counties; details are included under Objective B. Challenges included evaluating the direct impact of community outreach activities on clinic caseloads and the lack of local agency capacity to apply for and implement community outreach mini-grants. MDHHS also monitored community outreach plans at all awarded Family Planning agencies.

MDHHS also focused on improving the quality of family planning counseling and access to Long-Acting Reversible Contraceptives (LARCs) through provider professional development in FY 2017. A Contraceptive Counseling Module Series was developed and focused on enhancing providers' knowledge of client-centered care and contraceptive counseling skills, as well as reducing barriers to providing LARCs. The series will be promoted among Family Planning and other Medicaid providers. An IUD clinical practicum was held in conjunction with the 2017

Family Planning Conference at which 20 providers were trained on the insertion and removal of Liletta. Challenges included promoting professional development opportunities among providers outside the Family Planning network which is necessary to improve the National Performance Measure of increasing the percent of women with a preventive visit.

Objective A: By 2020, increase by 5% the proportion of Michigan pregnancies that are intended.

The Family Planning Program uses the Guttmacher Institute's *Contraceptive Needs and Services Update* to annually assess unmet need within the state for contraceptive services and supplies. In FY 2017, the *Contraceptive Needs and Services, 2014 Update* remained the most current publication on contraceptive needs. For Michigan, 2,017,700 women were in need of contraceptive services and supplies, and of those in need, 635,660 women were in need of publicly supported contraceptive services and supplies. Of the Michigan women in need of publicly supported contraceptive services, 32% (201,460) were living at or below 100% poverty, 27% (171,780) were under the age of 20, and 15% (97,490) were uninsured. MDHHS worked to meet Michigan's contraceptive needs by providing Title X services to 65,588 clients according to preliminary 2017 Family Planning Annual Report (FPAR) results, serving 59,204 women of reproductive age and 13,592 teens. Low-income individuals (≤100% poverty) comprised 54% of all clients served, and 38% of clients were uninsured. While MDHHS has continued to meet the contraceptive needs of Michigan's most vulnerable women, the percentage of pregnancies that are intended has remained relatively steady at just above half (53%, PRAMS 2014), highlighting the need for both public and private providers to address pregnancy intention and reproductive life planning with women of childbearing age at each visit.

In an attempt to increase awareness among women in need, local Family Planning agencies focused on traditional and social media campaigns, health fair events, sexual health presentations, and providing clinic materials to referral agencies and community partners. Local Family Planning agencies engaged consumers and priority populations by gathering satisfaction feedback for program improvements, evaluating clinic educational materials for audience appropriateness, and participating as members of local Family Planning Advisory Councils. The MDHHS monitored program promotion, education, and community outreach activities among local agencies through work plan review, comprehensive site reviews, and technical assistance monitoring visits.

In an effort to strengthen community outreach efforts, MDHHS released a one-time mini-grant and funded four family planning agencies to implement evidence-based community outreach strategies or promising practices that were focused on, but not limited to, the following: 1) increasing a target population's access to family planning services; 2) expanding the preconception and reproductive life planning knowledge and behavior of a target population; 3) increasing community awareness and messaging for family planning services; and 4) coordinating outreach and education efforts with health plans to increase contraceptive access. Applicants who would work in an area with an infant mortality rate above the state rate of 6.8 per 1,000 live births received preferential scoring.

MDHHS funded three LHDs and one Planned Parenthood Affiliate at $50,000 each. These four local agencies increased awareness and access to reproductive health services within 35 high infant mortality counties, reaching 3,465,672 low-income men and women of reproductive age, particularly adolescents and young adults through social media campaigns; 49,360 through traditional media (i.e., billboards, movie theater ads); 1,000 through boots-on-the-ground outreach (i.e., health fairs, community events, trivia nights); and engaged 46 local businesses in outreach efforts. Keys to success were social media campaigns that utilized multiple modalities (e.g., Pandora ads, Facebook, Google Adwords, agency websites) aimed at low-income men and women of reproductive age, and boots-on-the-ground outreach efforts that fostered community engagement among target populations, local businesses, and professionals serving low-income men and women of reproductive age. While these local Family Planning agencies increased their reach, it was difficult to evaluate the direct impact of outreach efforts on clinic caseloads. Another encountered challenge was that applications were limited for this opportunity as many local

agencies do not have staff capacity to develop and implement community outreach activities.

During FY 2017, the MDHHS Family Planning Program continued monitoring program performance on two of the National Quality Forum endorsed contraceptive care measures, most or moderately effective method utilization and access to LARC. At the 2017 Family Planning Coordinator's meeting, 2015 and 2016 FPAR data were presented to the network, along with national, state, and local level comparisons. Michigan (86% 2015 FPAR, 84% 2016 FPAR) continued to exceed national network performance (72% 2015 FPAR, 71% 2016 FPAR). Michigan's LARC utilization among female users aged 15 to 44 increased to 9% (2015 FPAR) and 12% (2016 FPAR); however, performance continued to lag behind the national network (15% 2015 FPAR, 16% 2016 FPAR), indicating program improvement opportunities. These data were used to discuss the benefits of a data-driven approach to develop program priorities and strategies, make improvements, and demonstrate a program's value and worth. Following the meeting, local agencies were provided with their performance measure data. During FY 2018, the MDHHS Family Planning Program will facilitate a Contraceptive Access Learning Collaborative to assist local agencies with increasing their performance on these two measures.

Objective B: By 2020, increase by 5% the proportion of Michigan women who report ever having discussed reproductive life planning during a visit with a doctor, nurse, or other health professional.

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 2017 reporting data indicates that 64.3% of women discussed reproductive life planning during a visit with a doctor, nurse, or other health professional. This was an increase over the previous reporting year, which was 60.3%. To continue to make progress on this objective, during FY 2017 the Family Planning Program began soliciting state and local level stakeholder feedback on the Before, Between, and Beyond Pregnancy educational modules and the National Preconception-Interconception Care Clinical Toolkit to develop a streamlined approach for translating current recommendations and preconception health strategies into clinical practice among Family Planning providers and other health care professionals. In FY 2018, the program's Medical Advisory Committee will review these and other reproductive life planning tools for promotion and dissemination within the network. MDHHS determined it would not be feasible to replicate and expand Kent County's Interconception Care Project because the project's evaluation findings indicated the model was not suitable nor sustainable for scaling up within local public health settings.

Objective C: By 2020, increase the capacity of 50 Michigan reproductive health providers to offer highly effective contraceptive services.

In FY 2017, MDHHS worked with the Michigan Public Health Institute to develop a three-part Contraceptive Counseling Module Series focused on enhancing providers' knowledge of client-centered care and contraceptive counseling skills, as well as assisting with reducing barriers to providing LARCs. The first module, *Client-Centered Contraceptive Counseling*, describes the basic strategies for providing interactive client-centered contraceptive counseling, using scenario-based instruction, to assist clients with making informed decisions and choosing a contraceptive method that best fits their individual needs. The second module, *Contraceptive Method Education*, covers each contraceptive method from most effective to least effective, describing correct use, the benefits and risks, side effects, and STD protection. The third module, *Improving LARC Access*, describes the reasons to promote the use of LARCs, identifies barriers to LARC access, and provides information to reduce barriers to LARC provision in Michigan. Nurses, social workers, and health educators will be able to receive one hour of free continuing education credit by completing the module series in FY 2018. The modules were promoted to Family Planning and Medicaid providers in 2018.

During FY 2017, MDHHS reassessed individual and organizational barriers for LARC provision within local Family

Planning agencies. FY 2017 LARC survey results mirrored FY 2016 findings, which indicated additional support from the MDHHS Family Planning Program was needed to 1) organize more opportunities for LARC insertion trainings, and increase availability of mentoring with insertion trainings; 2) increase the number of clinics that are able to perform same-day LARC insertion; 3) assist clinics with improving management of LARC stocking and purchasing, and streamlining LARC stock to increase availability of cheaper options; 4) increase provider awareness of LARC reimbursement program for low-income clients, such as the Access and Resources for Contraceptive Health (ARCH) Program; 5) support agency relationship building with both public and private insurers; 6) dispel myths about LARCs; and 7) overall, increase the number of clients who have the opportunity to choose to receive a LARC from a Family Planning clinic. These findings were disseminated to Michigan's Family Planning network and Medicaid partners and have informed FY 2018 programmatic strategies.

To increase provider professional development surrounding LARCs, a clinical practicum was offered at the Annual Family Planning Conference during FY 2017, where 20 Family Planning providers were trained on the insertion and removal of Liletta. Two educational sessions (on LARCs and contraceptive care) were offered at the Annual Family Planning Conference in FY 2017 by Dr. Brent Davidson. His keynote, *Contraception Update: Past, Present, Future?* covered a brief history of contraception and the birth control movement, LARC use and the 2016 presidential election, as well as the implications for reproductive health providers in the current political environment. This keynote was attended by 180 Family Planning providers and staff. Dr. Davidson's breakout session, *The Doctor Is In*, covered the 2016 U.S. Medical Eligibility Criteria for Contraceptive Use and the 2016 U.S. Selected Practice Recommendations for Contraceptive Use, focusing on LARCs, such as increasing LARC use with medically eligible clients, including adolescents; provider resistance to LARCs; and challenging LARC case scenarios. This breakout session was attended by 30 Family Planning providers and staff.

Objective D: By 2020, increase by 5% the proportion of Michigan women who report having a routine check-up within the past year.

In FY 2017, Medicaid outreach opportunities were promoted among local Family Planning agencies. Local efforts to educate clients about health insurance focused on providing brochures and educational materials, provider referrals to other organizations, and working with other organizations for on-site enrollment or enrollment events. In the Family Planning Program in 2017, 34% (n=65,588) of clients reported utilizing public health insurance such as Medicaid or Healthy Michigan Plans (i.e., Medicaid Expansion).

Local Family Planning agencies were reviewed and monitored on their 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. Primary care providers are included as a minimum program requirement for client encounters and established medical referral agreements. Of the agencies reviewed during FY 2017, 100% had incorporated asking clients whether they were in need of primary care services into their Electronic Health Record systems, and had current referral agreements with primary care providers within their community. Referrals to primary care providers were promoted on an as-needed basis.

Oral Health – Women and Children (FY 2017 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. This remains evident in the activities of NPM 13 in FY 2017. In the original Title V Guidance, this two-part NPM was originally in the Cross-cutting/Life

Course population domain. Starting in 2018, the two parts of the measure are being separated between the Women/Maternal Health and the Child Health population domains. Since the original NPM 13 state action plan and the associated objectives combined the women and child components, they are reported on together here.

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

SEAL! Michigan is a school-based sealant program that aims to educate children about dental health and to reduce decay rates. In FY 2017, SEAL! Michigan was able to fully utilize the Teleform software to scan annual data in an efficient manner. For the first time, all funded programs had their reports within 10 weeks of data collection, allowing for timely data-driven decisions to be made within the program. Having the ability to analyze data in the first quarter of FY 2017 allowed time for funding allocations to take place to shift funds from less effective programs to new program growth in FY 2018.

In FY 2017, 12 funded programs in Michigan provided school-based dental sealant programs in eligible schools (those with 50% or more students participating in the Free and Reduced Lunch Program). One new program was the Health Department of North West Michigan (HDNWM), which entered in FY 2017 to fill a geographical gap. The HDNWM used FY 2017 as a planning and training year, purchasing equipment and supplies, and writing a grant to a private foundation to receive a minivan to be used for transportation to and from schools. The HDNWM had the goal of servicing their first school in the fall, and they met that goal, and were then ready to work in FY 2018 in a higher capacity.

The ESM for this measure is the number of students who have received a preventive dental screening through the SEAL! Michigan program. Research has shown that dental sealants reduce tooth decay; in turn, reducing tooth decay improves the oral health and general well-being of children. In FY 2017, a total of 6,677 students were screened and 14,916 dental sealants were placed. Nearly a quarter of students screened had special health care needs and 95.5% of students received a fluoride varnish treatment. There was a decrease in the percent of students in need of urgent care (12.9% in FY 2016 to 10.1% in FY 2017) and a slight increase in the percent of students who had evidence of decay or filled first molars (6.9% in FY 2016 to 8.0% in FY 2017). In FY 2016, 19.2% 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 also an increase in HKD (41.6%). Part of the parent education requirement is to bring awareness to parents about HKD and how to enroll. Enrollment will place kids in a dental home, eliminating access to care issues.

In FY 2017, the SEAL! Michigan program continued to attempt 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.

Objective B: Implement a state plan for improving oral health with a focus on pregnant women, infants, children and youth, includingCYSHCN.

The Michigan State Oral Health Plan (SOHP) was finalized in FY 2016 and disseminated to multiple partners and organizations. A presentation was developed for members to use at meetings, conferences and other educational opportunities to describe the SOHP, including goals and activities that partners and organizations could get involved in. The SOHP presentation was shown in educational settings so that dental students and dental hygiene students

were aware of the statewide efforts to improve oral health. The SOHP presentation was given at three local coalition meetings in Wayne County, Kent County and Macomb County. In addition, the annual Michigan Oral Health Conference provided an opportunity to highlight activities that were implemented in the past year that corresponded to the goals of the SOHP. The SOHP includes specific objectives and activities that relate to access to care, professional integration and health literacy. The SEAL! Michigan program and Perinatal Oral Health initiatives are activities within the SOHP and are described within this report.

A key stakeholder survey was conducted by the Michigan Oral Health Coalition and the MDHHS Oral Health Program to assess stakeholder knowledge and activities related to the SOHP. The results demonstrated that key stakeholders were aware of the SOHP and the goals regarding access to care and professional integration. The Health Literacy goal was the least recognized by stakeholders. The annual Michigan Oral Health Conference included a session on health equity and social justice. The Bridges Out of Poverty workshop was the session highlighted with overwhelming attendance and positive feedback. The Michigan Dental Association is looking to bring this workshop to their state leadership. Implementing another survey to recognize the mid-point of the five-year plan should be considered to determine the progress of the SOHP goals. In addition, metrics and performance measures regarding the progress should be considered to capture and report on outcomes.

Objective C: Increase by 20 the number of medical and dental providers trained to treat, screen and refer pregnant women and infants to oral health care service.

During FY 2017, the Perinatal Oral Health Action Plan continued to be implemented to support better health status for women and girls. One of the main strategies continued to be the training and education of Michigan health professionals. In FY 2017, the Perinatal Oral Health Program trained 636 health professionals in the medical and dental fields through lectures, webinars, conference calls and other training events, nearly doubling the number of individuals from FY 2016. A partnership to teach a lecture on perinatal oral health to Nurse Midwifery and Nurse Practitioner students was established for the first time, with lectures occurring each semester. Positive student feedback has been measured at 99%. In addition, the program has established grand rounds with OBGYN residents at one of the leading delivery hospitals in Michigan. The OHP has also increased its partnership with the Maternal Infant Health Program and developed an educational webinar for Michigan home visiting programs. Continued education on best practices and quality improvement to implement a comprehensive perinatal oral health focus has become a priority.

Challenges remain in the training and educating of medical and dental providers. Although the medical community continues to be enthusiastic about perinatal oral health, it continues to be difficult to engage the dental community. Barriers include low reimbursement for Medicaid as well as conflicting information regarding the safety of oral health during the perinatal period. Obtaining data remain a challenge due to lack of availability, system incompatibility, and staffing limitations. New but limited PRAMS data became available regarding perinatal oral health in FY 2017, with complete analysis to become available in FY 2018.

Objective D: Increase by 2% the number of pregnant women and infants receiving oral health care services.

In FY 2017, the wichealth.org module went “live” for use not only in Michigan but other states that utilize wichealth.org. Wichealth.org provides stage-based, client-centered, WIC nutrition education and an anticipatory guidance model where WIC clients could complete educational lessons in English or Spanish in order to receive their WIC benefits. A webinar provided in partnership with Michigan WIC, Wichealth.org, the Association of State and Territorial Dental Directors and the OHP was developed to promote the module. Including Michigan, 14 states have selected the module for use and at the end of FY 2017, over 5,000 lessons were completed. Consumer feedback on the module

has indicated that 85 percent of viewers would recommend the course to other parents. The availability to collect consumer feedback and input was unprecedented before the implementation of this module. Parents can give direct feedback, ask questions and indicate specific learning objectives when utilizing the module. Current feedback indicates that many parents were unaware of the need to seek oral health care during pregnancy but now intended to do so, as well as starting basic oral health practices for infants.

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. This partnership with UDM, the Michigan Primary Care Association (MPCA) and the OHP identified a current successful pilot program in a Michigan FQHC. That model of care, which placed a dental hygienist directly within an OBGYN unit in an FQHC, was studied with plans to replicate in five other identified FQHC locations. This model of care will increase the number of women seen during their pregnancy and facilitate any advanced treatment necessary during the perinatal period. This program will feature robust data collection which will allow for evaluation and quality improvement as the pilot develops.

The Perinatal Oral Health Initiative has a Perinatal Oral Health Advisory Committee that met in FY 2017 to review current program practices as well as guide future priority areas. That committee is comprised of payers, MCH organizations and representatives, clinicians, and oral and maternal health focused organizations. This committee contributes to the promotion of perinatal oral Health as well as program planning and evaluation.

Depression across the Life Course – Women/Maternal Health (FY 2017 Annual Report)

To address the priority area to "Promote social and emotional well-being through the provision of behavioral health services," MDHHS originally developed a two-part State Performance Measure (SPM) relative to reducing depression across the life course, focusing on two high need populations: adolescents and pregnant and postpartum women. The SPM included A) Percent of the Michigan's high school students who report having felt sad or hopeless almost every day for two or more weeks in a row, to the extent they stopped doing some usual activities during the prior 12 months, and B) Percent of women enrolled in Michigan's Maternal Infant Health Program (MIHP) who are screened for maternal depression. This original SPM is being retired in 2018, as the focus on part A will move into the Adolescent NPM and part B is not directly tied to Title V funding or support.

The Maternal Infant Health Program (MIHP) is a home visiting program that utilizes a population health model. Its primary purposes are to support Medicaid beneficiaries via case management to promote healthy pregnancies, positive birth outcomes, and infant health and development with the long-term goal of reducing infant morbidity and mortality among the Medicaid population. The importance of assessing and addressing depression in women of the MIHP is of utmost importance. A core strategy for the second component of the original State Performance Measure (SPM) 5 was centered on developing partnership and collaboration between the MIHP provider agencies and the Medicaid Health Plans (MHP). On January 1, 2017, the MIHP contracts and payments became administered by Medicaid Health Plans, thus strengthening the partnership and collaboration of the MIHP agencies and the MHPs.

Although this SPM is being retired, the efforts to address SPM 5 will continue through the MIHP case management structure in partnership with the Medicaid Health Plans. Additionally, in the FY 2017 reporting year, 100% of women in MIHP completed the MIHP RiskScreener.

Objective A: Increase by 5% the enrollment of Medicaid-eligible pregnant women into the MIHP.

In FY 2017, 19,789 pregnant women were served by the Maternal Infant Health Program. This represents a 15% decrease in comparison to FY 2016. This decrease will be evaluated in FY 2018 to determine the cause(s) of the decline that will be inclusive of MIHP beneficiary surveys.

Objective B: Ensure appropriate coordination of care for MIHP enrolled women identified at risk for maternal depression.

In FY 2017, the Maternal Risk Screener that includes evidence-based depression screening, based on a current literature review, was completed, evaluated by content experts and piloted with select MIHP provider agencies. In FY 2018, the revised Maternal Risk Screener will be implemented. In addition, the associated Depression Plan of Care has been updated based on a literature review that identified evidence-based interventions and is slated to be implemented in FY 2018.

Well-woman Visit (FY 2019 Application)

Michigan's first National Performance Measure (NPM) for the Women and Maternal Health Domain is "Percent of women with a past year preventive medical visit." According to the Michigan Behavioral Risk Factor Surveillance System (BRFSS), in 2016 68% of women aged 18 to 44 years had a preventive visit in the past year. Using predictive modeling, MDHHS set an ambitious 2020 target of 75% for this NPM due in part to a steep increase from 2012 to 2013. The increase has since plateaued and while it seems unlikely that MDHHS will meet the 75% target by 2020, MDHHS will continue to monitor and support activities to break the plateau. FY 2019 objectives are concentrated on improving the following areas: 1) contraceptive access; 2) pregnancy intention assessment and preconception health; and 3) health care access. Associated strategies span individual, provider, organizational, and community levels. Most notably, consumers will be engaged through MDHHS social media accounts to promote preconception health, well-woman visits, and other preventive health screenings.

While MDHHS will employ a breadth of strategies to achieve FY 2019 objectives for the well-woman NPM, systematic barriers persist. The current political climate and uncertainty of the Affordable Care Act does not encourage women to seek health care services nor does it foster a culture of preventive health care. Even though the Affordable Care Act has enabled millions more Americans to access to affordable health insurance, social determinants of health hinder low-income and working poor families from moving beyond reactionary health care. While more Michiganders have a primary care provider, the focused attention on chronic disease makes it difficult to adequately address pregnancy intention and provide the client-centered contraceptive counseling patients deserve. Additionally, MDHHS has limited influence over private providers where more Michiganders are served. In the reproductive health realm, because of annual Pap guideline changes coupled with the increased use in long-acting reversible contraceptives (LARC), it is challenging to entice women of reproductive age, especially young women, to attend an annual check-up when a pap and a prescription for a method is no longer needed.

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.

Contraception is a highly effective clinical preventive service that assists women in achieving their reproductive health goals, such as preventing teen and unintended pregnancy and achieving healthy spacing of births. While there is no single method of contraception that is right for everyone, the type of contraceptive method used by a woman is strongly associated with her risk of unintended pregnancy. Having access to a full range of effective contraceptive methods allows each woman the opportunity to choose the method that is right for her to successfully delay or prevent pregnancy.

The first strategy, support the provision of contraception across Family Planning's provider network, will focus on assuring Michigan's network of 30 local agencies and 93 clinical sites offer a broad range of FDA-approved contraception and client-centered counseling according to national standards of care from *Providing Quality Family Planning Services: Recommendations of CDC and the U.S. Office of Populations of Affairs*. Family Planning providers are required to have a broad range of contraceptives available including one type of LARC, although an agency may choose to offer LARC by paid referral off-site. Permanent contraception such as sterilization is typically provided by referral. Client-centered counseling is provided to all clients seeking a contraceptive method. Informational and educational materials on the aforementioned methods, as well as abstinence and fertility awareness, are made available to all clients when selecting a method. In FY 2019, the MDHHS will monitor local agency provision of contraception through comprehensive site visits and semi-annual Family Planning Annual Report (FPAR) submissions. Consumer input will be obtained at least annually through a statewide consumer survey

administered at 93 clinic sites and local surveys created and administered by local Family Planning providers. The results of the statewide survey will be presented at the program's Advisory Council meeting.

The second strategy, evaluate Michigan's Contraceptive Access Learning Collaborative (MiCALC), will focus on assessing the extent to which participating agencies were able to 1) increase their performance on the two contraceptive care measures (i.e., most or moderately effective method use and long-acting reversible contraceptive use) endorsed by the National Quality Forum; 2) sustain changes that resulted in improvements; and 3) promote a culture of quality across their agency. In FY 2018, six local Family Planning agencies selected one to two contraceptive best practices from the *Contraceptive Access Change Package* to remove individual and organizational barriers that impede client access to contraception by conducting small tests of change using Plan-Do-Study-Act (PDSA) cycles. This evaluation will inform whether MDHHS replicates MiCALC with a second cohort of local Family Planning agencies. In FY 2019, contraceptive access assessment results and agency performance on the two contraceptive care measures will be examined from baseline to endpoint, and again at three months post-MiCALC participation. Additionally, lessons learned and success stories will be disseminated to the Family Planning network, as appropriate.

The third strategy is to host at least one clinical practicum on the insertion and removal of LARC for at least five Family Planning and other health care providers. Local Family Planning providers have indicated continuous training on LARCs as an area of need. In FY 2019, the MDHHS Family Planning Program will offer at least one clinical practicum. Additional training opportunities will be offered to statewide clinical programs and health care organizations as needed. Additionally, the MDHHS Family Planning Program can assist local providers by connecting them with pharmaceutical companies for individual or regional trainings.

The fourth strategy, educate Family Planning and other health care providers on immediate post-partum LARC insertion, will focus on raising provider awareness about Michigan Medicaid policy changes, effective October 1, 2018; disseminating informational materials; and inviting health policy speakers to applicable trainings and events. In FY 2019, the MDHHS Family Planning Program will utilize its network listserv, statewide Advisory Council, Annual Coordinator's Meeting, or Annual Conference to educate Family Planning providers on immediate post-partum LARC insertion. MDHHS Family Planning Program staff will promote and disseminate materials associated with immediate post-partum LARC insertion to other health care providers as opportunities arise.

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.

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 assist individuals in thinking about when and under what conditions they would like to become pregnant or, conversely, thinking about how pregnancy will be prevented, with the primary focus on increasing the overall health and well-being of the individual regardless of reproductive intentions. This objective is also Michigan's Evidence-Based Strategy Measure (ESM) for this performance measure, which is focused on developing quality health care services. Given that the majority of women of reproductive age either want to prevent or achieve pregnancy, focusing on strategies aimed at increasing preconception health (such as reproductive life planning) is a smart investment. According to the 2016 Michigan BRFSS, 64.3% 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, indicating an increase over the previous reporting year, which was 60.3%. Despite the increase from reporting years, Family Planning providers and other health care professionals are experiencing barriers to addressing prevention across the life span, preconception health, and contraceptive care with women of reproductive age.

The first strategy, to discuss reproductive life planning with at least 60,000 women in the Family Planning Program, will focus on determining clients' need for contraception and preconception health services by assessing when they would like to become pregnant, the number of children they would like to have, and how long they want to wait to become pregnant at all visit types. In FY 2019, MDHHS will monitor local agency assessment of clients' reproductive life plans through comprehensive site visits.

The second strategy—expand use of pregnancy intention and preconception health education, including optimal spacing into existing state and local programs serving expectant and new mothers—will focus on enhancing service providers' ability to counsel clients on pregnancy intention, being healthy prior to pregnancy, and pregnancy spacing for optimal health. Additionally, service providers will be able to make the appropriate contraceptive care referrals for pregnancy prevention. In FY 2019, efforts will focus on incorporating lessons learned from FY 2018 to refine tools and service provider talking points and partnering with state (e.g., Michigan Adolescent Pregnant and Parenting Teen Program, WIC) or local programs (e.g., Breastfeeding Coalitions). Ideally, this intervention will be integrated into existing service delivery components with minimal disruption to the fidelity of evidence-based or evidence-informed service models. State and local level programs situated within high infant mortality communities will be prioritized.

The third strategy—to present on evidence-based recommendations for assessing pregnancy intention and preconception health education, including optimal spacing at one clinical conference—will focus on describing the ways pregnancy intention and preconception health education can be incorporated into primary care and service delivery settings, as well as the impact on health outcomes for moms and babies. In FY 2019, MDHHS will apply to relevant statewide clinical conferences (e.g., Michigan Primary Care Association, WIC).

The fourth strategy, disseminate pregnancy intention and preconception health messages on MDHHS social media accounts, will focus on developing or using existing social media and promotional tools to increase community awareness about goal setting and achieving or preventing pregnancy, as well as the benefits of being healthy prior to pregnancy. Additionally, MDHHS will include information on state and local resources, as appropriate. In FY 2019, MDHHS's social media presence will be aligned with national health observances such as National Teen Pregnancy Prevention Month. MDHHS will collaborate with state and local partners to amplify social media messaging. Key social media metrics such as reach and engagement will be used to evaluate community awareness efforts.

Objective C: Increase the percent of women with a past year preventive medical visit from 68% to 75% by 2020.

Access to comprehensive quality health care services assists individuals in participating in routine preventive appointments, thereby improving the ability to address health issues as they arise, and also fosters positive long-term health outcomes. According to the 2016 Michigan BRFSS, 68% of Michigan women aged 18 to 44 reported having a preventive visit during the past year, indicating that barriers to obtaining health insurance, accessing health care services, and finding a trusted provider still exist.

The first strategy, to promote insurance assistance and enrollment trainings and resources to Family Planning and other providers, will focus on identifying existing national and state training opportunities and resources. MDHHS plans to survey Family Planning programs to determine what resources are already in use as well as existing needs. In FY 2019, the MDHHS Family Planning Program will utilize its network listserv, statewide Advisory Council, Annual Coordinator's Meeting, or Annual Conference to disseminate insurance assistance and enrollment trainings and resources.

The second strategy, to promote referrals to primary care providers within Family Planning clinics, will focus on strengthening and enhancing Family Planning client referrals to primary care providers. In FY 2019, local Family

Planning agencies will continue to assess client need for primary care referrals, update referral agreements with primary care providers as necessary, and strengthen linkages. The MDHHS Family Planning Program will continue to strengthen state and local level relationships with primary care organizations, particularly Federally Qualified Health Centers, by using appropriate training opportunities offered by the Michigan Primary Care Association and the Annual Family Planning Conference.

The third strategy is to assist Family Planning providers in fostering relationships with Medicaid and Medicaid Health Plans. This strategy will focus on receiving regular Medicaid updates, providing input on Medicaid's common formulary, and providing 340B prices on medications (i.e., antibiotics and contraceptives) to set reimbursements. In FY 2019, regular Medicaid updates will be received during Family Planning's statewide Advisory Council. Local Family Planning agencies will have the opportunity to provide input on the common formulary on a quarterly basis, and 340B medications prices will be provided to Medicaid on a quarterly basis. Additional opportunities to partner with Medicaid and Medicaid Health Plan will be pursued as appropriate.

The fourth strategy, to disseminate well-woman and other preventive health messages on MDHHS social media accounts, will focus on developing or using existing social media and promotional tools to increase community awareness about the importance of annual visits, as well as the benefits of other preventive health screenings such as hypertension, depression, and HIV. Additionally, MDHHS will include information on state and local resources, as appropriate. In FY 2019, MDHHS's social media presence will be aligned with national health observances (e.g., National Women's Health Week). MDHHS will collaborate with state and local partners to amplify social media messaging. Key social media metrics such as reach and engagement will be used to evaluate community awareness efforts.

Oral Health – Women (FY 2019 Application)

Through the five-year needs assessment process, the state priority need "Increase access to and utilization of evidence-based oral health practices and services" was originally selected for the cross cutting/life course domain. NPM 13 was selected to address this priority need: A) Percent of women who had a dental visit during pregnancy and B) Percent of children, ages 1-17, who had a preventive dental visit in the past year. Given the changes to the Title V NPM framework in 2018, this NPM is now discussed across two different population domains (Women/Maternal Health and Child Health) since Michigan retained both components of the NPM. Leadership for Michigan's MCH oral health programs and initiatives is located within the Oral Health Unit. The Oral Health Unit and Perinatal Oral Health Initiative is housed within the Bureau of Family Health Services in the Population Health Administration, allowing for collaboration, particularly on issues related to women's oral health. The Perinatal Oral Health Initiative works 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. In FY 2019, the Perinatal Oral Health Initiative will endeavor to maintain educational efforts for the health community as well as expecting mothers but also enact and expand new programs that further address oral health disparities and access to care issues. Recent PRAMS data indicates that disparities exist. The proportion of women getting 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. Existing strategies that continue to educate providers as well as new strategies that focus on alternative practice models and recent Medicaid will be harnessed to address these disparities.

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.

Data collected from a statewide provider survey indicates that the majority of medical providers (82%) acknowledged that perinatal oral health was an important consideration for optimal obstetric management; however, only one-fifth (22%) of providers stated that they routinely examined the patient's oral cavity during pregnancy. Routine oral health assessments by a dentist were also infrequently recommended (28%). These data indicate a need to promote the practices of oral health screening and referral for preventive and restorative dental services among perinatal care providers. In addition, there is a need to provide resources that assist in facilitation of referrals. The new Evidence-based or -informed Strategy Measure (ESM), which is the number of medical and dental professionals who receive perinatal oral health education through MDHHS, 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. A database of training records has been developed, 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.

Also included in these efforts is strategically disseminating Perinatal Oral Health Guidelines as well as 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. 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 stakeholders and distributed to local health departments, Federally Qualified Health Center (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 FY2019.

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

In FY 2018, the Michigan Initiative for Maternal and Infant Oral Health (MIMIOH) launched with a goal 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. The initial aim was to examine the feasibility and impact of placing a registered dental hygienist within an OBGYN medical clinic. The initial model at one pilot site established a template for five other FQHC sites to build from and mimic throughout Michigan. Other pilot sites contributed input to enhance and standardize current workflow; expand the scope of services rendered; and include pregnant mothers and their children up to the age of three. While this approach was an important first step toward reaching patients in the FY2018 inaugural year, FY 2019 efforts will include strategically planning a more robust sustainable model while concurrently expanding and improving the current program. Outputs and measures will include project sustainability and the number of patients seen via this alternative model of care. This collaborative model of care also allows for feedback and engagement not only from providers but from the patients served.

In FY 2019, 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. This strategy will continue to be evaluated through the number of women who complete the perinatal oral health module. Since its inception, nearly 10,000

lessons have been completed nationally, with similar numbers expected in FY 2019.

The final strategy will include the development of a communication plan to dental health providers surrounding changes in Medicaid benefits for pregnant women. In FY 2018, MDHHS allotted funds to increase the adult dental Medicaid benefit for pregnant women within the state. This increase in benefit will carve dental benefits into Medicaid health plans and may mirror benefits currently available within the Healthy Michigan plan. This change would increase the availability of dental providers, addressing a critical need in access to care and increasing the number of pregnant women with a dental visit. Once this benefit goes into effect, the dental community, the medical community, and pregnant women will need to be made aware of what it entails and how the benefit is accessed. A communication plan that draws from the expansive networks created under the Perinatal Oral Health Initiative will be developed and implemented. Participants included in the plan will include medical, dental, and social service entities, local health departments, FQHCs, professional organizations, local coalitions, community partners, and other relevant agencies. This measure will be evaluated by the creation of the plan as well as the effectiveness of the plan itself.

Oral Health – Women (FY 2019 Application)

Through the five-year needs assessment process, the state priority need “Increase access to and utilization of evidence-based oral health practices and services” was originally selected for the cross cutting/life course domain. NPM 13 was selected to address this priority need: A) Percent of women who had a dental visit during pregnancy and B) Percent of children, ages 1-17, who had a preventive dental visit in the past year. Given the changes to the Title V NPM framework in 2018, this NPM is now discussed across two different population domains (Women/Maternal Health and Child Health) since Michigan retained both components of the NPM. Leadership for Michigan’s MCH oral health programs and initiatives is located within the Oral Health Unit. The Oral Health Unit and Perinatal Oral Health Initiative is housed within the Bureau of Family Health Services in the Population Health Administration, allowing for 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. In FY 2019, the Perinatal Oral Health Initiative will endeavor to maintain educational efforts for the health community as well as expecting mothers but also enact and expand new programs that further address oral health disparities and access to care issues. Recent PRAMS data indicates that disparities exist. The proportion of women getting 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. Existing strategies that continue to educate providers as well as new strategies that focus on alternative practice models and recent Medicaid will be harnessed to address these disparities.

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.

Data collected from a statewide provider survey indicates that the majority of medical providers (82%) acknowledged that perinatal oral health was an important consideration for optimal obstetric management; however, only one-fifth (22%) of providers stated that they routinely examined the patient's oral cavity during pregnancy. Routine oral health assessments by a dentist were also infrequently recommended (28%). These data indicate a need to promote the practices of oral health screening and referral for preventive and restorative dental services among perinatal care providers. In addition, there is a need to provide resources that assist in facilitation of referrals. The new Evidence-based or -informed Strategy Measure (ESM), which is the number of medical and dental

professionals who receive perinatal oral health education through MDHHS, 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. A database of training records has been developed, 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.

Also included in these efforts is strategically disseminating Perinatal Oral Health Guidelines as well as 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. 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 stakeholders and distributed to local health departments, Federally Qualified Health Center (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 FY2019.

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

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number of pregnant women with a dental visit. Once this benefit goes into effect, the dental community, the medical community, and pregnant women will need to be made aware of what it entails and how the benefit is accessed. A communication plan that draws from the expansive networks created under the Perinatal Oral Health Initiative will be developed and implemented. Participants included in the plan will include medical, dental, and social service entities, local health departments, FQHCs, professional organizations, local coalitions, community partners, and other relevant agencies. This measure will be evaluated by the creation of the plan as well as the effectiveness of the plan itself.

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-2015	5.8	NPM 3
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2015	6.5	NPM 3 NPM 4 NPM 5
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2015	4.2	NPM 3
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2015	2.3	NPM 4 NPM 5
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2015	236.5	NPM 3
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2015	100.6	NPM 4 NPM 5

National Performance Measures

NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Baseline Indicators and Annual Objectives

FAD for this measure is not available for the State.

State Provided Data		
	2016	2017
Annual Objective	89.4	90.1
Annual Indicator	91.2	89.5
Numerator	1,560	1,521
Denominator	1,711	1,699
Data Source	2015 Michigan Resident Live Birth File	2016 Michigan Resident Live Birth File
Data Source Year	2015	2016
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	91.6	92.4	93.0	93.6	94.2	94.7

Evidence-Based or –Informed Strategy Measures

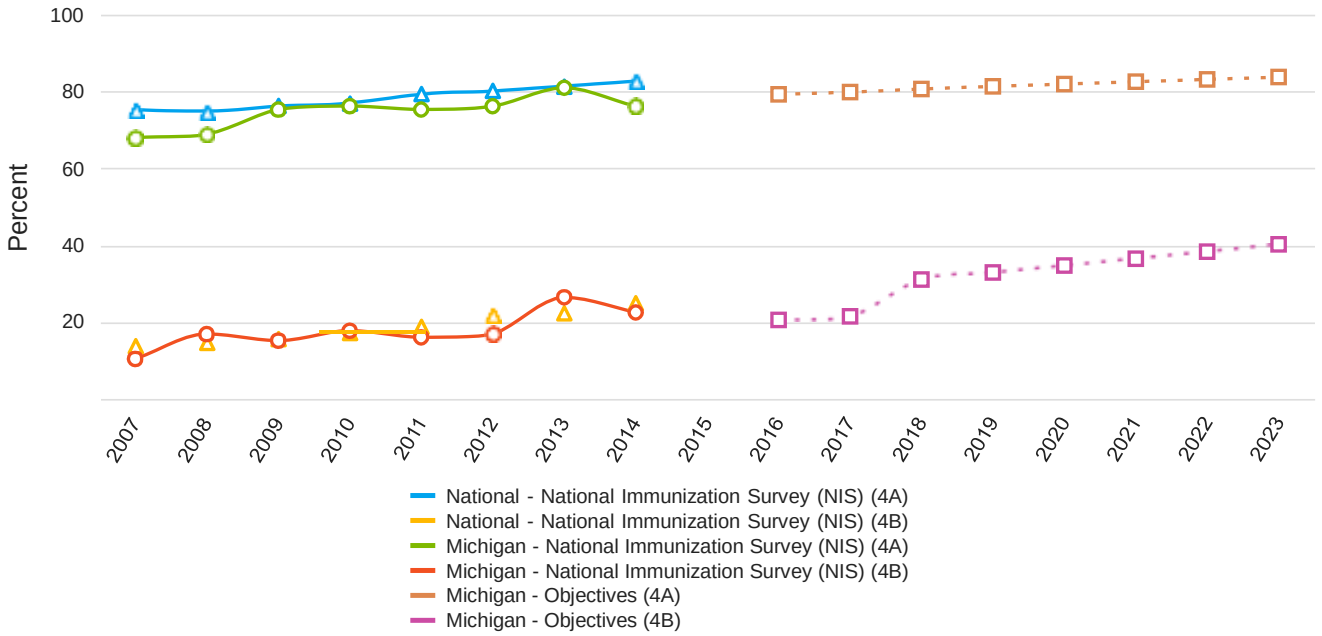
ESM 3.1 - Number of CenteringPregnancy sites in Michigan

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		12
Annual Indicator	14	12
Numerator		
Denominator		
Data Source	Centering Health Institute	Centering Health Institute
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	12.0	12.0	12.0	12.0	16.0	16.0

NPM 4 - A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months
Baseline Indicators and Annual Objectives



NPM 4A - Percent of infants who are ever breastfed

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	79.1	79.7
Annual Indicator	80.8	75.9
Numerator	82,892	86,976
Denominator	102,591	114,556
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	80.5	81.2	81.8	82.4	83.0	83.6

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

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	20.6	21.5
Annual Indicator	26.6	22.6
Numerator	25,900	25,415
Denominator	97,537	112,351
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	31.1	32.9	34.7	36.5	38.3	40.2

Evidence-Based or –Informed Strategy Measures

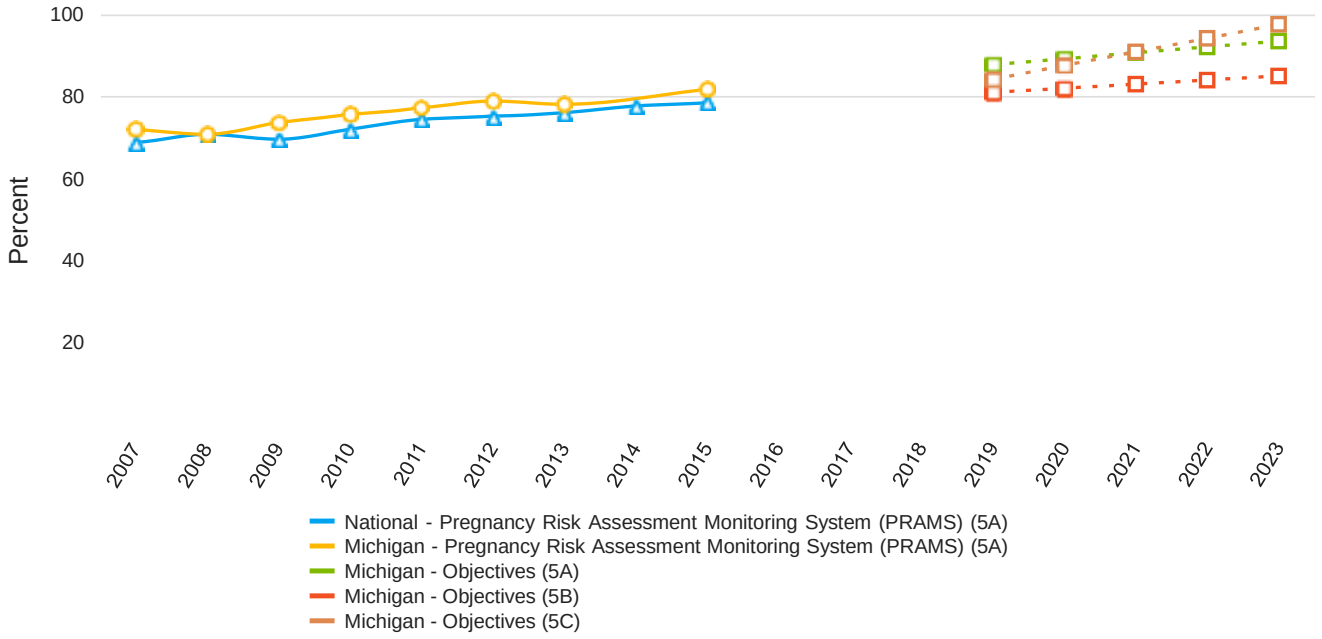
ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		17
Annual Indicator	14.3	14.5
Numerator	12	12
Denominator	84	83
Data Source	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	20.0	23.0	26.0	29.0	31.0	33.0

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
Baseline 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
Annual Objective	
Annual Indicator	81.4
Numerator	86,585
Denominator	106,318
Data Source	PRAMS
Data Source Year	2015

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	87.6	89.0	90.5	91.9	93.3

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

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	74.7
Numerator	77,520
Denominator	103,790
Data Source	PRAMS
Data Source Year	2015
Provisional or Final ?	Final

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	80.8	81.8	82.8	83.8	84.8

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

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	74.6
Numerator	78,063
Denominator	104,629
Data Source	PRAMS
Data Source Year	2015
Provisional or Final ?	Final

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	84.0	87.4	90.7	94.0	97.4

Evidence-Based or –Informed Strategy Measures

ESM 5.1 - Number of birthing hospitals trained on infant safe sleep

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	8.0	16.0	24.0	32.0	40.0

ESM 5.2 - Number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	85.0	90.0	95.0	105.0	110.0

State Performance Measures

SPM 2 - A) Percent of infants put to sleep alone in their crib, bassinet or pack and play and B) Percent of infants put to sleep without objects in their crib, bassinet or pack and play

Measure Status:	Inactive - SPM 2A and SPM 2B are now included as National Performance Measures.

State Provided Data		
	2016	2017
Annual Objective		75.9
Annual Indicator	77.6	74.7
Numerator	80,756	77,520
Denominator	104,115	103,790
Data Source	PRAMS	PRAMS
Data Source Year	2014	2015
Provisional or Final ?	Final	Final

State Action Plan Table

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

Priority Need

Support coordination and linkage across the perinatal to pediatric continuum of care

NPM

NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Objectives

A) By 2020, support the implementation and evaluation of Regional Perinatal Quality Collaboratives (RPQC) in eight regions

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

C) By 2020, expand quality improvement efforts related to the prevention and response of Perinatal Substance Use via the Regional Perinatal Quality Collaboratives

Strategies

A1) Provide financial and staff support to assist Regional Perinatal Quality Improvement Initiatives A2) Assess for, and pursue, expansion of RPQC quality improvement efforts in other regions in Michigan A3) Promote department directives to ensure alignment with statewide maternal infant health strategies

B1) Promote case management/care coordination for at-risk pregnant women in Michigan through evidence-based programs such as CenteringPregnancy©; CenteringParenting©; Maternal, Infant and Early Childhood Home Visiting (MIECHV); and Maternal Infant Health Program (MIHP) B2) Participate in the Maternal and Child Health Bureau's Alliance for Innovation on Maternal Health (AIM) B3) Lead statewide maternal and infant vitality efforts through the statewide maternal and infant health improvement plan

C1) Promote opioid use disorder prevention and increase screening and identification of women (especially those of childbearing age) for opioid use disorder through the work of regional perinatal quality collaboratives C2) Enhance capacity to provide treatment for women identified as affected by opioid use disorder through cross-sector partnerships within each regional perinatal quality collaborative C3) Improve workforce development and training programs to improve education and training related to Neonatal Abstinence Syndrome (NAS) and maternal care perinatally and postpartum via regional perinatal quality collaboratives

ESMs	Status
ESM 3.1 - Number of CenteringPregnancy sites in Michigan	Active

NOMs
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths
NOM 9.1 - Infant mortality rate per 1,000 live births
NOM 9.2 - Neonatal mortality rate per 1,000 live births
NOM 9.4 - Preterm-related mortality rate per 100,000 live births

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

Priority Need

Support coordination and linkage across the perinatal to pediatric continuum of care

NPM

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

Objectives

A) Increase percentage of Baby-Friendly designated birthing hospitals to 26% by 2020

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

Strategies

A1) Determine each Michigan birthing hospital's individual goal to continue movement along the Baby-Friendly pathway A2) Seek resources that will support and expand the work of QI Jumpstart, a collaborative network of hospitals working on QI and training A3) Continue and expand breastfeeding supportive practices in birthing hospitals through trainings and materials A4) Encourage key partners to develop one specific strategy to support efforts to increase the number of Baby-Friendly hospitals

B1) Increase training opportunities to improve the number, availability and racial and cultural diversity of trained breastfeeding professionals B2) Identify resources to discuss and determine root causes for lower breastfeeding initiation rates among women of color

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

NOMs

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

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

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

State Action Plan Table (Michigan) - Perinatal/Infant Health - Entry 3

Priority Need

Foster safer homes, schools, and environments with a focus on prevention

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 percent of infants put to sleep on a separate approved sleep surface to 81.8% by 2020

B) Increase percent of infants placed to sleep without soft objects or loose bedding to 87.4% by 2020

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

Strategies

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

A2, B2) Support providers who educate families on safe sleep

A3, B3) Develop and disseminate safe sleep messages based in best practices and families' experiences

A4, B4) Develop and disseminate tools for providers to have effective, non-judgmental, and culturally-sensitive conversations about safe sleep

A5, B5) Support promotion of protective factors (i.e. smoking cessation, breastfeeding, immunizations)

C1) Provide training and support to local health departments on health equity C2) Dedicate at least one infant safe sleep webinar annually to the topic of health equity C3) Send at least one message on the topic of health equity via the Infant Safe Sleep for Professionals list per quarter

ESMs	Status
ESM 5.1 - Number of birthing hospitals trained on infant safe sleep	Active
ESM 5.2 - Number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep	Active

NOMs

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

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

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

Perinatal/Infant Health Overview

Perinatal and infant health is a central focus of BFHS, which supports programs designed to ensure infants are born healthy and ready to thrive. The Perinatal and Infant Health Section, in particular, oversees the Maternal Infant Health Program, which 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, breastfeeding, 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, fetal alcohol syndrome, PRAMS, and infant and maternal mortality reduction. Title V also funds regional perinatal quality collaboratives across the state that are using quality improvement methods to test strategies for reducing infant mortality and improving infant health. Other federal funding is also 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, the Maternal Infant Strategy Group, the Michigan Association for Infant Mental Health, and universities.

Michigan's approach for perinatal and infant health emphasizes implementing strategies that prevent infant mortality, which is a critical indicator of the degree to which a community takes care of its women and children. In Michigan, the infant mortality rate has decreased from 7.6 deaths per 1,000 births in 2009 to 6.52 per 1,000 births (NVSS) in 2015. A similar trend has been documented nationwide. However, the risk doubles to 12.1 among non-Hispanic Black babies and is substantially greater (11.21) for babies born to mothers who are under 20 year of age. These data suggest that, while we are better prioritizing the needs of women and children in general, the needs of Black families and young families remain unmet. Another critical signal of wellbeing in the perinatal period and an important factor in the health of infants is postpartum depression. Data reported in the 2015 PRAMS suggest that 14.07% of women in Michigan experienced symptoms of postpartum depression. However, 29.81% of women with Medicaid experienced depression symptoms postpartum, suggesting women living with a limited income face stressors around childbirth that women with higher incomes are more protected from experiencing.

Risk-appropriate Perinatal Care (FY 2017 Annual Report)

Building on Michigan's existing perinatal care system, FY 2017 resulted in ongoing Regional Perinatal Care System Quality Improvement efforts in northern lower, west and southeast Michigan and efforts to begin expansion into the Upper Peninsula and southwest Michigan. Regional quality improvement efforts have served as the backbone of addressing risk appropriate care for mothers and infants and perinatal substance use. Focus remained on linking families to the evidence-based CenteringPregnancy and CenteringParenting prenatal and postnatal care models and evidence-based home visiting, which have been proven to improve birth outcomes.

The importance of comprehensive system linkages and quality improvement remain the driving force behind Michigan's efforts to improve maternal, infant and family health. In FY 2017, partnerships and collaborations were solidified with Healthy Start projects; WIC clinics; Maternal, Infant and Early Childhood Home Visiting (MIECHV) Programs; local health departments (LHDs) receiving Title V funding; and many other maternal and child health partners.

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

In FY 2017, Regional Perinatal Quality Collaborative projects encompassed four of the ten Michigan-designated Prosperity Regions. Perinatal Quality Collaboratives are in southeast, west and northern Lower Michigan. Each regional project is charged with utilizing quality improvement methodology aimed at improving maternal and infant health. All projects are required to address the social determinants of health, as the root cause of health inequity. Each regional collaborative is composed of regional partners vested in improving maternal and child health outcomes. Birthing hospitals, LHDs, Medicaid Health Plans, Healthy Start projects, evidence-based home visiting programs, Great Start Collaborative representatives and Community Foundations are just a sample of the diverse stakeholders and members of the Regional Perinatal Quality Collaborative projects. The most important stakeholders, however, are the families residing in each region. Family input has been garnered in the form of focus groups, attendance at regional meetings and family participation on the steering committee of the west Michigan project.

Southeast Michigan (inclusive of Wayne, Oakland and Macomb counties) is home to 24 of Michigan's 83 birthing hospitals. Of these 24 birthing hospitals in southeast Michigan, ten are neonatal intensive care units (NICUs) and represent just under half of the NICUs in Michigan. In calendar year 2016, 46,185 (41%) of the births in Michigan occurred in southeast Michigan. The southeast Michigan project has designed their quality improvement project around increasing referrals and utilization of evidence-based home visiting in two 'hot spot' zip codes in the City of Detroit.

West Michigan contains 13 rural and urban counties, nine LHDs, 13 birthing hospitals, two NICUs and a reported 19,709 births in calendar year 2016. This regional quality collaborative has divided into two workgroups: one to increase substance use screening in pregnant women and one to increase utilization of evidence-based home visiting services. Each workgroup is planning to pilot their interventions in both a rural and an urban setting.

Northern Lower Michigan is made up of 21 counties, nine birthing hospitals, and one NICU. In calendar year 2016, 4,688 live births were reported. This region is working to increase substance use screening in pregnant women and is planning to pilot a substance use screening tool in two prenatal clinics.

Outreach to the Upper Peninsula (UP) and southwest Michigan began in FY2017 with stakeholders in each region meeting to discuss operationalizing a Regional Perinatal Care System Quality Improvement collaborative. The Upper Peninsula is 16,377 square miles, has 15 counties, eight birthing hospitals, and one NICU. In calendar year 2016, 2,786 live births were reported. In calendar year 2014, the Upper Peninsula had an incidence of neonatal abstinence syndrome (NAS) of 2,102 per 100,000 live births. This rate is the highest in the state. Southwest Michigan is comprised of seven counties, 10 birthing hospitals, and one NICU. In calendar year 2016, 9,131 live births were reported. Additionally, in southwest Michigan, in calendar year 2015 only 62% of pregnant women began prenatal care in the first trimester. This was the lowest of all the regions in the state. Launching Regional Perinatal Quality Collaboratives in both the Upper Peninsula and southwest Michigan will prove beneficial toward the overall improvement of maternal and child health.

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

The ESM for this NPM, which aligns to this objective, is the number of CenteringPregnancy sites in Michigan. Ongoing support of this evidence-based strategy measure is a key component to assuring risk appropriate care for Michigan mothers and infants. CenteringPregnancy is an evidence-based prenatal model that has proven health outcomes including reductions in preterm and low birth weight infants. The CenterPregnancy model is patient driven resulting in a patient/clinician partnership that values the voices of women, during pregnancy and interconception. In FY 2017, through the partnership of MDHHS and the Michigan Primary Care Association, the 13

CenteringPregnancy sites remained supported. The Michigan Primary Care Association contracted with the Centering Health Institute to offer training and technical assistance for new and existing CenteringPregnancy sites. To date, there is one CenteringParenting site in Michigan.

In calendar year 2016, 88% of low birth weight (LBW) babies were born at hospitals offering neonatal intensive care units (NICU) or special care nurseries (SCN). In 2016, 9,515 babies were born with LBW and of those, 8,354 were born at a facility with a NICU or SCN. In the same year, 91.5% of very low birth weight (VLBW) babies were born at hospitals offering a NICU. There were 1,663 babies born with VLBW in 2016, and of those, 1,521 were born at a facility with a NICU.

NICUs of Michigan most closely correlate with Level III nurseries and SCNs of Michigan most closely correlate with Level II nurseries. Based on data received from MDHHS Vital Statistics, the majority of low birth weight and very low birth weight babies were born at hospitals that best medically meet their needs. However, more work needs to be done to understand why 12% of LBW babies are born at hospitals without NICUs and SCNs, why 8.5% of VLBW babies are born at hospitals without NICUs, and how we can ensure that all LBW and VLBW babies are born at hospitals that best meet their needs.

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

The MDHHS-supported Michigan Collaborative Quality Initiative is a voluntary quality collaborative of approximately 25 Michigan birthing hospitals. In FY 2017, the Michigan Collaborative Quality Initiative conducted two learning opportunities addressing Neonatal Abstinence Syndrome (NAS) throughout the state; held monthly webinars to share best practices and discuss collaborative efforts; and collected data to monitor improvements regarding NAS, breast milk use for very low birth weight babies, and infection rates of infants cared for in Neonatal Intensive Care Units.

The Regional Perinatal Quality Collaboratives of northern lower and west Michigan, as mentioned above, continued quality improvement efforts aimed at increasing the number of prenatal substance use screenings and conducted brief interventions and referrals made via the innovative use of handheld technology while patients wait at prenatal appointments. Piloting these efforts is slated to occur in FY 2018. All Regional Perinatal Quality Collaborative projects have also been very instrumental in ensuring that education and outreach efforts to address Perinatal Substance Use have occurred in the forms of Society for Public Health Education (SOPHE) Script training and use of Finnegan scoring of infants to identify NAS.

Michigan participated in the *2017 Policy Academy: Improving Outcomes for Pregnant and Postpartum Women with Opioid Use Disorders and their Infants, Families and Caregivers* hosted by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the National Center on Substance Abuse and Child Welfare (NCSACW). The Policy Academy resulted in a unified cross-departmental approach to address and prevent perinatal substance use. The linking of MCH efforts funded efforts both internally and externally to MDHHS resulted in increased communication and more streamlined efforts to positively impact the lives of those affected by Perinatal Substance Use Disorder (PSUD).

Breastfeeding (FY 2017 Annual Report)

During FY 2017, breastfeeding initiation and duration rates were strengthened through training, education, promotion and support. The most recent year for which breastfeeding initiation data is available is 2015 Pregnancy Risk

Assessment Monitoring System (PRAMS). In 2015, 85.0% of all Michigan mothers breastfed at least once. PRAMS data has revealed that the proportion of Michigan mothers who initiated breastfeeding was fairly flat over the period from 2005-2009 with a minimal increase of 1.1% over that time period, but Michigan saw a substantial increase of 10.9% in the time period 2009-2014.

Families and consumers have significant input into local breastfeeding activities through breastfeeding coalitions and peer support groups. At the state level, families and consumers were invited to participate in the breastfeeding regional summits and their input was utilized in the writing of Michigan's first breastfeeding state plan.

Objective A: By 2018, develop and promote a state plan to improve and support breastfeeding with a focus on duration, initiation and reducing disparities.

In recognition of the impact of breastfeeding on infant mortality and improving health and wellness, MDHHS hosted two regional summits titled "Working to Bridge the Gap: Removing Breastfeeding Barriers" in 2016. The ideas and suggestions from these summits formed the basis of the State of Michigan Breastfeeding Plan which was published in October 2017. The second strategy of promoting the plan statewide was accomplished through mailing the plan to key partners, presenting the plan's executive summary at over 20 statewide presentations, and completing a radio interview which aired on "Morning Edition", "All Things Considered" and "Current State" show. Within a week of completing the interview, over 240 people accessed the story on the WKAR website. Additionally, the plan was promoted widely through a press release and state-level maternal and child health program Listservs and email groups. The Michigan Breastfeeding Network's (MIBFN) was active in promoting release of the plan through Facebook and Twitter feeds with abundant sharing among our statewide coalitions.

The third strategy was achieved through the completion of a Collaboration multiplier by August 2017 through partners at our state-level breastfeeding work group. Nineteen state-level maternal infant health programs and collaborative partners completed the tool to assess their role in each of the strategies outlined in the plan. The fourth strategy was achieved through the successful posting of the plan on the Infant Mortality website.

Objective B: By 2020, increase Baby-Friendly hospitals to 20% across Michigan.

Tracking the number of Baby-Friendly designated birthing hospitals is the ESM for this NPM. In FY 2017, the number of Baby-Friendly designated birthing hospitals and centers remained constant at 12. A number of additional birthing hospitals are currently on the path to Baby-Friendly designation due to the collaborative efforts of Michigan's breastfeeding stakeholders and our goal of 22 Baby-Friendly hospitals (26%) by 2020 remains the same.

A statewide assessment of hospital maternity care practices was completed by working in close collaboration with our maternal child health epidemiologist team. We were able to utilize Michigan's mPINC scores to focus our education and outreach towards Prosperity Regions that had the greatest opportunity for improvement. Our mPINC scores revealed that we needed to focus on staff training and discharge planning. Additionally, Michigan Women, Infants and Children Supplemental Food Program (WIC) completed a survey of 922 hospital staff in February 2017. This survey provided us with a baseline understanding of current hospital practices, perceptions about mothers' willingness and preparedness to receive evidence-based care, staff perceptions about relationships with community organizations, including referrals, and interest in broader collective impact and quality improvement efforts.

The second strategy of awarding a minimum of four mini-grants to assist hospitals in Baby-Friendly Hospital Initiative implementation was accomplished when ten birthing hospitals completed an application and eight grants of $10,000 each were awarded. All of the awarded hospitals chose to work on staff training. Funding began January 1, 2017 and a collaboration (called the Quality Improvement Jumpstart or QI Jumpstart) was formed with these hospitals. The goal of QI Jumpstart was to propel hospitals toward the implementation of hospital-based maternity care practices

with the creation of QI culture and the provision of training and tools. Two of the funded hospitals did not have the capacity to complete the grant objectives, and therefore, withdrew. An additional three hospitals were added to the original group of six for total of nine. From January 2017 to September 2017, staff from these nine Michigan birthing hospitals participated in monthly collaborative webinars to allow for group learning, monthly office hours to provide technical assistance and allow for sharing and feedback, accessed customized materials from Coffective designed to assist with QI work and all-staff activities, and received training on strategies for effective and efficient data collection and reporting. The results achieved were outstanding. From a process-perspective, hospitals started monthly breastfeeding in-services with all of their pediatric and family practice residents, developed a task force, started support groups, wrote policies, trained nurses, initiated skin to skin after C-sections, placed posters in waiting rooms, initiated rooming in, began to delay the bath and immunizations until after the first hour, and completed numerous PDSA cycles. From an outcomes-perspective, four hospitals moved onto the Baby-Friendly pathway (D1 designation), two hospitals moved from D1 to D2 designation, and one hospital plans to apply soon.

Objective C: By 2020, study and determine method(s) to accurately measure breastfeeding initiation, duration, and exclusivity rates and measure racial and ethnic differences.

In FY 2016, the MDHHS Breastfeeding Coordinator formed a workgroup with data partners in the Maternal and Infant Health Division and the Maternal Child Health Epidemiology Section to obtain input on determining a baseline for breastfeeding data collection in Michigan. The workgroup determined that the majority of Michigan's breastfeeding stakeholders were unaware of data parameters or how to access data. In order to prepare the document, research was completed on MI PRAMS, Vital Records, mPINC, WIC Hospital Practice Survey 2016, WIC ad hoc rate and duration report, WIC Pediatric Nutrition Surveillance Survey (PedNSS), Metabolic screening, Center for Disease Control (CDC) National Immunization Survey and Morbidity and Mortality Weekly Report (MMWR). The breastfeeding data source document was completed in October 2017. This document has been shared extensively across Michigan at local breastfeeding coalition meetings, to local maternal child health providers and to QI Jumpstart collaborative hospital participants. It was also posted on the MIBFN website.

The variance in electronic health record collection systems throughout Michigan has made collection of standardized breastfeeding data from hospitals and pediatricians an unobtainable goal at this time. MDHHS has requested and received regional Michigan mPINC data which has been shared for informational, program planning and reporting purposes. Data collection from the birthing hospitals participating in QI Jumpstart collaborative work has been completed and was presented at the Mother Baby Summit in November 2017.

Strategy D: By 2020, increase breast milk at discharge by ≥ 10% (over baseline) for VLBW (under 1500 grams at birth) infants.

Supporting the Michigan Quality Collaborative Initiative and staff was accomplished through collaborative work in the education of NICU nurses in 2017. Support of the Michigan Collaborative Quality Initiative through education on the importance of early pumping and Kangaroo care occurred through trainings, webinars and resource sharing. Use of RedCap data on breastmilk usage was found to be unobtainable and therefore, the second and third strategies related to use of RedCap data have been discontinued. Updated objectives and strategies are reflected in the current state action plan.

Strategy E: By 2020, increase the percentage of mothers who discussed feeding only breastmilk to their babies with their health care worker from almost 44% to 50% as measured by PRAMS.

Education and tools for providers who work with pregnant women and families were provided through multiple venues, including the home visiting conference, the Great Lakes NetWORK series breastfeeding webinar,

presentations child care providers, diabetes educators, and coalitions, at the Michigan Premier Public Health conference and many more. WIC has been working diligently on increasing collaboration between home visiting, WIC and hospitals through the WIC hospital survey and implementation strategies (described above) and through three Building Bridges for Breastfeeding Duration trainings offered in Flint, Traverse City/Petoskey and Port Huron in 2017. Since 2010, Building Bridges for Breastfeeding Duration has been offered in 2-4 communities each year throughout the state. The purpose is to bring together the hospital and community work settings and to build a bridge of support for the mother-baby dyad after discharge. The second strategy is being accomplished through the use of Coffective evidence-based, prenatal educational materials among our maternal child health programs.

Single year 2013 PRAMS data showed that the proportion of moms who discussed only breastfeeding with their provider at 44%. Multi-year PRAMS data from 2012-2014 reveals that 45.3% of all Michigan mothers discussed feeding only breast milk with their provider. Disparities continue to exist with 48.3% of non- Hispanic white mothers discussed feeding only breast milk to their infant with their provider compared to 38.5% of non-Hispanic black mothers. Unfortunately, this question was removed from Phase 8 PRAMS survey so another parameter to measure will need to be identified going forward.

Safe Sleep Environments (FY 2017 Annual Report)

In Michigan's original five-year plan, the priority area to "Foster safer homes, schools and environments with a focus on prevention" was linked to promotion of infant safe sleep environments through the following two-part SPM: A) the percent of infants put to sleep alone in their crib, bassinet or pack and play and B) the percent of infants put to sleep without objects in their crib, bassinet or pack and play.

Data from the Michigan Pregnancy Risk Assessment Monitoring Survey (PRAMS) for 2015 indicates two behaviors have improved over time at the state level: back sleeping and sleep space objects. In 2015, 81.4% of Michigan infants were usually sleeping on their back. The proportion of infants sleeping with no soft objects (pillows, bumpers, blankets, toys) is improving quickly. In 2009, only 47% of infants slept with none of these objects. By 2015, this proportion increased to 75% of infants.

With these state level measurements on track we turn our attention to groups where risks still exist, particularly racial disparities. In 2015, 85% of non-Hispanic white (NHW) infants and 66% of non-Hispanic black (NHB) infants are being put to sleep on their backs, a NHW-NHB rate difference of 19%. This difference persists over time; the average NHW-NHB rate difference for back sleeping from 2004-2015 is 22%. While there is a persistent NHW-NHB rate difference seen for back sleeping, this disparity gap is actually closing for other sleep practices. In 2012, 91% of NHW infants were slept in a crib versus 82% of NHB infants, a NHW-NHB rate difference of 9%. By 2015, the rate difference decreased by more than half to 4.3% [90.3 NHW - 86.0 NHB]. In 2012, co-sleeping was much more common among NHB mothers; the rate difference was 17.9% [82.9% NHW - 65.0% NHB]. By 2015, co-sleeping was much less common among NHB mothers and the rate difference decreased to just 3.6% [80.4% NHW - 76.8% NHB].

According to the Centers for Disease Control (CDC), approximately 3,500 infants die suddenly and unexpectedly in the U.S. each year. Despite the improvements in parental behavior, in 2015 the CDC Sudden Unexpected Infant Death Case Registry reported that 159 infants died from sleep-related causes in Michigan, accounting for almost 21% of all infant deaths. For the last several years, sleep-related death has been the third leading cause of death for infants overall in Michigan, and the leading cause of death for infants 28 days to one year old. Of the leading causes of death, sleep-related infant deaths are considered the most preventable.

In FY 2017, work began to identify all the touchpoints where a family could and should receive infant safe sleep information with a goal to impact existing infrastructure resources. Infrastructure systems have been grouped into either key healthcare system components, key community system components, or groups that will support training, outreach, or dissemination needs. Connections have been strengthened with existing partners, such as WIC and home visiting programs, and made with a variety of new partners, including the Regional Perinatal Quality Collaboratives and teen pregnancy programs. This work is continuing in FY 2018. Challenges exist in ensuring families are receiving consistent infant safe sleep messages at all of the potential touchpoints. Families sometimes receive inconsistent messages when health care providers provide old or inaccurate information and when family members, who may have done things differently when they were caring for infants, provide outdated advice.

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

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

In FY 2017, activity occurred across six overarching strategies for these two objectives:

- Provide funding to a subset of local health departments and the Inter-Tribal Council of Michigan to support the implementation of community-based infant safe sleep activities
- Facilitate new collaborations with non-traditional partners to carry out programming that promotes infants being placed to sleep alone in their crib, bassinet or pack and play
- Develop and implement more effective messages and methodologies that are best practice driven, reflect the needs and choices of families, align safe sleep implementation within a real-life context and provide messaging that is appropriate and relevant to diverse target population groups
- Provide education and tools for providers who work with pregnant and parenting families (in programs such as home visiting, WIC, child care, prenatal care, etc.) to have effective conversations about infant safe sleep
- Produce a safe sleep report
- Reduce the racial disparity related to unsafe sleep practices

All of the strategies were designed to meet both of the original objectives to increase the percent of infants put to sleep alone in their crib, bassinet or pack and play and to increase the percent of infants put to sleep without objects in their crib, bassinet or pack and play. The sixth strategy, to reduce racial disparity, is tied to activities in the other five strategies so is not singled out in the narrative below. Until FY 2017, the Infant Safe Sleep Program was staffed by a part-time Program Coordinator and a Unit Manager, who supervised additional programs. In June 2017, a full-time Infant Safe Sleep Program Coordinator was hired. A part-time Program Consultant also supported the program in FY 2017.

Six major strategies were implemented to impact parents' infant sleep practices. First, 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. The LHDs represented Michigan communities with the highest numbers of Sudden Unexpected Infant Deaths (SUIDs) and the Inter-Tribal Council of Michigan was a grantee due to the historically high numbers of SUIDs among American Indian infants. Grants were in the amount of $22,500, with the exception of Wayne County receiving $45,000 and the City of Detroit receiving $90,000 due to the higher numbers of deaths in those communities. The mini-grants allowed communities to develop local programming to provide culturally relevant, community-based infant safe sleep education, awareness and outreach activities. Activities ranged from provision of safe sleep education sessions at home or in a community setting to group classes to large community awareness events. In some communities, mini-grant funds were used to purchase

billboards and develop and/or translate materials specific to the populations served. A portion of the mini-grant could be used to purchase pack and plays or sleep sacks. Through mini-grants, 4,500 individuals (parents, caregivers, professionals and community members) received infant safe sleep education in a class or workshop and over 11,500 people were provided infant safe sleep information at community events such as health fairs. Pre/post test scores of attendees in the classes and workshops showed that infant safe sleep knowledge and intention to practice safe sleep behaviors increased after attendance.

The faith-based collaboration that was initiated in FY 2016 in Detroit expanded in FY 2017 through collaboration between the Detroit Health Department, the MDHHS Infant Safe Sleep Program and the MDHHS Office of Community and Faith Engagement (formerly the Office of Inter-Agency Collaboration). At the end of FY 2017, 16 faith-based organizations were involved in these efforts which included hosting infant safe sleep educational sessions, distributing safe sleep messages in church bulletins, holding prayer times for infants and posting infant safe sleep educational material in nurseries and public spaces. Additionally, the annual Infant Safe Sleep Pastor's Luncheon was held in September 2017 honoring pastors who were involved in the program. In FY 2018, the faith-based collaboration will be expanded to add at least four faith-based organizations in each of four high-risk SUIDs counties.

The third strategy was to develop and implement more effective messages and methodologies that are relevant to diverse target population groups. In December 2017, MDHHS was awarded and began work on the Michigan Health Endowment Fund (MHEF) grant with a main activity to evaluate the message and methodologies. During FY 2017, seven focus groups to test attitudes and beliefs about infant safe sleep messaging were conducted with 74 mothers and fathers of infants under the age of one plus individuals who provide support (grandmothers, aunts, etc.). The focus groups were conducted in areas of the state with high SUID rates. The recommendations from the focus groups were shared with MDHHS's contracted media partner, along with additional information on recent research regarding infant safe sleep messaging and innovative programs from around the country.

The fourth strategy, to provide education and tools for providers who work with pregnant and parenting families to have effective conversations about infant safe sleep, is part of ongoing program efforts. Program staff provide training at conferences, professional trainings and webinar presentations to reach many who work in the field. The staff supported by the infant safe sleep mini-grants are another critical component of this work, as they provide education for local groups such as hospitals, home visiting collaboratives, child care centers, and community agency staff. Online training opportunities are available as well, with provision of a training for child care providers and a broader one for others providing care for pregnant women and parenting families.

In FY 2017, 7,643 individuals completed infant safe sleep training online. Providers are also supported with access to free educational materials to use in their work with families; 368,905 educational items were distributed by MDHHS in FY 2017. During FY 2017, an email list for professionals working with families around the issue of infant safe sleep was been established and had nearly 1,300 members at the end of FY 2017. A quarterly webinar series on infant safe sleep was established in FY 2017, with webinars occurring in May and August 2017. The webinar series will continue through FY 2018. A "Safe Sleep 201" training for home visitors and child welfare workers has been developed and will be piloted; an in-person and online version will be rolled out in FY 2018. The objective of this training is to go beyond the AAP recommendations and to address how to talk to families around safe sleep and how to address the challenges families face in following the guidelines. Each pilot session will have an evaluation component and any needed changes will be incorporated prior to the next session.

The fifth strategy is the production of an annual safe sleep report. Work on the Infant Safe Sleep Report was largely done in FY 2017; however, the final report was not released until January 2018 and will be discussed in the next reporting cycle.

Perinatal/Infant Health - Application Year

Risk-appropriate Perinatal Care (FY 2019 Application)

The state priority need to support coordination and linkage across the perinatal to pediatric continuum of care was selected for the Perinatal/Infant Health domain, as a result of the five-year needs assessment process. The percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU) (NPM 3) was selected as the first of two measures to address this priority need.

Infants born prematurely and of VLBW or low birth weight (LBW) are at a greater risk of longer hospital stays, compromised health statuses, developmental delays and even death in comparison to their full-term, healthy weight counterparts. Black, Native American, Middle Eastern and Hispanic babies are particularly impacted by health inequities specifically related to gestation and birth weight. In 2016, 10% of all live births in Michigan occurred prior to 37 weeks gestation and 1.5% of all live births were born with VLBW. As was seen in 2015, the disparity between Black infants and White infants in terms of prematurity, VLBW, and LBW is still apparent. Much like in 2015, the percentage of Black VLBW infants (3.1%) was triple that of White VLBW infants (1.1%) in 2016. The percentage of Black LBW infants (14.4%) was double that of White LBW infants (7%) in 2016[1]. This persistent disparity indicates the need for innovation and collective efforts to move the percentages in a downward trend.

The aim of the Michigan Regional Perinatal Quality Collaboratives (RPQCs) is to develop innovative strategies to address the drivers of preterm birth rates, as well as VLBW and LBW regionally. The RPQCs are also tasked with addressing social determinants of health, disparities in birth outcomes, and health care inequalities through involvement of cross-sector local and statewide stakeholders. Several RPQCs have begun to address perinatal substance use through increased prenatal screening, increasing treatment capacity in their respective region and increased educational opportunities related to Neonatal Abstinence Syndrome (NAS). Addressing the existing health inequities and disparities in Michigan will result in the overall reduction of Michigan VLBW, LBW and preterm birth rates. At the same time, striving to increase the percentage of preterm and VLBW infants born in a risk-appropriate care hospital will decrease the risk of neonatal, infant and maternal mortality.

Objective A: By 2020, support the implementation and evaluation of Regional Perinatal Quality Collaboratives (RPQCs) in eight regions.

RPQCs have been launched in six regional areas in Michigan. These areas have varied demographic composition and include rural and urban communities. Key stakeholders include, but are not limited to: families, birthing hospitals, insurance payers, local health departments (LHDs), medical providers, health systems, home visiting programs and other community agencies. In FY 2019, an additional RPQC will be launched in the Saginaw Bay area on the east side of Michigan.

Regional Perinatal Quality improvement efforts in northern Lower Michigan are focused on increasing substance use screenings and treatment referrals of pregnant women, as well as establishing a sustainable home visiting program that is available to all pregnant/postpartum women and their infants, regardless of their insurance or income status. Substance use screening efforts achieved at two pilot prenatal care sites across the region in FY 2018 are expected to fuel expansion of the screening tool use at other obstetric clinics in FY 2019.

In FY 2018, efforts in Southeast Michigan began to take shape. The collaborative chose to focus on increasing the utilization of evidence-based home visiting programs in Detroit to move the needle on infant deaths, especially those related to sleep-related causes. It is anticipated that information obtained through consumer focus groups and conclusions reached in FY 2018 will encourage the collaborative to expand the best practices to other home visiting agencies and birthing hospitals in the region.

Regional Perinatal Quality improvement efforts on the west side of the state have focused on increasing the use of evidence-based home visiting programs and on increasing substance use screening in pregnant women. Results of these two pilot projects, focused in an urban and rural area of the region, will help inform and direct FY 2019 activities.

Regional Perinatal Quality improvement efforts were initiated in FY 2018 in Michigan's Upper Peninsula and Southwest Michigan. In 2016, the Upper Peninsula had the highest rate of NAS of any region in the state[2] and Southwest Michigan had the lowest rates of any region of early entry into prenatal care[2]. This data helped shape the focus of each respective region's quality improvement efforts in FY 2018 and will continue to steer their work in FY 2019.

All RPQC initiatives are to be inclusive of active family engagement and based on a framework of health equity. Input from families is received through in-person participation at regional meetings, focus group participation and patient feedback surveys.

In FY 2019, each funded RPQC will continue efforts aimed at the improvement of maternal, infant and family outcomes, as a means of decreasing the percentage of infants born prematurely, born with very low or low birth weights, and born exposed to harmful substances such as opioids, alcohol, and tobacco. Assessment for potential additional RPQCs will be conducted in FY 2019 to continue expansion to all regions within the state.

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

The first strategy for this objective is to promote case management and care coordination for pregnant women in Michigan through evidence-based programming. MDHHS continues to support and promote CenteringPregnancy and CenteringParenting in Michigan. CenteringPregnancy is an evidence-based group prenatal care model that has been proven effective in decreasing the rate of preterm and low birth weight babies, as well as decrease racial disparities in preterm birth. The number of CenteringPregnancy sites in Michigan is the Evidence-based Strategy Measure (ESM) for this performance measure. To date, there are 12 CenteringPregnancy group prenatal care sites and one CenteringParenting site in Michigan. In addition, MDHHS promotes case management and coordination for women and infants through evidence-based home visitation programs. Evidence-based home visitation programs promote health care utilization and reduced risk for adverse birth outcomes such as VLBW, LBW, and premature births. MDHHS remains committed to promoting the aforementioned evidence-based case management and care coordination strategies aimed at decreasing poor outcomes for infants in FY 2019 and thereafter.

Participation in the Maternal and Child Health Bureau's Alliance for Innovation on Maternal Health (AIM) is the second strategy. By partnering with stakeholders and professional organizations, Michigan is working toward improved maternal morbidity and mortality outcomes. Addressing the health status of mothers is a key part of prevention efforts aimed at reducing the number of premature, very low and/or low birth weight babies. The work of MI-AIM will continue to lead the effort of improving maternal health of Michigan mothers in FY 2019.

Prior to FY 2019, maternal and infant health were siloed. In FY 2019, and the fiscal years to follow, maternal and infant health efforts will be addressed in a combined statewide maternal and infant health improvement plan. This plan will be the next iteration of the current Infant Mortality Reduction Plan (IMRP). MDHHS is leading this effort and plans to host a series of "town hall" meetings in which stakeholders, including families, will be provided with an overview of the direction of the combined efforts. Attendees will also have an opportunity to offer feedback on the plans. As with the current IMRP, the new iteration of the health improvement plan will focus on reducing the number of premature, very low and/or low birth weight babies in FY 2019 and beyond.

Objective C: By 2020, expand quality improvement efforts related to the prevention and response of Perinatal Substance Use via the Regional Perinatal Quality Collaboratives (RPQCs).

Three comprehensive strategies will be utilized in FY 2019 to address Perinatal Substance Use, including addressing Neonatal Abstinence Syndrome (NAS). Perinatal substance use is a risk factor for preterm births and infants born with very low or low birth weights. In addition to the effects of alcohol and tobacco use, Michigan continues to have high NAS rates in several regions within the state. This is due to the opioid epidemic that Michigan continues to battle. All three strategies to address perinatal substance use will be guided by the RPQCs. In FY 2019, three of the collaboratives will direct efforts on perinatal substance use and/or addressing NAS.

The first strategy is to promote opioid use disorder prevention and increase screening and identification of women (especially those of childbearing age) for opioid use disorder. Northern Lower Michigan and West Michigan have been piloting the use of electronic screening tools in prenatal clinics located within their respective region. Patient feedback is also being collected and analyzed. Therefore, it is anticipated that in FY 2019, the results of these pilots will lead to regional efforts to prevent, screen, and address perinatal substance use for all women of reproductive age.

The second strategy builds upon the previous strategy: to enhance capacity to provide treatment for women identified as affected by opioid use disorder through cross-sector partnerships. Northern Lower Michigan identified a large gap in treatment options for individuals living in this 21-county region and is currently in the initial planning stages for expanded treatment capacity. As part of this planning process, conversations have been inclusive of providers and community members. These efforts will carry over to FY 2019 with expectations that at least one additional comprehensive treatment clinic for pregnant women will come to fruition.

As mentioned previously, NAS is also addressed under this objective. The third strategy aims to improve workforce development and training programs related to NAS, as well as maternal care for perinatal substance use both perinatally and postpartum. The Upper Peninsula has the highest NAS rate of any region in Michigan. Current efforts in this region have been focused on providing education and training to birthing hospital staff, as well as prenatal care staff. It is expected that by the completion of FY 2019, all birthing hospitals in this region will be trained in NAS identification and treatment. The Northern Lower Michigan region is also committed to training staff at birthing hospitals located in the 21-county region. Initial efforts have commenced and will continue into FY 2019. Having a standardized approach to NAS, as well as maternal care for perinatal substance use, will decrease the number of mothers, infants and families impacted by substance use and will furthermore reduce the risk for preterm births and infants born with very low or low birth weights.

Breastfeeding (FY 2019 Application)

The percent of infants who are ever breastfed and percent of infants breastfed exclusively through six months (NPM 4) was selected as the second of two measures to address the priority need to “Support coordination and linkage across the perinatal to pediatric continuum of care” in the Perinatal/Infant Health domain. Breastfeeding is a natural way to feed and provide nutrition to infants, and research shows that it provides many short- and long-term benefits to both mothers and babies. Therefore, Michigan continues to support breastfeeding as an important public health issue. The publication of Michigan’s first Breastfeeding State Plan in the fall of 2017 set the common agenda necessary for a collaborative approach among an array of stakeholders: state, local and tribal government; health care professionals and organizations; employers; child care providers and educational institutions; community organizations; and most importantly, individuals and families. The Breastfeeding Plan’s strategies strive to address

the social determinants of health and health equity, and work to address health disparities in breastfeeding and infant mortality. Michigan's five key strategies to achieve breastfeeding goals are the elimination of disparities; advancing breastfeeding rights through education of policy makers and support of laws that protect breastfeeding families; building community support through coalitions and increased access; changing organizational practices; and strengthening individual skills. In order to focus our efforts, MDHHS breastfeeding promotion partners (i.e., WIC, maternal and infant health and obesity prevention) further narrowed the plan's strategies to include:

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

Opportunities for success have been heightened through enhanced communication and goal alignment achieved with the reestablishment of Michigan's state-level Breastfeeding Work Group. This group meets quarterly and brings together state-level partners. It has resulted in the development of a collaborative tracking tool (to document progress towards achieving the goals of the state plan) and in the identification of issues that are more easily solved with many key partners at the table. Michigan's barriers to optimal breastfeeding include the lack of access to educated peers and support people, the lack of access to breastfeeding professionals, the lack of Baby-Friendly hospitals, and the lack of community and work place support. Implicit bias can also affect our clinical and community providers, along with families. Funding limitations are a challenge to continuing successful programs, such as QI Jumpstart.

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

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. Although there is general support for the Baby-Friendly initiative in Michigan, our birthing hospitals struggle to move forward on the Baby-Friendly pathway. Michigan's evidence-based strategy measure (ESM) is the percent of Baby-Friendly designated hospitals. Currently, 17 hospitals are on the pathway, and as of April 2018, two more birthing hospitals received their designation, which increased the total number of Baby-Friendly hospitals in Michigan to 14 out of 83. The current percent of Baby-Friendly hospitals is 16.9% and progress is being made towards the goal of 26% by 2020.

The first strategy to achieve our goal will be to determine each Michigan birthing hospital's individual goal to continue movement along the Baby-Friendly pathway. Utilizing the communication network available through the state-level breastfeeding work group, contacts will be made with each maternal infant health hospital leader to ascertain motivation, progress and barriers towards achieving Baby-Friendly status. Research has shown that the most effective way to support hospitals involves funding and technical assistance. Therefore, the second strategy is to support and expand the work of QI Jumpstart, a collaborative network of hospitals working on quality improvement and training, from nine hospitals to 14 hospitals by 2019. Resources (including funding) will need to be identified to provide technical assistance and coordination, so outside grant funding will be explored.

The third strategy to increase the number of Baby-Friendly hospitals will be to continue and expand breastfeeding supportive practices in birthing hospitals through trainings such as WIC-supported Building Bridges, Coffective trainings and materials, 310 Connect collaborative support in Flint and Battle Creek, and support of the annual Mother Baby Summit for the next two years. The fourth strategy will encourage key statewide partners who influence maternal and infant health to develop and implement one specific strategy that supports efforts to increase the number of Baby-Friendly hospitals.

Objective B: Reduce the disparity in breastfeeding initiation between non-Hispanic white women and

non-Hispanic black women from an average of 12.1% to 11.9% by 2020.

According to PRAMS data, Michigan's gap in breastfeeding initiation between non-Hispanic white women and non-Hispanic black women has decreased from an average of 15.3% in 2009-2011, to 12.1% in 2013-2015. To further reduce the gap in disparities to 11.9% (2014-2016), Michigan will increase training opportunities to improve the number, availability and racial and cultural diversity of trained breastfeeding professionals. In FY 2019, MDHHS will focus efforts on state-administered programs and either provide or promote a base level of competency training for home visitors (MIHP and MIECHV) who interact with pregnant or breastfeeding clients. WIC offers a two-day Breastfeeding Basics class two to four times per year which can be available to home visiting staff with additional funding. The Bureau of Family Health Services can strongly encourage or require appropriate state-level programs to focus on breastfeeding in quality improvement projects and trainings offered. It will require a focused effort across all programs to increase breastfeeding knowledge and decrease disparities.

Cost and distance make it difficult for providers to receive information on evidence-based breastfeeding care. The Great Lakes NetWORK Series Breastfeeding webinar—which is supported by MDHHS—offers breastfeeding-specific information every month, without cost to participants. The webinar provides contact hours for nurses, social workers, lactation consultants and dietitians. The removal of barriers allows community providers of color the ability to receive advanced training, which diversifies and strengthens Michigan's lactation workforce. Topics are chosen based on requests from current viewers that meet the needs of breastfeeding providers, both clinical and community. For FY 2019, MDHHS has approached maternal and child health partners in Region V states to support the webinars to make this a regional collaboration.

The second strategy to reduce the gap in disparities is to find resources that will allow MDHHS to explore and identify root causes for lower breastfeeding rates among women of color. Evidence has shown that women need support to meet their breastfeeding goals. Throughout Michigan, there is wide variance in the amount and success of community support. Utilizing breastfeeding initiation data, counties with lower rates among women of color will be approached to determine project interest and capacity for change. Consumer engagement will be necessary to ascertain the specific needs of women of color in their communities. MDHHS is exploring funding opportunities to administer focus groups. If funding is not secured, MDHHS will approach local breastfeeding coalitions to provide opportunities to speak with women of color in low initiation communities about barriers to breastfeeding. Once barriers are identified in specific communities with low rates, financial and technical support can be provided.

Safe Sleep (FY 2019 Application)

Through the needs assessment process, the state priority issue of "Foster safer homes, schools, and environments with a focus on prevention" was selected for the Perinatal/Infant Health domain. Originally, an SPM using the Pregnancy Risk Assessment Monitoring Survey (PRAMS) as a data source was created to address this priority need. The SPM measured 1) the percent of infants put to sleep alone in their crib, bassinet or pack and play and 2) the percent of infants put to sleep without objects in their crib, bassinet or pack and play. These two behaviors are critical in the prevention of sleep-related infant deaths, which are the third leading cause of death for infants overall in Michigan and the leading cause of death for infants 28 days to one year old. With the changes HRSA made to the Safe Sleep NPM starting in FY 2019 (i.e., the addition of these two PRAMS measures to the original NPM that previously measured the percent of infants placed to sleep on their backs), Michigan decided to convert its original SPM to the new NPM.

It is important to look at parental behavior related to infant sleep. Data reveal that although there has been modest improvement in some areas, parents are continuing to practice infant sleep behaviors that put infants at risk, which is

confirmed by data from the Michigan PRAMS. PRAMS results from 2015 show that 17% of all infants usually sleep on their side, stomach or a combination (an improvement from 18% in 2014); 21% of babies usually bed share with another person (an increase from 19% in 2014); and 11% do not usually sleep in a crib or portable crib (remained the same from 2014). All of these behaviors increase the risk for a sleep-related infant death. Overall, in 2015, 75% of infants slept with no soft bedding or objects in their sleep environment; however, 19% slept with at least one object and 6% slept with two or more objects in their sleep environment. One positive behavior that has remained consistently high is back sleeping. In 2015, 81.4% of Michigan infants were usually sleeping on their back, exceeding the Healthy People 2020 goal of 75.9%.

Despite improvements in parental behavior related to infant safe sleep, the rate of sleep-related deaths (deaths per 1,000 live births) for infants in Michigan—reported by the Centers for Disease Control and Prevention (CDC) Sudden Unexpected Infant Death (SUID) Case Registry Project, 2018—decreased from 2015 to 2016 (1.4 to 1.3), even as the number of deaths decreased (from 159 to 142). The SUID Case Registry Project is a population-based, multistate surveillance system designed to identify SUID trends and risk factors. It utilizes information collected by local child death review teams and other sources to identify cases where the sleep environment was likely to have contributed to the death. The following consists of 2010-2016 aggregate data from the SUID Case Registry.

Significant racial disparities exist among sleep-related infant deaths. Statewide, the SUID Case Registry shows that Black infants in Michigan die at a rate more than three times greater than White infants (2.8 per 1,000 live births for Black infants compared to 0.8 per 1,000 live births for White infants), and American Indian infants die at more than twice the rate of White infants (1.9 per 1,000 live births for American Indian infants compared to 0.8 per 1,000 live births for White infants).

According to the SUID Case Registry, three in four sleep-related infant deaths in Michigan occurred in an unsafe sleep location—with nearly 47% of infants who died being placed in an adult bed for sleep; 15% placed on a couch or chair; and 13% placed in other unsafe sleep locations. Only 21% of infants who died of sleep-related causes were placed to sleep in a crib, bassinet or portable crib. A crib, bassinet or portable crib was not present in the home in 15% of the deaths. Additionally, 57% of sleep-related infant deaths occurred among infants who shared a sleep surface such as with an adult or sibling. One in two infants found unresponsive are not on their backs with approximately 43% found on their stomach and 11% on their side. Although these data look at the position when the infant was found unresponsive, it is unclear whether infants were placed to sleep in the found position or if they moved to that position during sleep.

Two of Michigan's safe sleep objectives relate to how babies are put to sleep. The strategies to address these two objectives are combined, since the safe sleep behaviors are so closely related. Although infants being placed to sleep on their back was not singled out as a specific objective, all strategies and activities will promote the key messages to parents and caregivers: infant sleeps alone and without objects on the back, in a crib, bassinet or pack and play. The strategies developed to meet these objectives involve ensuring community level partners are trained on infant safe sleep and have the support and tools to educate families by having non-judgmental, culturally sensitive conversations about infant safe sleep practices. A challenge to this work is ensuring that families receive the information early, at every touchpoint and are receiving consistent, accurate messages about the safest way to sleep their baby.

Objective A: Increase percent of infants put to sleep on a separate approved sleep surface to 81.8% by 2020.

Objective B: Increase percent of infants placed to sleep without soft objects or loose bedding to 87.4% by 2020.

The first strategy is to support safe sleep activities of local health departments (LHDs) and the Inter-Tribal Council of Michigan to increase the capacity of communities to implement infant safe sleep education, awareness and outreach activities to promote infants being placed on their backs and alone with no objects in their cribs, bassinets or pack and plays. This strategy will be accomplished through the provision of mini-grants to communities identified as having high numbers of sleep-related infant deaths. In addition to high numbers of deaths, many of these communities experience significant racial disparities among the deaths. In FY 2019, 15 LHDs and the Inter-Tribal Council of Michigan will be offered such grants. Each community currently uses a local advisory council to guide activities. Coordination with Regional Perinatal Quality Collaboratives will be encouraged in FY 2019 by allowing them to use a regional advisory council. Many mini-grantees involve parents and caregivers in funded activities as parent educators, speakers and outreach workers. All efforts must adhere to the current American Academy of Pediatrics recommendations for a safe infant sleeping environment issued in October 2016.

The second strategy to increase the percent of infants put to sleep safely is to support providers who educate families on infant safe sleep, including continuing to facilitate new collaborations with non-traditional partners so the message spreads in communities that may not have been reached previously. Non-traditional partners often have greater acceptance in high-risk communities due to increased levels of trust and their ability to reach community members who are not being served in traditional settings. This approach has the potential to impact racial disparity as many of the populations that are disproportionately affected by sleep-related infant deaths may have strong connections with non-traditional community partners. In FY 2018, the faith-based collaboration was expanded to add at least four faith-based organizations in four counties with high numbers of sleep-related infant deaths. In FY 2019, efforts to collaborate with faith-based organizations will continue to be supported. Technical assistance and resources will be provided from the MDHHS Infant Safe Sleep Program and the MDHHS Office of Community and Faith Engagement. Other areas of collaboration that will be continued in FY 2019 include home visiting programs (such as Maternal Infant Health Program and Healthy Start Programs), Medicaid Health Plans, MDHHS Immunizations, the Women, Infants and Children (WIC) Program, MDHHS Child Welfare Programs, MDHHS Breastfeeding, MDHHS Tobacco, and the Michigan Adolescent Pregnancy and Parenting Program.

In addition, efforts to support birthing hospitals to educate families on infant safe sleep will be enhanced. The new evidence-based or -informed strategy measure (ESM) is to increase the number of birthing hospitals trained on infant safe sleep. When health care providers, including nurses, are educated on infant safe sleep, families are more likely to follow recommended infant safe sleep practices. In FY 2018, the MDHHS Infant Safe Sleep Program began to offer birthing hospitals training on infant safe sleep. In FY 2019, efforts to ensure that birthing hospitals are trained on infant safe sleep will continue. Due to the large number of birthing hospitals in the state (83), birthing hospitals in southeast Michigan will be targeted to reach the most concentrated number of births in the state. Hospitals with special care nurseries and neonatal intensive care units (NICUs) will also be targeted because babies born with lower birth weights and/or premature are at higher risk of sleep-related infant death. A challenge to providing training to birthing hospitals is not being able to reach all staff due to staff turnover and staff being unable to attend in-person trainings due to scheduling conflicts. In addition, hospital administrative procedures may prevent staff from implementing best practices related to infant safe sleep.

The third strategy is to develop and disseminate safe sleep messages that are based in best practices and families' experiences. This strategy was refined in FY 2018 to align with one of the major activities in a grant awarded to the MDHHS Infant Safe Sleep Program from the Michigan Health Endowment Fund (MHEF) in December 2016. The strategy has been expanded to include not only public awareness mediums, but also the development and implementation of effective core messages that are best-practice driven; reflect the needs and choices of families; align safe sleep implementation within a real-life context; and provide messaging that is appropriate and relevant to diverse population groups. The goal is that improved messaging and methodologies will translate to increased use of safe sleep practices among high-risk populations and, ultimately, reduce the number of deaths in addition to the

racial disparity.

Much of this work is based on the results of focus groups with parents and individuals that provide support (e.g., grandmothers, aunts, uncles, and other caregivers) and feedback from community stakeholders to evaluate the educational needs of families, community partners and professional providers regarding infant safe sleep. In FY 2019, this information will be used—along with additional information on recent research regarding infant safe sleep messaging and innovative programs from around the country—to develop new messages and methodologies. After initial development of messages and methodologies, market testing will be done so that refinements can be made prior to large scale dissemination. As in previous years, a media plan will be developed that will coordinate all education and awareness activities.

As a fourth strategy, the MDHHS Infant Safe Sleep Program will continue to develop and disseminate tools for providers to have effective, non-judgmental, and culturally-sensitive conversations about safe sleep. This includes providers who work with pregnant and parenting families in programs that reach those populations including home visiting, WIC, child care, child welfare, and prenatal care. Staff at state and local levels will continue to provide training to these provider groups at state and local events. An online safe sleep training for providers working with families (formerly called Infant Safe Sleep for Health Care Providers but renamed Infant Safe Sleep for Professionals Working with Families) will continue to be available, offering continuing education credits for social workers, nurses and certified health educators. A second online safe sleep training will also continue to be available and is a required training for child care providers licensed by the Department of Licensing and Regulatory Affairs.

A focus for FY 2019 will be to continue promotion of the Safe Sleep 201 training for home visitors and child welfare workers that will be launched (in person and online) in FY 2018. The objective of the training is to go beyond the AAP recommendations and to address how to have more effective conversations with families around safe sleep while addressing the challenges families face in following the guidelines.

In addition, other efforts to support home visiting programs in educating families on infant safe sleep will continue. The second new ESM is to increase the number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep. In FY 2018, a three-part motivational interviewing and safe sleep webinar series was developed. In FY 2019, MIHP agencies will be required to have staff take this training. 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 allows the most high-risk mothers and families to be reached. Additional support for professionals will be continued through the email list for professionals working with families around the issue of infant safe sleep and the quarterly webinars that were established in FY 2017.

The final strategy for this objective is to support promotion of protective factors related to infant safe sleep (i.e., smoking cessation, breastfeeding, immunizations). Outreach to other MDHHS programs that will be continued in FY 2019 include Medicaid Health Plans (to help ensure prenatal care), MDHHS Immunizations (to help ensure infants are immunized), WIC and MDHHS Breastfeeding (to ensure breastfeeding is supported), and MDHHS Tobacco (to help reduce smoking among pregnant mothers and families).

Work that started in FY 2017/2018 to support the number of local health departments implementing the Society for Public Health Education (SOPHE) Smoking Cessation and Reduction in Pregnancy Treatment (SCRIPT) Program will be continued. The MDHHS Infant Safe Sleep Program will continue activities such as provide/participate in a quarterly call to support local health departments implementing SOPHE SCRIPT; provide support in evaluating the reach of the efforts; and help new health departments obtain training and implement SOPHE SCRIPT.

Family input is another component of program activities. One parent regularly attends quarterly meetings of the

Michigan Infant Safe Sleep State Advisory Committee and several others are active promoters of infant safe sleep in their communities. Parents are on the distribution list for the meetings and/or are in contact with the MDHHS Infant Safe Sleep Program about their interest in becoming involved. It is hoped that family/parent involvement will be expanded in FY 2019, and staff will be able to provide the necessary supports to increase this important part of the program.

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

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. Rate difference calculations to monitor changes will be based on PRAMS data. Starting with birth year 2016, Michigan will use the phase 8 PRAMS questionnaire that has updated language on some sleep measures. Because of this change, we can report disparity gaps in all the performance measures, but cannot make direct comparisons to past years of survey data (2015 and back). Therefore, we will report baseline measures in the FY 2018 annual report and can track changes over time as more data is collected using the new phase of PRAMS in subsequent years.

Each strategy noted above for Objectives A and B will integrate the need to address health equity and racial disparities. Approaches will vary but may involve allocating more resources to areas that experience greater racial disparity and gaining a better understanding of messages and methodologies that may be more effective with different racial or ethnic groups. In addition to the approaches integrated with the strategies above, additional strategies will be implemented in FY 2019.

The first strategy is to provide training and support to local health departments (LHDs) on health equity. In FY 2018, training was provided to the LHDs that received mini-grant funds and included training on health equity. Continued training, technical assistance and support is planned for FY 2019, not only from the MDHHS Infant Safe Sleep Program, but also from MDHHS Health Disparities Reduction and Minority Health. The second strategy is to dedicate at least one infant safe sleep webinar annually to the topic of health equity. The challenge in this strategy is to provide webinars that educate participants on health equity but also provide strategies they can use in their work. The third strategy is to send at least one message on the topic of health equity via the Infant Safe Sleep for Professionals list per quarter.

[1] All data are from the MDHHS Division of Vital Records and Health Statistics (accessed March 30, 2018).

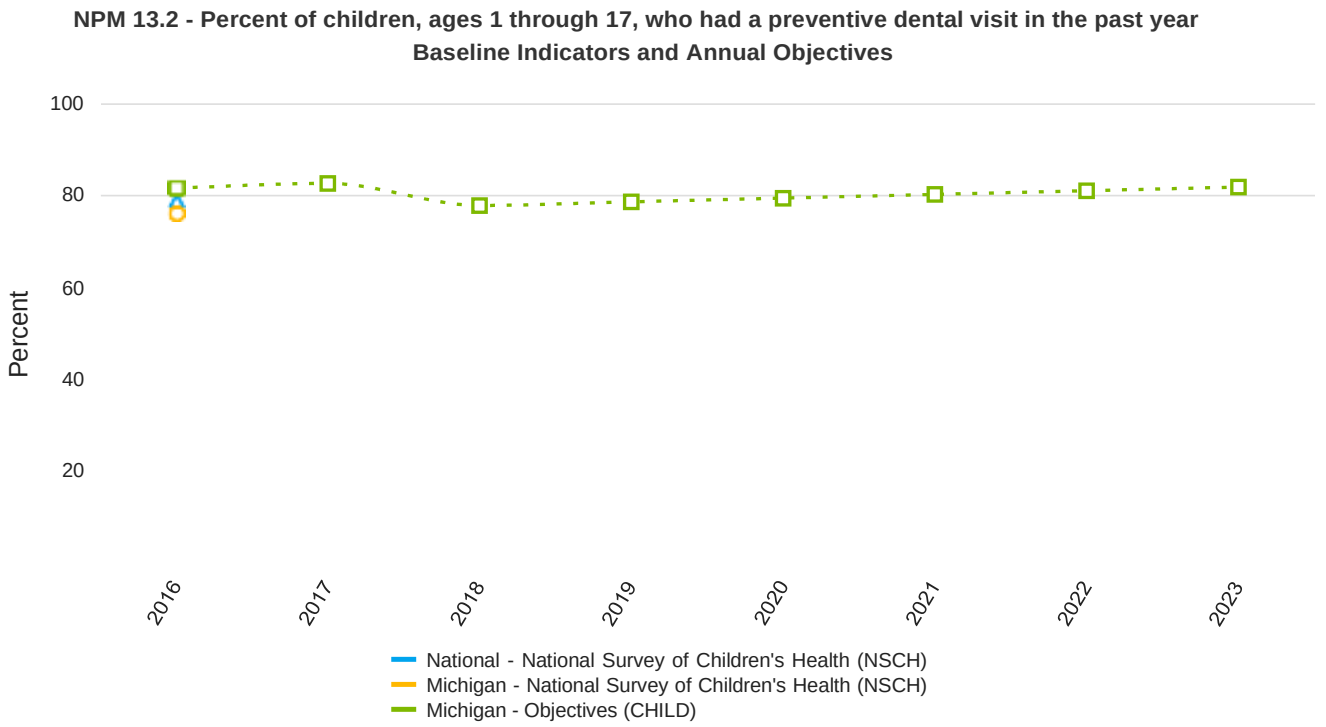
[2] MDHHS Division of Vital Records and Health Statistics

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-2016	10.4 %	NPM 13.2
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2016	93.2 %	NPM 13.2

National Performance Measures



NPM 13.2 - Child Health

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH)		
	2016	**2017**
Annual Objective		82.4
Annual Indicator		76.1
Numerator		1,584,320
Denominator		2,082,991
Data Source		NSCH
Data Source Year		2016

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						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	77.6	78.4	79.2	80.0	80.8	81.6

Evidence-Based or –Informed Strategy Measures

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

Measure Status:	Active

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

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	6,127.0	6,327.0	6,527.0	6,727.0	6,927.0	6,927.0

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 positive capillary test

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		22.1
Annual Indicator	23.6	25
Numerator	1,208	1,048
Denominator	5,116	4,190
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2016	2017
Provisional or Final ?	Provisional	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	24.6	27.1	29.6	32.1	34.6	37.1

SPM 5 - 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
Annual Objective		76
Annual Indicator	74.7	75
Numerator	125,343	125,853
Denominator	167,778	167,842
Data Source	Michigan Care Improvement Registry	Michigan Care Improvement Registry
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
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

Increase access to and utilization of evidence-based oral health practices and services

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

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 SEAL! Michigan annual all grantee reports to monitor for annual growth of students receiving a preventive dental screening

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

NOMs

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

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

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

Priority Need

Foster safer homes, schools, and environments with a focus on prevention

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 positive capillary test

Objectives

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

B) By 2020, increase by 10% the percent of all children under age 6 with an elevated blood lead level (EBLL) from a capillary test who receive a venous lead confirmation test

Strategies

A1) Provide local health departments with lists of Medicaid-enrolled children who need venous testing A2) Flag, in the Michigan Care Improvement Registry (MCIR), the Medicaid-enrolled children that need venous lead testing

B1) Provide local health departments data to support targeted outreach to improve confirmatory testing B2) Provide Maternal and Child Health partners with educational materials about venous lead testing

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

Priority Need

Invest in prevention and early intervention strategies

SPM

SPM 5 - Percent of children 19 to 36 months of age who have received a completed series of recommended vaccines (4313314 series)

Objectives

A) By 2020, increase the percentage of children 19-36 months of age who receive recommended vaccines to 79%

B) Enable local health departments to better track successes or shortfalls for their health jurisdiction

C) Implement the I Vaccinate Campaign

Strategies

A1) Use data in the Michigan Care Improvement Registry (MCIR) to identify all children 6-18 months of age who are overdue for a vaccine A2) Generate semi-annual letters to parents of children 6-18 months of age who are overdue for a vaccine

B1) Produce a quarterly report card for each county showing vaccination rates and rankings compared to other counties across the state B2) Produce quarterly reports showing vaccination levels of infants birth through 24 months showing vaccination drop off by series and vaccine

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. Within BFHS, the Early Childhood Health section (housed in the Division of Child and Adolescent Health) collaborates with the Michigan Department of Education, Human Services, and the Children's Trust Fund to implement evidence-based home visiting and to strengthen early childhood systems at the state and local level. The Oral Health Unit also plays a key role in promoting children's health and expanding access to dental screening and services. The Division of Immunization 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, improve immunization rates, and expand understanding of trauma-informed care. Other federal funding that improves children's health includes the Early Hearing Detection and Intervention Program (CDC), the Oral Health grant (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, Early On, Healthy Start, Head Start, the Michigan League for Public Policy, the Michigan Council for Maternal and Child Health, and many others.

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 without health insurance steadily declined between 2009 (4.35%, ACS) and 2016 (2.93%) in Michigan, as it has in the nation overall. However, children of parents with less than a high school education are less likely to be insured (6.07%), as are American Indian children (7.02%). While 93.21% of children are in good health as reported by their parents (NSCH, 2016), only 84.2% of Hispanic children are in good health and children living with two, unmarried parents are also less likely to be in good health (78.35%). Michigan tracks vaccination coverage carefully, and the percent of children ages 19-35 months who have completed the seven vaccine series has increased over time from 52.14% (NIS-Child) in 2009 to 70.22% in 2016. However, coverage is lower among non-Hispanic Black children (42.21%) and children living at less than 100% of the poverty level (54.06%). Oral health is certainly a concern in Michigan where 10.36% of children, including 7.44% of children under five years of age, have tooth decay or cavities (NSCH, 2016). Tooth decay is especially likely among children receiving Medicaid (14.83%), suggesting a lack of access to dental providers who accept this type of insurance. Non-Hispanic Black (17.66%) and Asian (18.61%) children 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.

Developmental Screening (FY 2017 Annual Report)

The interagency developmental screening work in Michigan for FY 2017 culminated in a series of actions including a statewide scan of policies and procedures related to developmental screening; convening a workgroup of professionals, stakeholders, and caregivers (parents) to determine initial recommendations for a statewide strategic plan; developing action steps and recommendations to meet updated requirements of the Child Care Development Fund (CCDF); conducting a scan of national statewide developmental screening systems; and regular meetings of the work group to discuss how to share information about developmental screening with partners, child care providers, and caregivers.

Given the changes within the Title V Guidance in 2018, this National Performance Measure is being retired. The original objectives and FY 2017 activities are discussed below. Although this measure is being retired given a shift in

Title V priorities since the original five-year needs assessment, state-level work on development screening will continue through the existing early childhood partnerships described here. Additionally, many local communities have robust developmental screening initiatives. For example, Help Me Grow is currently active in nine counties in Michigan.

Objective A: By 2018, identify initial implementation steps of a statewide developmental screening system.

Progress was made in FY 2017 toward bringing additional partners together to determine next steps to develop a statewide developmental screening plan. Given the retirement of this measure, further work on developmental screening will take place as part of ongoing early childhood efforts between MDHHS and the Michigan Department of Education (MDE) and other stakeholders. Developmental screening is incorporated into many service systems across the state including prevention focused home visiting; within the medical home and as part of Early Periodic Screening Diagnosis and Treatment (EPSDT); child care and other early learning settings; and within local developmental screening initiatives and early childhood advocacy groups. Additionally, MDE is fulfilling requirements to have a landing page of online resources for families to provide information on services and supports. Links to statewide developmental screening resources and information will be included on this page by participating partners. Updated training for child care providers to learn about the importance of developmental screening and how to share information with families will bemade available.

The group of stakeholders who initially convened for this work are very interested in ensuring an efficient system of developmental screening and will continue to work through existing early childhood initiatives. Starting in April 2018, MDHHS has contracted with a facilitator for continuation of this developmental screening work until September 2018 to assist with accelerating progress on the identified activities.

Caregivers and families have been a part of this work since the beginning. Specifically, parents representing the Michigan Great Start Collaborative system and the Family Center (Children's Special Health Care Services Division) participated on the workgroup and provided a consumer voice. These representatives provided insight into how parents access developmental screening and potential barriers, as well as potential strategies to reduce those barriers. Parents will continue to assist in various state and local early childhood groups including community-based Great Start Collaboratives and the state-level home visiting workgroup which both address developmental screening as part of ongoing system improvement.

Objective B: By 2020, adopt consistent screening and referral procedures across the system.

Objective C: By 2020, adopt consistent procedures for responding to referrals, receipt and disposition.

Objective D: By 2020, adopt procedures/strategies for reporting results to parents.

Activities for Objectives B, C and D were not completed in FY 2017. These objectives will not be addressed given the retirement of this NPM. Michigan will continue to work through the early childhood systems structure to support developmental screening work at the state and local level.

Lead Poisoning Prevention (FY2017 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. The State of Michigan uses the reference value recommended

by the CDC's Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP), five micrograms per deciliter of blood (µg/dL), to define a child as having an elevated blood lead level (EBLL). In 1998 (the first complete year of required reporting) among children under the age of six tested for lead, the percentage of children with EBLLs was 42.7% (31,395 children). In 2016, 3.56% (5,526) of tested children through age six had EBLLs, and in 2017, the percentage decreased to 3.30% (4,960 children).

This report describes CLPPP activities undertaken in FY 2017 to improve testing in general and confirmatory testing specifically, which has been increasing steadily. The rate of confirmatory venous testing of EBLL capillary in 2016 was 23.6%, which rose to 25.0% in 2017. The attention brought to lead poisoning prevention as a result of the Flint Water Crisis altered the work of CLPPP. Additional resources and staff were allocated to CLPPP, and there was an increase in collaborations with other agencies and organizations involved in lead poisoning prevention including Michigan's Medicaid program, local health departments (LHDs), non-profit organization, universities, researchers and advocacy groups.

In the aftermath of the Flint Water Crisis, MDHHS made an organizational change to ensure that childhood lead poisoning prevention was fully integrated with related services and expertise. CLPPP was moved from the Division of Family and Community Health (in the Bureau of Family, Maternal and Child Health) to the Division of Environmental Health (in the Bureau of Epidemiology and Population Health), which has overall responsibilities for addressing environmental hazards and for administering the state's Lead Safe Home Program. The move strengthened integration of the blood lead surveillance and epidemiology functions within MDHHS's area of epidemiological, environmental, and lead abatement subject matter expertise.

In FY 2017, CLPPP staff numbers expanded to eight, creating new positions for a public health consultant, a departmental financial analyst, and a unit manager. The CLPPP unit manager hired has an extensive background working in maternal and child health programs and worked in the Bureau of Family, Maternal and Child Health for over 12 years. Her addition has allowed CLPPP to maintain a strong connection with other MCH programs. She also has expertise with nursing programs and partnerships with other clinical-based programs serving children and young adults.

Another response to the Flint Water Crisis was establishment of the Child Lead Poisoning Elimination Board by Governor Rick Snyder to address the need for coordinated efforts to eliminate childhood lead poisoning. In November 2016 this board released a report including recommendations to design a long-term strategy for eliminating child lead poisoning in the state of Michigan. In March 2017, the Child Lead Exposure Elimination Commission was established to prioritize and ensure the successful implementation of the recommendations of the Child Lead Poisoning Elimination Board. A key recommendation includes testing of children for elevated blood lead, follow-up monitoring, and services including case management.

CLPPP's efforts are not possible without partnerships with other federal and state MCH programs. In FY 2017, CLPPP was one of ten state teams selected to participate in the Maternal and Child Environmental Health (MCEH) CoIIN to support and improve coordinated systems of care to address the needs of maternal, infant, and child populations that are at risk for or experience exposure to lead. The CoIIN project period will take place over the next three fiscal years (2018-2020). The objectives focus on lowering blood lead levels in children aged 1-5 years, increasing identification and screening of children with elevated blood lead levels, and increasing the number of providers who are following the CDC recommendations for treatment and follow-up for children exposed to lead.

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.

The three main focus areas of CLPPP include surveillance, outreach, and health services. Title V funding directly supports outreach and health services. The surveillance activities allow for CLPPP to better target areas of needed outreach and health services. In FY 2017 several grants and programs were awarded and developed to increase the number of children (Medicaid-enrolled and non-Medicaid) under age 6 with an EBLL from a capillary test who received a venous lead confirmation test.

The Child Lead Poisoning Education & Outreach Grant was awarded to ten LHDs, with the expectation to develop and conduct educational activities for parents of children at risk of lead poisoning, with special attention to high-risk areas.

The Childhood Lead Poisoning Prevention Grant was awarded to nine LHDs, to focus prevention efforts in the highest risk communities in Michigan. The target population for this grant includes children with lead levels of 5 to 14 µg/dL and pregnant women enrolled in Medicaid living in homes built before 1960.

The Childhood Lead Poisoning Intervention Grant was awarded for the first quarter of FY 2017 to three health departments (City of Detroit, Wayne County, and Kent County) with the greatest numbers of children with EBLLs to conduct nursing case management activities in coordination with Medicaid Health Plans.

In January 2017, a new program was launched to increase reimbursement to all LHDs for in-home nursing case management to Medicaid children with EBLLs, supported by training and technical assistance from CLPPP. In the first three quarters of the program (January 1, 2017 – September 30, 2017), 970 home visits were conducted by the 42 participating LHDs. 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.

All efforts and interventions to lower an elevated blood lead level are documented by CLPPP or the LHD 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 it to assure kids are provided nursing case management by nurses.

Previous to the increased reimbursement program, many LHDs had little support and capacity to have robust lead nursing case management programs. In order to train LHD staff on how to conduct nursing case management, materials were developed by CLPPP including the "Guide for Case Management of Children with Elevated Blood Lead Levels", letters, and recorded trainings.

In an effort to continuously improve CLPPP programs and activities, CLPPP contracts with the Michigan Public Health Institute to conduct an annual evaluation. The survey, completed by LHDs and partner agencies, collected data about communication, usefulness of resources, and response times/actions. Overall, improvements in satisfactions were seen from 2016 to 2017. CLPPP also holds quarterly conference calls with grantees, bi-monthly conference calls with LHDs, and occasional in-person meetings to obtain feedback from local programs and allow for sharing of best practices and challenges.

On May 17, 2017, the U.S. Food and Drug Administration (FDA) issued a warning that certain lead tests conducted on certain LeadCare testing systems may underestimate the blood lead levels from venous blood samples. As a result, MDHHS recommended that use of the LeadCare testing systems should not be used on venous blood samples, and retesting of children and pregnant/lactating women who meet a specific criteria. In Michigan,

approximately 270 offices and labs had registered LeadCare machines impacted by the warning. LeadCare machines can test both capillary and venous samples. Of those registered offices and labs, 53 had reported venous test results. This is a continuing barrier for CLPPP's goal of increasing venous testing because those offices that previously were conducting venous tests on LeadCare machines can no longer do so.

Additional programs and activities undertaken in FY 2017 to improve testing and confirmatory retesting in all children (Medicaid-enrolled and non-Medicaid) included:

- Linkage of the blood lead surveillance database to the Michigan Care Improvement Registry (MCIR), the state's immunization registry. Health care providers are able to view a lead tab with blood lead testing results in individual patient records. This linkage allows providers to determine if follow-up or confirmatory blood lead testing is needed.
- In MCIR, a flag will automatically be displayed to providers when viewing an individual patient record if that individual lived within Flint during the Flint Water Crisis, and was potentially exposed to the water.
- Weekly reports to Medicaid Health Plans with lists of enrolled children under age three that include their blood lead test results, flagging children who had not had a blood lead test.
- Monthly data summary reports of testing status of Medicaid-enrolled children that included data by Medicaid Health Plan, posted on the MDHHS website, in an effort to bring all Medicaid Health Plans in line with the Medicaid goal of 80% of continuously-enrolled children tested by age three.
- Continuation of a monthly Medicaid-CLPPP workgroup to ensure coordination between Medicaid programs and services and CLPPP.
- Facilitating requests for blood lead data and Medicaid data by researchers, in particular, those interested in the impacts of the lead-contaminated water on the health of children in Flint.

Critical to the success of CLPPP and LHDs in meeting the objectives of this project were numerous partnerships with community groups, advocacy organizations, health care provider groups, local governmental agencies and the families of lead-exposed children. Partners included the Michigan Environmental Council, Ecology Center, Healthy Homes Coalition of Western Michigan, WIC, Michigan State Housing Development Authority, Genesee County Medical Society, Michigan Association of School Nurses, Michigan Chapter of American Academy of Pediatrics, Greater Flint Health Coalition, MDHHS Medicaid, MDHHS Lead Safe Home Program, Calhoun County Task Force and many more.

Immunizations – Children (FY 2017 Annual Report)

To address the priority area of "Invest in prevention and early intervention strategies, such as screening," MDHHS originally developed a two-part SPM related to Immunizations that was included in the Cross-Cutting/Life Course population domain. This 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. While these two measures are being retained, starting in 2018 they are being split into two separate measures in two separate population domains (Child Health and Adolescent Health). This change is being made 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 2017 to assure children are vaccinated on schedule. On-schedule vaccinations have become increasingly difficult as many parents have questions about vaccines and vaccine hesitancy appears to be increasing. Michigan immunization rates have

remained at 75% which is the same as the previous year, based on data from the Michigan Care Improvement Registry (MCIR). Michigan was able to send overdue notices to all children aged 6-18 months of age using data from MCIR. Michigan continues to see lower immunization waiver rates in school children and preschool children due to the requirement that parents receive immunization education on the value of vaccination before receiving a non-medical waiver.

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

In FY 2017, Michigan continued to experience a significant problem keeping children on schedule. Only 55.2% of children who are seven months of age were on schedule with all recommended vaccines. This means that children are susceptible to diseases for a longer period of time when they are most vulnerable. Data also show that those children who fall behind are less likely to complete the schedule. In an effort to keep children on schedule, in FY 2017 Michigan sent two rounds of letters to all children overdue for a vaccine. These notices went out to all children between the ages of 6 and 18 months of age. In 2017, notices were sent to the parents of over 80,000 children.

In preparation for a statewide media campaign called I Vaccinate (which began in March of 2017), MDHHS conducted focus groups with young mothers who were hesitant to vaccinate their children. The goal of the focus groups was to learn about their concerns and what types of information and messaging would most impact their decision to vaccinate their children. These mothers were also asked how they receive information. This information was used to create the I Vaccinate Campaign. The I Vaccinate Campaign ran for the remainder of 2017 in an effort to provide vaccine information to parents with questions about vaccines. The campaign promoted vaccination of children in Michigan using many media methods, including TV ads, radio ads, social media posts on several social media sites, immunization provider materials, and “Mommy Bloggers” promoting vaccines and vaccine safety. More information about the I Vaccinate Campaign is available online.

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

The Division of Immunization was able to document all needed changes to make the AFIX reports available to the end user in an immunization provider office using MCIR. In FY 2016, all documentation was completed and programmed into MCIR. AFIX reports are now available for use by provider offices. Several trainings were held for provider practices to learn about the functionality of the reports. The trainings included an emphasis on how to utilize the reports to improve immunization rates and overall quality improvement. MCIR regional staff were also trained to further support providers in the community. In 2017, 923 AFIX visits were conducted primarily by local health department staff to private provider offices. After the initial visit, each site was asked to submit activities they could do to improve immunization rates in their practice. The local health departments did 310 face-to-face follow-up visits to these practices and 485 follow up activities over the phone.

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

In FY 2017, County Immunization Report Cards were generated and posted on the MDHHS public-facing website on a quarterly basis. The report cards were generated to reflect the immunization rates of each county in Michigan and ranked them against other counties in the state. The report cards have been modified several times to better meet the needs of local health departments. The goals of the report card data are to 1) provide each county with an understanding of vaccination rates in their respective communities and 2) identify areas for improvement. County report cards have been published every quarter and highlighted during several conferences. The state will continue to

make that data available to the public so the public is aware of immunization rates in their area.

The Michigan Immunization program also provides immunization drop-off data to local health departments on a quarterly basis. Data are obtained from the Michigan Care Improvement Registry. These reports track vaccine completeness by the age at which vaccines should be obtained for children. Data show a dramatic drop off in vaccine completeness by seven months of age which indicates that it is very difficult to keep children on schedule for vaccines.

Oral Health – Children (FY 2019 Application)

Through the five-year needs assessment process, the state priority need "Increase access to and utilization of evidence-based oral health practices and services" was identified. As discussed in the Women/Maternal Health section, NPM 13 was selected to address this priority need: A) Percent of women who had a dental visit during pregnancy and B) Percent of children, ages 1-17, who had a preventive dental visit in the past year. Michigan retained both components of this NPM, the second of which is discussed here.

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. Children in Michigan face a struggle with only 38% of Medicaid-eligible children receiving dental services. Children under the age of five are the least likely to have visited a dentist. To address barriers, over time, 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. Healthy Kids Dental utilizes Delta Dental's 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. In 2019, parents will be able to choose from Delta Dental or Blue Cross Blue Shield, as a new Medicaid agreement will go into place. This change is expected to help even more children, ages 0-21, to receive dental care (which encompasses the 1-17 age group).

The Healthy People 2020 goal is to have 28.1% of children ages 6-9 with one or more dental sealant 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 there were 23.3%, in 2010 there were 26.6%, and in 2016 there were 37.6% of third grade students with one or more dental sealants. This increase is attributed to the MDHHS SEAL! Michigan school-based dental sealant program, that piloted in 2007 and has expanded within the state over the last several years, due to funding opportunities. SEAL! Michigan is funded through Title V, CDC Cooperative Agreements, HRSA grants (as available), and annual gifts received from the Delta Dental Foundation of Michigan. Together, this funding has supported a School Oral Health Consultant to manage SEAL! Michigan at the state level and has financially supported direct services to be delivered in schools around Michigan.

The MDHHS Oral Health Program has submitted for competitive grant renewal through both HRSA (four years of funding) and the CDC Cooperative Agreement (five years of funding) to begin in the fall of 2018. The current risk to SEAL! Michigan is being reliant on federal grant funds and private donations. However, past successful grant applications have led to children in Michigan having more teeth sealed than ever before. SEAL! Michigan has significant interest from local partners to serve their community's schools with a school-based dental sealant program.

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. The data collected from the National Survey for Children's Health (NSCH), being a random sample of children, could include children who have been provided treatment in a SEAL! Michigan school-based dental sealant program.

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 charge to families. In addition to dental sealants, students receive a dental screening, oral health education and 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 12 grantees across the state and two previously-funded, now self-sustaining, programs. Although the program has experienced significant growth into over 210 schools, the majority of schools in Michigan do not offer a dental sealant program to students. Dental sealants ultimately decrease dental disease in youth as they are 100% effective in preventing dental decay when they are retained by the tooth. Therefore, reaching children through school-based services is ideal 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 in its data collection efforts. Data is collected annually and efficiently entered through Teleform software where it is cleaned and analyzed by the oral health epidemiologist. Annual reports are written, in a timely manner, and released for each local program and aggregated into a statewide report. Data can illustrate program success through annual increases in number of schools and students served and through number of sealants placed. Ultimately, the data will be captured by the Michigan Basic Screening Survey of third grade students (completed every five years), Count Your Smiles Report, to demonstrate the rates of dental sealant placement and dental decay in youth across the state.

The SEAL! Michigan program attempts to reach the target population through family and consumer outreach and engagement. The program relies on parent and guardian awareness of the program; thus, parents' consent for their children to receive the preventive oral health services are 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. All student consent forms are delivered home with an informational brochure on the SEAL! Michigan program and the benefits of dental sealants. The brochure was developed by professional health literacy specialists and is written at a third grade reading level to accommodate varying literacy levels.

The first strategy under this objective is to utilize the SEAL! Michigan database to track the number of students receiving an annual preventive dental screening. 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) 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 was reviewed for program improvement strategies that could be implemented.

Lead Poisoning Prevention (FY 2019 Application)

A state performance measure (SPM) was established to address lead poisoning prevention and treatment. 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. This SPM is linked to the state priority need to foster safer homes, schools, and environments with a focus on prevention.

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. Children who are poor, live in homes built before 1978, are enrolled in Medicaid, and/or receive other social services (e.g., WIC) are especially at risk of lead exposure and are targeted for blood lead testing. Children with elevated blood lead levels (EBLLs), defined as a blood lead level (BLL) equal to or greater than 5 micrograms per deciliter of blood (µg/dL), should have interventions to identify and mitigate the sources of lead in their environments. Leadership for Michigan's lead prevention activities, as they relate to the MCH population, is housed within the Childhood Lead Poisoning Prevention Program (CLPPP). This program is housed within the Bureau of Epidemiology and Population Health, which is in the Population Health Administration (the same Administration that houses the Bureau of Family Health Services and Title V). Title V funding currently supports the childhood lead programs administered by CLPPP. Staff in CLPPP work collaboratively with staff in the Bureau of Family Health Services and Medicaid, particularly on issues related to case management and blood lead testing.

The three main focus areas of CLPPP include data surveillance, nursing assistance, and community education and engagement. Title V funding directly supports nursing assistance and community education. Data surveillance allows for CLPPP to better target areas for needed nursing assistance and community education. CLPPP provides 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. CLPPP also provides statewide community outreach to parents, health care providers, child care providers, public schools, homeowners, and tenants on the prevention of lead exposure and the importance of screening and confirmatory testing of at-risk children.

In March 2017, the Child Lead Exposure Elimination Commission (CLEEC) was established to prioritize and continue efforts to eliminate child lead poisoning in Michigan. In early 2018, the commission released its five-year action plan, which prioritizes 51 specific action steps focused on the prevention of exposure before children are lead poisoned. In 2018, four regional public forums will be held to elicit feedback and comments on CLEEC's action plan. Specific groups that CLEEC will target to attend the forums include families of those affected by or concerned about lead poisoning, advocacy organizations, property owners, all levels of government, and any other individuals or groups concerned with the elimination of child lead exposure. CLEEC and CLPPP will use the feedback and comments to prioritize recommendations, projects, and other action items. As the action plan is implemented to ensure coordinated efforts to prevent lead poisoning in Michigan, CLEEC and CLPPP will work closely with federal, state, local and community leaders, healthcare providers, the private sector, academic experts, privacy law experts, LHDs, childcare centers and homeowners and tenants.

The CLEEC action plan includes a step for enhanced testing, which is developing pilot projects to require that 100 percent of children are tested for lead poisoning at 9 to 12 months and at 24 to 36 months of age. CLPPP will be closely monitoring the testing rates of children in those communities that are participating as pilot projects with

universal testing. These projects will be focused on larger, urban communities in Michigan, thus may have an impact on our goal to increase testing of children under the age of six.

Objective A: Increase the percent of Medicaid-enrolled children under age 6 with an elevated blood lead level (EBLL) from a capillary test who receive a venous lead confirmation test.

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

The first strategy for this objective is to provide LHDs with monthly lists of Medicaid-enrolled children who need venous testing. This list can serve as a tool to assist LHDs with their primary prevention and testing efforts. The list will include all children age six and under who are enrolled in Medicaid, and their blood lead testing status. CLPPP will work with the LHD to assure that they are accessing these lists and using them to promote confirmatory testing, as well as overall testing. Along with this list, LHDs receive a weekly list of the blood lead results in their jurisdiction. In this list, the type of testing that was conducted for the sample is noted. LHDs can use this list to work with the families of children with EBLLs through capillary testing to obtain venous testing. One critical intervention to prevent the adverse health effects of lead is to conduct in-home nursing case management for children with EBLLs. It is a requirement for Medicaid reimbursement that the capillary test has to be confirmed with a venous blood lead test before initiation of nursing case management.

The second strategy is to work with the Michigan Care Improvement Registry (MCIR), to determine the best way to flag children that need venous lead testing. MCIR is the state immunization registry, accessed by LHDs, healthcare providers, Medicaid Health Plans, and schools. Calling specific attention to any unconfirmed EBLL capillary results will support case managers and health care providers to take specific steps to follow up with families to order tests, help arrange transportation as needed, and address any other barriers to obtaining the venous test.

In addition, there will be a red flag added for any child in the MCIR database who resided in the seven Flint zip codes during the time period of the Flint Water Crisis. This information will automatically be displayed when an individual's record is accessed indicating that there was a potential exposure to the water for that child. This function can serve as a trigger for the provider to further investigate if a blood lead test is needed as a precautionary measure. This registry is statewide, so even if a child moves to a location outside of the Flint area, this red flag will stay linked to their MCIR record.

Objective B: Increase the percent of all children under age 6 with an elevated blood lead level (EBLL) from a capillary test who receive a venous lead confirmation test.

As CLPPP learns from experiences with the Medicaid population, the strategies and activities developed and implemented for Medicaid-enrolled children will be expanded to impact children served by private insurance carriers and children with no insurance coverage.

The first strategy is to provide LHDs with data to support targeted outreach to improve confirmatory testing. CLPPP will provide LHDs with confidential lists of non-Medicaid children in their jurisdictions who are in need of confirmatory venous testing, so they can follow up with the families. Although the nursing case management reimbursement is only for Medicaid-covered children because funding comes from Medicaid, many LHDs have committed to doing follow-up with non-Medicaid children with EBLLs, including pursuing venous confirmatory tests where indicated. Ten LHDs in communities with high-rates of EBLLs are provided with a grant to offset the costs of providing nursing case management services to this population, as well as providing prevention services in their region.

The second strategy is to provide Maternal and Child Health partners with educational materials about venous lead testing. CLPPP currently uses Title V funding to fund nine LHDs to provide education and outreach to their regions of the state. Recently, CLPPP held an in-person meeting to get feedback on current materials and determine what is needed and useful moving forward. This feedback will be used to develop toolkits for materials targeted towards health care providers, child care providers, public schools, owners and tenants of residential dwellings, and parents of young children. CLPPP will work with MDHHS Communications to establish a strategic, statewide communications plan to get information to our target audiences about the importance of talking to providers about childhood lead testing. This plan will include detailed information about the various distribution venues that have shown to be successful for MDHHS in the past, including materials in medical offices, text messaging, PSAs, radio ads, and social media.

Additionally, CLEEC will hold forums for healthcare providers in Michigan to provide feedback on their action plan, as well as insight into potential barriers they are experiencing related to capillary to venous testing. This feedback will be used in developing future trainings, webinars and materials targeted at healthcare providers.

Immunizations – Children (FY2019 Application)

To address the priority area of "Invest in prevention and early intervention strategies, such as screening," MDHHS originally developed an SPM on 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. Given the changes to the HRSA framework and population domains for FY 2019, Michigan decided to split this original SPM into two distinct SPMs in two different population domains (Child Health and Adolescent Health).

Within some populations, Michigan has experienced declining immunizations rates and has not met the Healthy People 2020 goal of 80% for child immunizations. For example, the percent of 19 to 35 month olds who received a full schedule of age appropriate immunizations (Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza and Hepatitis B) is at 74.1% based on data obtained from the Michigan Care Improvement Registry (MCIR). The National Immunization Survey data shows Michigan at 70.2% for the same series of vaccines. Additionally, two dose hepatitis A vaccination rates for children are low in Michigan. The Advisory Committee on Immunization Practices (ACIP) routinely recommends two doses of hepatitis A, and Michigan has started tracking completion rates for children to measure progress. Additionally, two dose hepatitis A vaccination rates for children are low in Michigan. The Advisory Committee on Immunization Practices (ACIP) routinely recommends two doses of hepatitis A, and Michigan has started tracking completion rates for children to measure progress. If two doses of Hepatitis A vaccine are added to the full series of vaccines for 19-36 month old children the compliance rate drops to 56%.

Parent vaccine hesitancy has greatly increased in the last several years even though there is a large number of published scientific articles showing 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 to learn the facts about immunizations and the benefits and risks of not vaccinating through the I Vaccinate campaign. MDHHS has also worked with the Franny Strong Foundation to provide educational messages to the public to promote timely vaccinations.

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

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

The vision of the MDHHS 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 from one state to another. The NIS uses random-digit-dialing to identify households with children ages 19 through 35 months. 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 2016 shows that the point estimate for Michigan is 70.2 which is up 2.6% from the prior year.

The Division of Immunization operates the Michigan Care Improvement Registry (MCIR). The MCIR is a regionally-based, statewide immunization registry that contains over 137 million shot records administered to 9.7 million individuals residing in Michigan. MDHHS is currently working through subcontracts with six MCIR regions to enroll and support every immunization provider in the state. Current enrollments include: 6,290 health care providers and pharmacies; 4,150 schools; and 3,869 licensed childcare programs. MCIR is used routinely by over 30,000 users to access and determine the immunization records of children and adults. In 2017, MCIR generated over 211,373 recall letters notifying responsible parties whose children had missed shots and encouraged them to visit their immunization providers to receive needed vaccines. In addition, over 3 million reports were generated by users of the MCIR system in 2017.

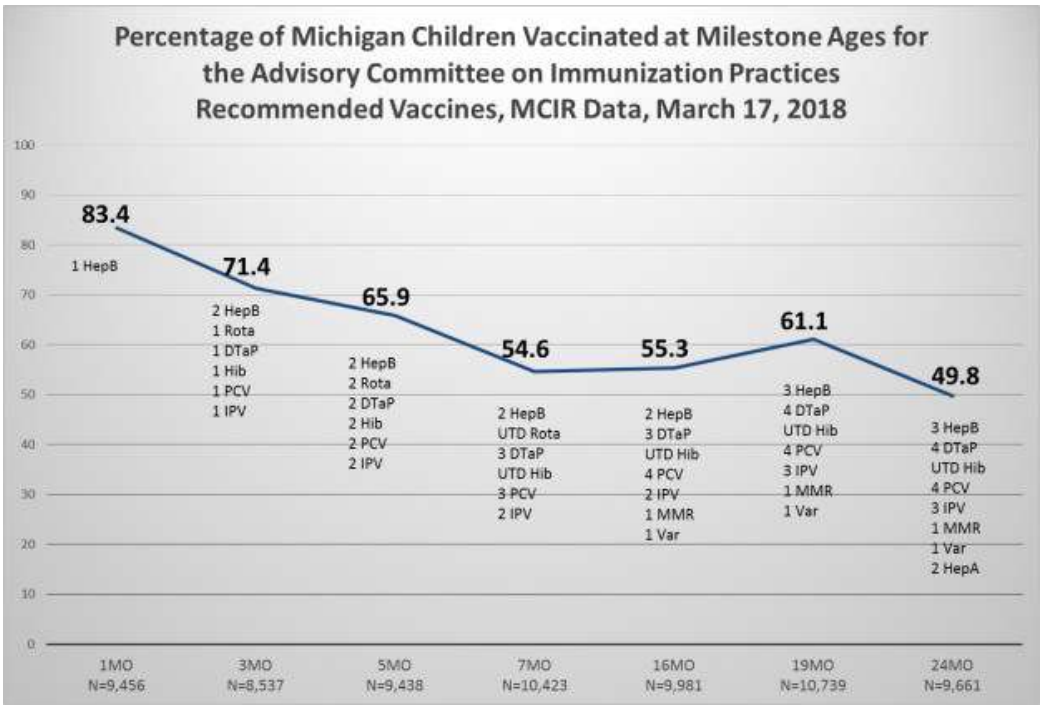
MCIR has the ability to forecast needed doses of vaccine for all children who are contained in the system. All children should have completed the recommended pediatric vaccines by the time the child reaches 19 months of age. Data from MCIR show that 75% of children who reside in Michigan have received the routinely recommend 4313314 series by the time they reach 36 months of age. MCIR rates have experienced gradual decreases in compliance rates for children enrolled in Medicaid and WIC. Although the 75% vaccination level is higher than the rate reported by the National Immunization Survey, the Healthy People 2020 goal is 80%.

Objective A: By 2020, increase the percentage of children 19-36 months of age who receive recommended vaccines to 79%.

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 54.6% of children in MCIR are current with all recommend vaccines. This puts our children at risk, with nearly half of the children susceptible to these serious diseases. From 0 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 the children were vaccinated on time. There are no known benefits to delaying vaccinations. Although we have seen mild increases in our immunization rates by age they have been very slight. Image 1 below shows immunization rates over time by age when vaccines should have been completed. There are small increases in most ages but rates still remain low.

Image 1. Percentage of Michigan Children Vaccinated at Milestone Ages



MCIR has the ability to assess existing immunization data for children and forecast needed doses. This functionality greatly assists clinicians in determining any needed doses of vaccine during a clinical encounter. This same forecasting functionality can be used at a system level to determine any children who are in need of vaccines. To increase vaccination rates, the Division of Immunization has initiated an effort to notify parents of all children 6 months through 18 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 19 months of age who are not staying on schedule. Data from MCIR show that children who stay on schedule are twice as likely to complete all needed vaccines as those who fall behind early. A central strategy to address this objective is to generate notices to parents of children who are overdue for vaccines. These notices are not intended to replace other efforts that may be underway in provider offices or local health departments, but are meant to enhance existing efforts to remind parents of the importance of immunizations.

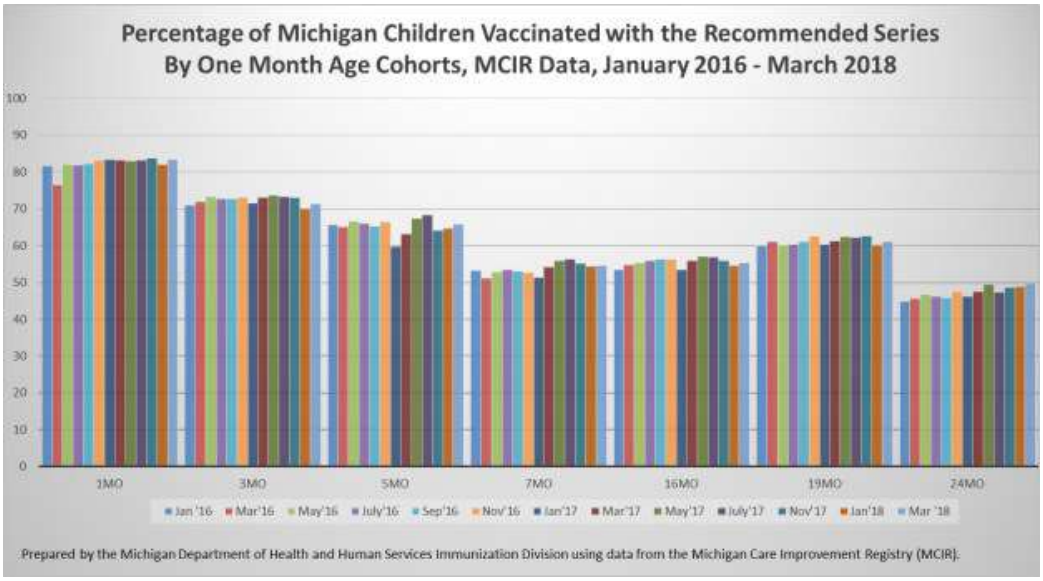
Objective B: Enable local health departments to better track successes or shortfalls for their health jurisdiction.

The Immunization Program will continue to distribute population-based county "report cards" for local health departments to better understand immunization issues and areas for improvement within their communities. The

MCIR epidemiologist will generate county report cards on a quarterly basis, which will be posted on the MDHHS website. The report card will contain coverage level information in several key areas including pediatric, adolescent and adult coverage levels. Report cards rank each county in the state, so a county can also compare its progress to other counties.

Another key report which will be made available to local health departments is the vaccine drop-off report. As discussed earlier, this report shows how well children are staying on schedule for all recommended vaccines. The Immunization Program will continue to make the data available to local health departments so they can be better informed on areas for improvement in their jurisdiction as they work with the immunization providers in their jurisdiction. Although we have seen mild increases in our immunization rates by age they have been very slight. Image 2, below, shows our immunization rates over time by age when vaccines should have been completed. There are small increases in most ages but still remain low.

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



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

Objective C: Implement the I Vaccinate Campaign.

Parental vaccine hesitancy has been an increasing concern in Michigan. Vocal and organized groups have continued to push back on school vaccine requirements and vaccines in a broader sense. This growing concern is affecting not only the school reporting process but the parents who may have questions about vaccines. Organized social media issues concerning vaccines circulate broadly throughout the state and the impact is that more parents are questioning the value of vaccinating their children.

In an effort to make positive vaccine messages available to the public, in 2017 MDHHS in partnership with the Franny Strong Foundation launched 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.

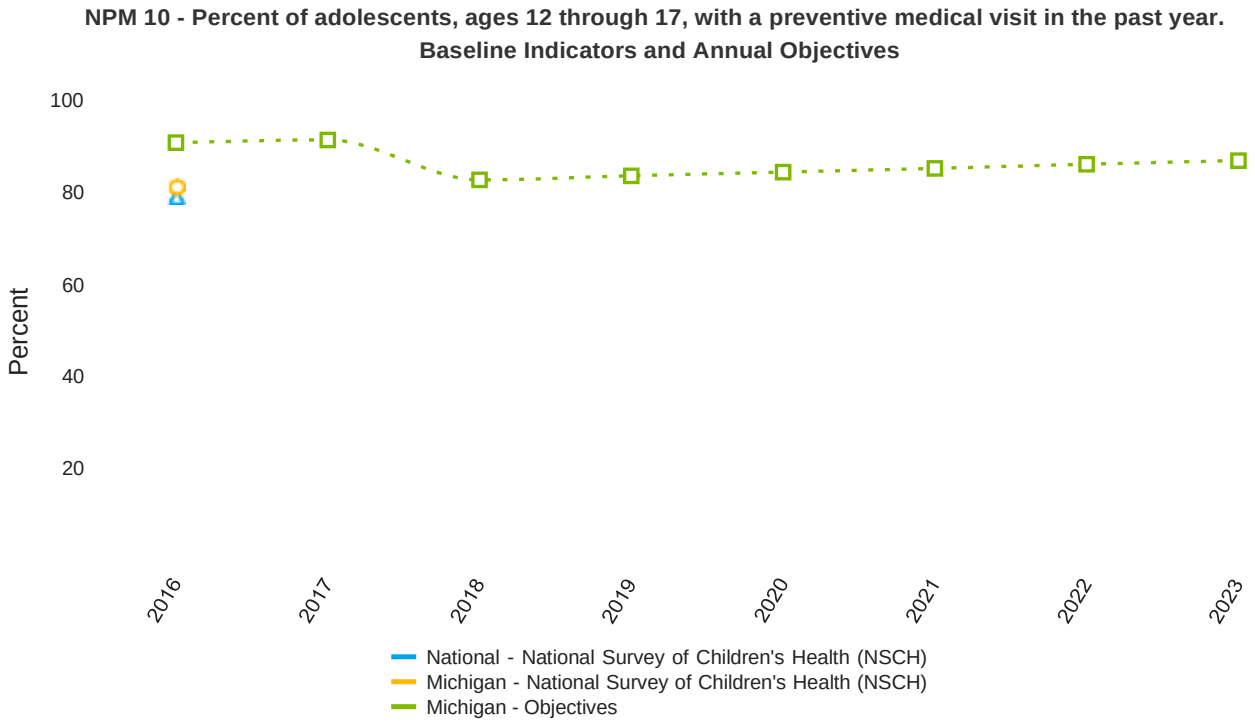
The I Vaccinate Campaign uses several media platforms to reach targeted populations of women of childbearing years knowing they are the primary decision makers related to the health of their children. Television and radio ads are purchased during this campaign to promote vaccinations to protect all children. Social media messages are used throughout the state with real life stories of individuals affected by vaccine preventable diseases. A website was created as a resource about vaccines to assist parents in the decision making process about vaccines for their children. This website is built on factual information presented in a user friendly forum from a parent's viewpoint. In FY 2019, the Immunization Program will continue to assess the I Vaccinate campaign to identify any ways to strengthen its message and broaden its reach.

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-2016	35.7	NPM 10
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000	NVSS-2014_2016	11.7	NPM 10
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2014_2016	11.0	NPM 10
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2016	65.3 %	NPM 10
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2016	93.2 %	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-2016	13.9 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2014	13.4 %	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)	YRBSS-2015	14.3 %	NPM 10
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2016_2017	55.7 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NISF-2016	70.5 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NISM-2016	52.5 %	NPM 10
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2016	93.6 %	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-2016	95.0 %	NPM 10
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2016	17.7	NPM 10

National Performance Measures



Federally Available Data		
Data Source: National Survey of Children's Health (NSCH)		
	2016	**2017**
Annual Objective		91.3
Annual Indicator		81.0
Numerator		633,720
Denominator		782,076
Data Source		NSCH
Data Source Year		2016

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						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	82.6	83.5	84.3	85.1	86.0	86.8

Evidence-Based or –Informed Strategy Measures

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
Annual Objective		93
Annual Indicator	87.5	93.3
Numerator	7	28
Denominator	8	30
Data Source	MDHHS Participant Assessment Tool	Evaluation tool / SurveyMonkey
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	95.0	95.0	98.0	98.0	98.0	98.0

State Performance Measures

SPM 3 - A) Percent of high school students who report feeling sad or hopeless almost every day for two or more weeks in a row and B) Percent of women enrolled in MIHP who are screened for maternal depression

Measure Status:	Inactive - This measure will be retired based on information from the ongoing needs assessment.

State Provided Data		
	2016	2017
Annual Objective		31.1
Annual Indicator	31.7	37.3
Numerator	135,280	159,526
Denominator	427,166	427,216
Data Source	YRBS	YRBS
Data Source Year	2015	2017
Provisional or Final ?	Final	Final

SPM 6 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	32.0	34.0	36.0	40.0	50.0

State Action Plan Table

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

Priority Need
Promote social and emotional well-being through the provision of behavioral health services

NPM
NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Objectives
A) Increase the percent of adolescents, ages 12 through 17, enrolled in Medicaid, with a preventive medical visit in the past year
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
C) Increase percentage of CAHC clients age 12+ with a positive depression screen who have documented follow-up

Strategies
A1) Develop a state plan to improve adolescent well-care, focusing on Medicaid-eligible youth A2) Convene a workgroup to promote comprehensive adolescent well-care A3) Expand strategies to incentivize well-child exams by working with health plans
B1) Increase the number of providers trained on culturally-competent adolescent-friendly care
C1) Establish Behavioral Health Quality Measures among Child & Adolescent Health Centers (CAHCs) C2) Implement CAHC CQI Initiative C3) Provide support to CAHC mental health providers to assure proper data collection and reporting for behavioral health quality measures, including appropriate follow-up, to clients with positive depression screens

ESMs	Status
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	Active

NOMs

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

NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000

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

NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling

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

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)

NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza

NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine

NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine

NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine

NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females

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

Priority Need

Invest in prevention and early intervention strategies

SPM

SPM 6 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Objectives

A) By 2023, increase the percentage of adolescents who have completed the HPV series to 50%

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

Strategies

A1) Generate a letter using MCIR data to parents of adolescents who have initiated the HPV series but have not completed it A2) Partner with the MDHSS Cancer Program and the American Cancer Society to build a stakeholder group to promote HPV vaccination as cancer prevention A3) Partner with health systems in Michigan to develop strategies to increase HPV immunization rates for their members

B1) Using MCIR data, generate a list of adolescent providers and their MCIR completion rates B2) Prioritize provider outreach to larger practices with the lowest immunization rates B3) Offer quality improvement visits to provide a comprehensive assessment of immunization rates and recommendations for practice improvements B4) Generate HPV Report Cards for Federally Qualified Health Centers B5) Promote the “Someone You Love” video to highlight the importance of HPV vaccination

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, both the Division of Child and Adolescent Health (DCAH) and the Division of Immunization play an important role in meeting the health needs of Michigan's adolescents. Both Divisions are housed within the BFHS. DCAH includes programs designed to prevent pregnancy and build healthy relationship skills among adolescents, and it houses programs designed to meet adolescents' health needs in school settings. The Division of Immunization includes sections focused on 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 directly support a variety of programs and services for adolescents through state and local organizations, including pregnancy prevention and immunization, as well as services for adolescents who have special health care needs. Other federal MCH funds that impact adolescents, and with which Title V coordinates, include the State Abstinence Education Program (ACF funding), the State Personal Responsibility Education Program (ACF funding), and an Epilepsy grant (HRSA funding). In addition, critical partnerships in the state that impact adolescent health include those with school 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.

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 and within their broader sociocultural context. The adolescent mortality rate of 35.65 per 100,000 remains above the national average (NVSS, 2016) and is highest among non-Hispanic Black adolescents (49.22 per 100,000, NVSS, 2014_2016). However, the motor vehicle mortality rate (11.66 per 100,000, NVSS, 2014_1016) among adolescents has dropped over the past six years to below the national average. Following alarming national trends, the suicide mortality rate (10.97 per 100,000, NVSS, 2014_2016) for adolescents has increased steadily over the past several years and currently exceeds the national average. This is an area of increasing concern for Michigan, which has emphasized improving depression screening, referral, and follow up among Child and Adolescent Health Centers, recognizing that only 69.38% (NSCH, 2016) of adolescents (12-17 years) with a diagnosed mental or behavioral condition receive treatment or counseling. However, 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 70.5% in 2016 (NIS), and higher rates of vaccination among Hispanic (84.6%) and non-Hispanic Black (78.9%) adolescents as compared with non-Hispanic white (59.5%) adolescents. The teen birth rate has also steadily declined from 31.95 per 1,000 females in 2009 to 17.72 in 2016 (NVSS). However, the teen birth rate was 37.14 and 28.89 in 2016 among non-Hispanic Black adolescent females and Hispanic adolescent females, respectively. This disparity suggests a need to explore the appropriateness and responsiveness of teen pregnancy programs and services.

Adolescent Well-Visit (FY 2017 Annual Report)

FY 2017 activities focused on implementing a Motivational Interviewing (MI) webcourse and in-person training to public and private providers, as well as Continuous Quality Improvement (CQI) activities to improve adolescent-well visits among state-funded school-based and school-linked health centers known as Child and Adolescent Health

Centers (CAHCs) in Michigan.

Attendance at the in-person Motivational Interviewing training has sustained. In FY 2017, the Evidence-based Strategy Measure (ESM) target was reached: 93% 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, which also showed an increase over the prior year.

Each state-funded CAHC is required to report on a standardized set of quality measures and to participate in a multi-faceted CQI approach which has collectively led to dramatic improvements in quality measures, including a 32% increase over five years in the percentage of clients up-to-date with a documented comprehensive physical exam (well-visit). In FY 2017, half of the state's CAHCs reported 71% or more of their clients were up-to-date with annual well-care exams; more than half saw improvements in the measure over the prior year.

Meaningful family and consumer engagement of parents and youth is a longstanding priority of the CAHC Program and is accomplished through various strategies. Per boilerplate requirements, each CAHC must operate a community advisory committee that is comprised of at least one-third parents of school aged children and youth. These advisory groups are tasked with giving input and approving core health center policies, including confidentiality, abuse and neglect and parental consent. Each group has a range of other responsibilities that are unique to each center. When funding for the CAHC program was eliminated in 2003, these advisory groups rallied other parents to provide a critical advocacy voice that was instrumental in reinstating the funding. Parents are a powerful ally in this work.

Youth input is also a requirement of the program and occurs through various strategies. Centers are required to have youth input through either their existing Community Advisory Council (CAC) or through a stand-alone youth advisory committee. As part of their work on these committees, youth routinely provide feedback on center services and programs, the center's environment, and reading material. Youth are strong advocates for CAHC utilization among their peers. Some CAHCs also conduct focus groups with youth to identify ways to increase health center utilization and improve services and outreach. As part of ongoing CQI activities, CAHCs must implement a client satisfaction survey at least annually. Results of these surveys are compiled and centers must demonstrate how this critical feedback was used to improve services to clients.

Objective A: Develop a state plan for improving adolescent well-care, focusing on Medicaid eligible youth.

This objective will be addressed as part of year four efforts in FY 2019.

Objective B: By 2020, increase by 625 the number of providers trained on culturally-competent, adolescent-friendly preventivecare.

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 will be 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 April 2015, 1,243 health professionals (e.g., medical providers, mental health providers and health educators)

have completed the MI web course. In 2017 alone, 489 professionals completed the motivational interviewing course. Of those that have completed the course since 2015, 604 individuals requested continuing education contact hours from their respective professions: nursing contact hours (27.5%); Michigan Social Work clock hours (15%); NASW Social Work contact hours (12.2%); and Certified Health Education Specialist (38%).

As noted above, the ESM for this measure is the percent of health care providers who complete the MI web course and subsequently attend the MI professional development in-person training who report improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies. Through the Title V program, in 2017, MDHHS offered two in-person MI trainings reaching 43 providers, for a total of 78 providers who have attended the in-person training over the past two years. Participants have included physicians, nurse practitioners, physician assistants, nurses, social workers and health educators. The trainings were promoted through provider organizations such as the Michigan Regional Chapter of the Society for Adolescent Health and Medicine, American Academy of Pediatrics, American Family Physicians, National Association of Pediatric Nurse Practitioners and the CAHC Medical Directors listserv. As a result of the MI training, 93% of evaluation respondents (n=30) reported improved skills and confidence in effectively counseling youth on changing risky behaviors using MI strategies. Therefore, in 2017 Michigan reached the ESM target and demonstrated an improvement of six percentage points over the previous year (87.5%).

An online evaluation was administered to participants two weeks following post-training, to obtain more accurate information on participants' actual use of the strategies. Future plans include a greater focus on partnering with state provider agencies to offer the MI training as a pre-conference session at annual provider conferences to recruit more physician and mid-level provider participants.

Objective C: By 2020, increase by 10% the proportion of adolescents with a documented well-child exam among 25 Child & Adolescent Health Centers.

As a first strategy to meet this objective, the CAHC Quality & Evaluation Support Team (QuEST) reviewed quality performance data across all state-funded health centers in order to select participants for a Continuous Quality Improvement (CQI) project aimed at increasing the proportion of clients with a documented, up-to-date well-care exam. Data reviewed included number of unduplicated clients, number of well-care exams provided and percent of clients up-to-date with a well-care exam (two-year trend) for each health center. Other factors taken into consideration were geographic location, staff longevity and commitment to a CQI process. One center completed CQI projects with QuEST guidance, while one center terminated the project midway due to center closure. Prior to the CQI initiative, these centers were among the lowest-performing CAHCs for the quality measure "percentage of adolescents with a documented, up-to-date comprehensive well-care exam."

QuEST coordinated tailored initiatives using the Plan-Do-Study-Act cycle of change, provided regular coaching calls and meetings with participating CAHC staff. To initiate each project, QuEST conducted conference calls to review the following: current available data; data needed to set goals; current processes for consent and well-child exam administration; challenges and facilitating factors for implementing the initiative; and next steps. A second conference call and a series of email and telephone communications followed to review data; develop goals and action steps; and determine resources and support needed for success. QuEST provided ongoing, tailored support which included guidance and support for policy/procedure and process review, revision and development. Access to current and relevant journal articles, tip sheets, training and educational materials were provided.

Center staff reviewed practices on requesting date of last well-care exam provided upon registration/completion of medical history form; reviewed options for documenting and retrieving date of last exam from respective EHRs; and implemented methods for proactively reminding and following up on those who were due/overdue. Examples of

proactive methods included contacting both parent and adolescent by phone, text, direct mail; coordinating with mental health providers to assure documentation of last well-care exam and warm hand-offs to schedule appointments for those who were due/overdue; and increasing communication via newsletters, public awareness announcements, and visible presence at school events.

CQI project results showed the following increase in the percentage of clients with a documented, up-to-date comprehensive well-care exam: *Lakeview Youth Clinic improved from 46% in FY 2016 to 55% in FY 2017* (a 9% increase) and is continuing the project in FY 2018.

Collectively, from FY 2016 to FY 2017, there was a modest increase in the percent of clients up-to-date with a comprehensive physical exam among CAHCs (from 67% to 71%). Among only the 65 CAHCs that were open for a full year in both FY 2016 and FY 2017, 60% (39) health centers individually saw an increase in this measure. The average increase among these 39 health centers was 14%; while 19 health centers individually saw an increase of 10% or more.

As a second strategy, the MDHHS CAHC staff continued to offer technical assistance (policy review and interpretation of requirements) to health centers as they apply for PCMH or PCCC recognition. The decision to pursue PCMH status must be a sponsoring agency-level decision and, in FY 2017, only two health centers sought PCCC recognition and took advantage of technical assistance opportunities. Unfortunately, many CAHC sponsoring agencies do not foresee a substantial benefit for the investment of the time and other resources needed to apply for PCMH recognition for their health centers. In fact, CAHCs who have achieved some type of PCMH recognition have reported that the financial return on investment has been minimal.

Depression across the Life Course – Adolescents (FY 2017 Annual Report)

This FY 2017 reporting content is tied to Michigan's original two-part SPM related to depression across the life course: A) Percent of the Michigan's high school students who report having felt sad or hopeless almost every day for two or more weeks in a row, to the extent they stopped doing some usual activities during the prior 12 months, and B) Percent of women enrolled in Michigan's Maternal Infant Health Program (MIHP) who are screened for maternal depression. As previously discussed, given the changes in the Title V Guidance and refined priorities being set by Michigan's Title V program, this SPM is being retired.

Ten school professionals completed the Eliminating Barriers for Learning Training of Trainers (TOT) in FY 2017. The master trainer inadvertently did not evaluate outcomes reported for TOT participants (Objective A). However, pre/post evaluations were completed by 22 (out of 85) individuals at the local school district level who were subsequently trained by the TOTs. The evaluation results included outcomes such as: an overall increase in confidence in ability to identify symptoms of mental health disorders, including depression; as well as in the ability to identify ways in which mental health affects learning and classroom environment.

While each of the ten trained school professionals were expected to complete two trainings within a year of being trained, only two participants reported provision of subsequent trainings, for a total of 85 individuals trained by the TOTs at the local school district level (Objective B).

Activities for Objective C (telepsychiatry services) were implemented as an expansion of existing efforts, however these services have been underutilized. Additionally, robust data collection has been a challenge. While these services will continue to be made available, they will not be included as part of Title V efforts.

Due to limited participation and lack of resources to fund continued implementation of the strategies included under this SPM, MDHHS has elected to retire this original SPM and will instead shift focus to development of a required quality measure among state-funded Child and Adolescent Health Centers (CAHCs) regarding appropriate treatment for clients diagnosed with depression. This quality measure (e.g., percentage of clients age 12+ with a positive depression screen who have documented, appropriate follow-up) will be incorporated into NPM 10.

The rationale for incorporating this measure into NPM 10 is that CAHCs provide comprehensive well-care visits that include risk assessment screening. Risk assessment screening includes initial depression screening (flagging) for youth ages 10 to 21 years. These initial positive screens lead to a more thorough depression screen (diagnosis/assessment) that should ultimately result in appropriate follow-up care. The goals of appropriate follow-up care are resolution of or decrease in symptom severity, better overall mental health, and lowered risk of negative outcomes associated with depression.

CAHC mental health providers have not traditionally been fully immersed in Continuous Quality Improvement (CQI) activities, including quality measure reporting; therefore, establishing this required quality measure will allow for targeted interventions for low performers which may include CAHC team-led CQI initiatives, webinars, in-person training, learning collaboratives, toolkit development, or other strategies. FY 2019 will be the first year of data collection for this quality measure.

Objective A: Participants of Eliminating Barriers for Learning training will demonstrate a 45% increase in ability to identify symptoms of mental health disorders including depression; and a 30% increase in ability to identify ways mental health affects learning and classroom environment.

Ten school professionals completed the Eliminating Barriers for Learning (EBL) Training of Trainers (TOT) in FY 2018. The master trainer inadvertently did not evaluate outcomes reported for TOT participants. Pre/post evaluations were, however, completed by 22 (out of 85) individuals at the local school district level who were subsequently trained by the TOTs. While the format of the pre/post evaluation did not lend itself to reporting the improvement in outcomes as described in this objective, outcomes did include an overall increase in confidence in ability to identify symptoms of mental health disorders, including depression; as well as in the ability to identify way in which mental health affects learning and classroom environment.

Objective B: Increase by 920 per year the number of school personnel who are trained on the impact of social and emotional health on learning.

Training of additional school personnel on the EBL curriculum began in 2018. Each participant in the FY 2018 TOT was expected to provide a minimum of two trainings within a year, in an effort to expand the reach of EBL to local school district personnel. However, only two participants reported provision of three trainings. As a result, a total of 85 individuals were trained by the TOTs at the local school district level through these three trainings.

Challenges to implementation included a lack of resources at the state level to provide ongoing monitoring and incentivizing of these activities, as well as time constraints, lack of resources to implement training, and competing priorities among those who were trained.

Objective C: 60 adolescents per year will access child psychiatry case consultation services through the provision of telepsychiatry services at Child and Adolescent Health Centers (CAHCs).

With funding support separate from Title V, telepsychiatry services (offered through the University of Michigan and called “MC3”) were provided to 19 state-funded CAHCs. These virtual case consultation services were made available as needed to the medical and mental health providers in these school-based and school-linked health

centers. Discussion usually revolved around the need for medication (primarily to address depression and/or anxiety); guidance around appropriate prescriptions; and next steps needed to fully serve the client.

In FY 2017, four CAHCs did not utilize the service. Of the 15 health centers which did utilize the service, just 26 case consultation requests were made for 52 clients. It is unknown if these 52 clients are unique (unduplicated).

Immunizations – Adolescents (FY 2017 Annual Report)

This section discusses the second reporting component of Michigan's original two-part Immunization SPM: Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus (HPV) vaccine. Many successes were achieved in FY 2017. For example, several indicators used to measure immunization rates in Michigan moved in the right direction. Michigan saw an increase in the adolescent coverage rates which did not include HPV vaccine. Those rates increased from 76% to 77%. Some areas of the state are showing these immunization rates well above 80%. The adolescent immunization rates for HPV coverage saw increases as well. HPV coverage rates over the last year for 13- to 18-year-old adolescents increased by approximately 9%. While much work was done to increase these rates, the increase was in part due to the change in the ACIP recommendations for the use of that vaccine. The new recommendation for children under 15 years of age is that the series can be completed with only two doses of appropriately spaced vaccine rather than the traditional three-dose schedule. Thus, Michigan experienced a 7% increase in rates due to the way vaccine coverage was measured.

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

In FY 2017, the Division of Immunization partnered with the Cancer Program and the Cancer Consortium on several activities. The Immunization Program and the American Cancer Society hosted Dr. Melinda Wharton from the CDC to meet with senior staff with several of the health systems in Southeast Michigan to discuss plans to increase HPV immunization rates for their members. Many meetings have been held with these health systems over the last six months to develop systematic changes to increase awareness about the HPV vaccine and ultimately increase immunization rates.

In FY 2017, a CDC grant that was administered by MDHHS ended. The grant had supported outreach efforts to adolescents who had not completed the HPV series. Given the conclusion of the CDC grant, only one round of notices was sent to these individuals in FY 2017.

Two HPV webinars were held in 2017 with an intended audience of immunization health care providers. These two webinars were attended by 350 individuals. The webinar was intended to educate health care providers on the importance of HPV vaccination and emphasize the need to increase HPV vaccination rates in their practice.

The Division of Immunization has also created a Physician Peer Education Module. In 2017 this module was presented to eight different audiences. The physician peer education module is presented by a peer-trained physician with the intended audience of other physicians.

Overall, in the FY 2017 reporting year 39% of adolescents 13 to 18 years of age completed the HPV series (MCIR). These rates were an increase over the previous reporting year and also exceeded Michigan's annual target for FY 2017.

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

In FY 2017, MDHHS analyzed adolescent immunization coverage levels from the MCIR to target outreach to large immunization providers with the lowest immunization rates. The focus of these coverage rates has been on HPV vaccination rates but all adolescent vaccines are discussed. Staff conducted outreach to these providers to meet in person and offer quality improvement tools to assist the practice in increasing immunization rates. AFIX reports were provided and reviewed and areas of focus were identified. Specific outreach to large provider practices with low HPV completion rates in MCIR helped to educate providers on the importance of this vaccine. Practices were asked to develop action steps to increase HPV vaccination rates. Staff from the Immunization program conducted outreach to these practices to measure the success of their efforts. Data collection is ongoing and results will be available at the end of 2018.

Adolescent Health - Application Year

Adolescent Well-visit (FY 2019 Application)

Through the ongoing needs assessment process, the state priority need to “Promote social and emotional well-being through the provision of behavioral health services” was linked to the percent of adolescents, ages 12-17, with a preventive medical visit in the past year. According to the 2016 National Survey of Children’s Health, 84.7% of Michigan’s children aged 0-17 received a preventive medical care visit in the year preceding the survey. While this may seem high, it is important to note the disparity among adolescent well-care rates. According to the Michigan Medicaid 2017 HEDIS Results, an average of 55.69% of Michigan’s Medicaid-covered adolescents aged 12-21 were current with at least one comprehensive well-care visit, with a range of performance among Michigan’s Medicaid Health Plans (MHPs) from 24.07% to 64.42%.

A key objective to improving this measure was increasing the percentage of clients of Child and Adolescent Health Centers (CAHCs) who were up-to-date with a comprehensive physical exam (well-care visit). Each state-funded CAHC is required to report on a standardized set of quality measures and to participate in a multi-faceted Continuous Quality Improvement (CQI) approach. This requirement has collectively led to dramatic improvements in quality measures, including a 32% increase over five years in the percentage of clients up-to-date with a documented comprehensive physical exam. In FY 2017, half of the state’s CAHCs reported 71% or more of their clients were up-to-date with annual well-care exams; and more than half saw improvements in the measure over the prior year. Due in part to marked improvements in this measure among CAHCs as well as our plans to engage Medicaid Health Plans in future adolescent well-care promotion activities, this particular objective focusing on CAHC CQI efforts will be discontinued in FY 2019.

MDHHS initially developed a two-part State Performance Measure (SPM) relative to reducing depression across the life course, focusing on two high need populations: adolescents and pregnant and postpartum women. In an effort to streamline MCH efforts, MDHHS has elected to retire the SPM and will instead shift focus to development of a required quality measure regarding appropriate treatment for clients diagnosed with depression among state-funded CAHCs. This quality measure (i.e., percentage of clients age 12+ with a positive depression screen who have documented, appropriate follow-up) has been incorporated into NPM 10 as an objective. The past success seen with other quality measure initiatives (e.g., increasing adolescent well-visits) suggests that CAHCs will also see improvement in this measure over time.

The rationale for incorporating this measure under NPM 10 is that CAHCs provide comprehensive well-care visits that include risk assessment screening. Risk assessment screening includes initial depression screening (flagging) for youth ages 10 to 21 years. These initial positive screens lead to a more thorough depression screen (diagnosis/assessment) that should ultimately result in appropriate follow-up care. 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.

Meaningful family and consumer engagement of parents and youth is a longstanding priority of the CAHC program and is accomplished through various strategies. Per boilerplate requirements, each CAHC must operate a community advisory committee that is comprised of at least one-third parents of school-aged children and youth. These advisory groups are tasked with giving input and approving core health center policies, including confidentiality, abuse and neglect and parental consent. They have a range of other responsibilities that are unique to each center. When funding for the CAHC program was eliminated in 2003, it was these advisory groups that 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 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, décor and reading material. They 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 and supports to clients.

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

The first strategy is to develop a state plan to improve adolescent well-care, focusing on Medicaid-eligible youth. To be developed in years four and five of the block grant cycle, this plan will include specific strategies involving local health departments (LHDs) in leading local efforts to promote and improve adolescent well-child exams in their jurisdictions. LHDs will be expected to report on progress in contributing to an improvement in adolescent well-care rates. It is expected that level of participation and progress will vary among LHDs based not only on varying need, but also on varying levels of local funding and staff capacity.

The second strategy is to convene a workgroup to promote comprehensive adolescent well-care. While initiatives are underway to improve adolescent well-care in Michigan, these efforts are largely uncoordinated among key stakeholders. As a strategy to improve well-care rates, MDHHS will convene a state-level workgroup comprised of health plans, provider groups (e.g., Michigan Chapter of the American Academy of Pediatrics and the Society for Adolescent Medicine), Michigan Quality Improvement Consortium (MQIC), LHDs, health systems and Federally Qualified Health Centers (FQHCs) to examine gaps in existing efforts and to identify opportunities for coordinating efforts to promote comprehensive adolescent well-care.

The third strategy is to expand strategies to incentivize well-child exams by working with health plans. Expanding on the work of this subgroup, MDHHS will work with the state Medicaid office to convene a sub-group of MHPs to share and expand strategies to incentivize well-child exams among their provider networks. Ideally, this will include initiatives already underway, such as linking payments to achievement of well-child exam goals and adolescent-friendly performance requirements including care satisfaction, privacy and confidentiality.

MDHHS will capitalize on current relationships and successes with established stakeholders to facilitate achievement of the proposed strategies. For example, health plan Quality Managers and several other state-level stakeholders are engaged in an HPV Immunization Improvement Initiative facilitated by the MDDHS Division of Immunization. This initiative brings stakeholders together to share best practice, data collection and reporting, and evaluation strategies to improve HPV immunization rates among adolescents. Participants have voiced the importance of increasing annual well-child exams to improve immunization rates, providing an opportunity to work toward achieving this mutual objective.

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.

The first strategy is to increase the number of providers trained on culturally-competent adolescent-friendly care. A key component of quality adolescent care is the extent to which services are 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: lack of training among health professionals; lack of effective communication skills; and low self-efficacy in providing adolescent preventive services. In real-world practice, the quality and delivery of preventive health care for adolescents varies widely and is highly dependent on the experience of the individual healthcare provider or professional; his or her knowledge of clinical guidelines; communication skills and training; subconscious biases; and personal comfort level.

In 2014 and 2015, the 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 and Decision Making and Encouraging Healthy Teen Relationships (interpersonal violence prevention). These courses will be promoted and offered at no charge to public and private providers throughout Michigan and the United States. The objective is to reach 50 providers in FY 2019 with these foundational adolescent health courses.

To supplement the MI course, an in-person training (Improving Adolescent Health by Motivating Change for Primary Care Providers) will be offered to providers who have completed the web-based course, and continuing medical education credits will be offered for those who complete both courses. Additional professional development and training opportunities focused on culturally-competent, adolescent-friendly preventive care will be offered, with a goal of reaching 75 providers in FY 2019.

The combined impact of completion of both the MI 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. Therefore, this objective also serves as the Evidence-based or -informed Strategy Measure (ESM) for NPM 10: Percent of health care providers who complete the Motivational Interviewing web course and subsequently complete the Motivational Interviewing professional development in-person training who report skills in effectively counseling youth on changing risky behaviors.

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

The first strategy is to establish Behavioral Health Quality Measures among CAHCs. In FY 2019, a required quality measure regarding appropriate treatment for clients diagnosed with depression among state-funded CAHCs will be initiated. A SMART objective with a defined target will be developed after baseline data has been established in FY 2019. The past success experienced with other quality measure initiatives (e.g., increasing adolescent well-visits) suggests that CAHCs will also see improvement inthis measure over time.

CAHCs provide comprehensive well-care visits that include risk assessment screening. Risk assessment screening includes initial depression screening (flagging) for youth ages 10 to 21 years. These initial positive screens lead to a more thorough depression screen (diagnosis/assessment) that should ultimately result in 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 c) treatment plan reviewed after 90 days (for those on caseload for at least 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.

The second strategy is to implement a CAHC CQI Initiative. MDDHS will engage up to five CAHCs each year in CQI initiatives to increase the percentage of CAHC clients age 12+ with a positive depression screen who have documented follow-up. State-level CAHC staff will coordinate the months-long, tailored initiatives using the Plan-Do-Study-Act cycle of change, partnered with regular coaching calls, meetings and/or site visits with all staff at participating CAHCs. To initiate each project, the state-level CAHC staff will conduct conference calls or meetings with each CAHC to review the following: current available data; data needed to set goals; current processes for consent and risk assessment/depression screening and assessment; challenges and facilitating factors for implementing the initiative; and next steps. A second conference call or meeting and a series of email, telephone and/or in-person communications will follow to review data; develop goals and action steps; and determine resources and support needed for success. The state-level CAHC team will provide ongoing support tailored to each health center which will include guidance and support for policy, procedure, and process review as well as revision and development. Access to current and relevant journal articles, tip sheets, training and educational materials will also be provided as relevant.

The final strategy is to provide support to CAHC mental health providers to assure proper data collection and reporting for behavioral health quality measures, including appropriate follow-up, to clients with positive depression screens. Establishment of the quality measure will allow for targeted interventions for low performers which may include more intensive CQI initiatives, webinars, in-person training, learning collaboratives, toolkit development, or other strategies. FY 2019 will be the first year of data collection for this quality measure. After review of the first year of data, MDHHS will determine specific strategies for implementation in FY 2020.

Immunizations – Adolescents (FY 2019 Application)

To address the priority area of “Invest in prevention and early intervention strategies,” Michigan developed an SPM focusing on immunizations. As previously discussed, the original two-part SPM was split into two separate SPMs in 2018, one focusing on children and one focusing on adolescents. For the Adolescent Health population domain, the SPM measures the percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus (HPV) vaccine.

Parental vaccine hesitancy has increased in the last several years, and Michigan continues to have some of the highest vaccine exemption rates for children in the country. The HPV vaccine has the potential to save thousands of lives from HPV-related cancers. Michigan has made progress increasing the uptake of HPV vaccination for adolescent, but more work needs to be done. Since 2014, Michigan has increased the coverage rate 20% which is promising; however, only 40% of adolescents between the ages of 13 and 18 years of age currently have completed the HPV series. The Healthy People 2020 goal is at least an 80% HPV vaccine coverage rate for adolescents in this age range. Data from the Michigan Care Improvement Registry (MCIR) show that the completion rate of females in the same age group is 42% while the rate for males is 38%. One goal of the MDHHS Immunization Program is to encourage the HPV vaccination at 11-12 years of age when it is routinely recommended. Data from the MCIR show that only 31% of 13-year-old children have completed the HPV series.

As discussed in the Child Health section, the Division of Immunization operates the MCIR. MCIR has the ability to forecast needed doses of vaccine for all children in the system. Data from the MCIR show that 77% of adolescents 13-18 years of age who reside in Michigan have received the routinely recommend 132321 series. The 132321 series represents 1 dose of Tdap vaccine, 3 polio doses vaccine, 2 doses of MMR vaccine, 3 doses of hepatitis B

vaccine, 2 doses of varicella vaccine, and 1 doses of meningococcal vaccine. When a complete series of HPV vaccine is added to the same series, the rate drops to 38%.

Objective A: By 2023, increase the percentage of adolescents who have completed the HPV series to 50%.

In 2014, the Immunization Program received grant funding to increase HPV immunization rates for adolescents in Michigan. At the beginning of the grant period, the HPV coverage rate was 18% for all adolescents (male and female) 13 to 18 years of age. The Division of Immunization used the majority of funding to send out notifications to parents of adolescents 11 to 18 years of age who were overdue for one or more doses of HPV vaccine. Given the impact of this strategy, in FY 2019 the Immunization Program will continue to seek funding for and use this strategy as a way to increase adolescent HPV immunization rates.

In Michigan, 54.4% of the adolescents 11-18 years of age have initiated the HPV series but only 37.5% have completed the series. The Immunization Program plans to send out notices to each adolescent who has initiated the HPV series to encourage them to complete the vaccination series. It is anticipated that approximately 40,000 notices will be sent to the parents of these adolescents.

The Immunization Program is also partnering with the American Cancer Society to form a stakeholder group. This stakeholder group is made up of representatives from several organizations including the Michigan Pharmacist Association, Karmanos Cancer Center, Michigan Cancer Consortium, and representatives from some health systems. The group is tasked with creating a plan to increase awareness about the importance of HPV vaccine in an effort to reduce cancers by increasing vaccination rates in our state. The group will meet on a quarterly basis with the intent to expand the group to include a broader set of partners. These larger groups will meet semi-annually.

MDHHS has partnered with several large health systems in an effort to increase awareness and vaccination levels for HPV vaccine. An HPV summit is planned in 2018 to bring together large immunization practices that have low immunization rates along with the partnering health systems. MDHHS plans to continue to work with the health systems throughout 2019 to solidify plans that health systems can put in place to increase HPV rates.

An additional strategy in FY 2019 is for the Immunization Program to continue partnering with the cancer programs working toward a common goal of increasing HPV coverage rates and decreasing the incidence of cancers caused by HPV. The Division of Immunization has partnered with these programs to promote the message about cancer prevention using social media and public advertising.

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

In FY 2019, 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 a comprehensive AFIX report and working with the practice to develop a plan to increase immunization rates. Through direct outreach to the provider, MDHHS will have the opportunity to customize a practical quality improvement plan to help improve immunization rates as well as the quality of care. The data will also be used to identify providers that are doing outstanding work on assuring all their adolescent patients are receiving the HPV vaccine. The Division of Immunization will recognize those practices achieving high immunization rates by providing Certificates of Excellence for their successful work. The Immunization Program will also educate providers on the importance of HPV vaccination and the HEDIS measures that are set for 2019. These measures will assess the number of adolescents who have completed the HPV series by 13 years of age. This will also

measure the number of adolescents who have completed the vaccine series according to the schedule which is to vaccinate at 11-12 years of age.

Past experience indicates that clinic staff within provider practices tend to overestimate the immunization rates for the practice. Feedback to provider practices based on MCIR data to identify their actual immunization rates is insightful and enables the practice to consider ways to improve how vaccines are promoted and administered. At times it is as simple as making sure vaccines are assessed and offered at every encounter. The Immunization Program has made it routine to provide feedback to local health departments on their immunization levels using county report cards. Report cards are posted on the MDHHS website and provide immunization rates by county along with rankings. In FY 2019, the Immunization Program will extend this concept to Federally Qualified Health Centers (FQHCs) to create report cards for each of the FQHCs in Michigan. This feedback will allow the FQHCs to see immunization rates for their practice as well as areas for improvement. These report cards not only show the immunization rates for the HPV vaccine but also all other routinely recommended vaccines.

Lastly, in an effort to increase awareness about the seriousness of HPV, the Immunization Program will work with the Michigan Cancer Prevention Program to promote the “Someone You Love” video. This video documents the lives of women impacted by HPV. MDHHS plans to make this video available to local health departments to show at their provider meetings.

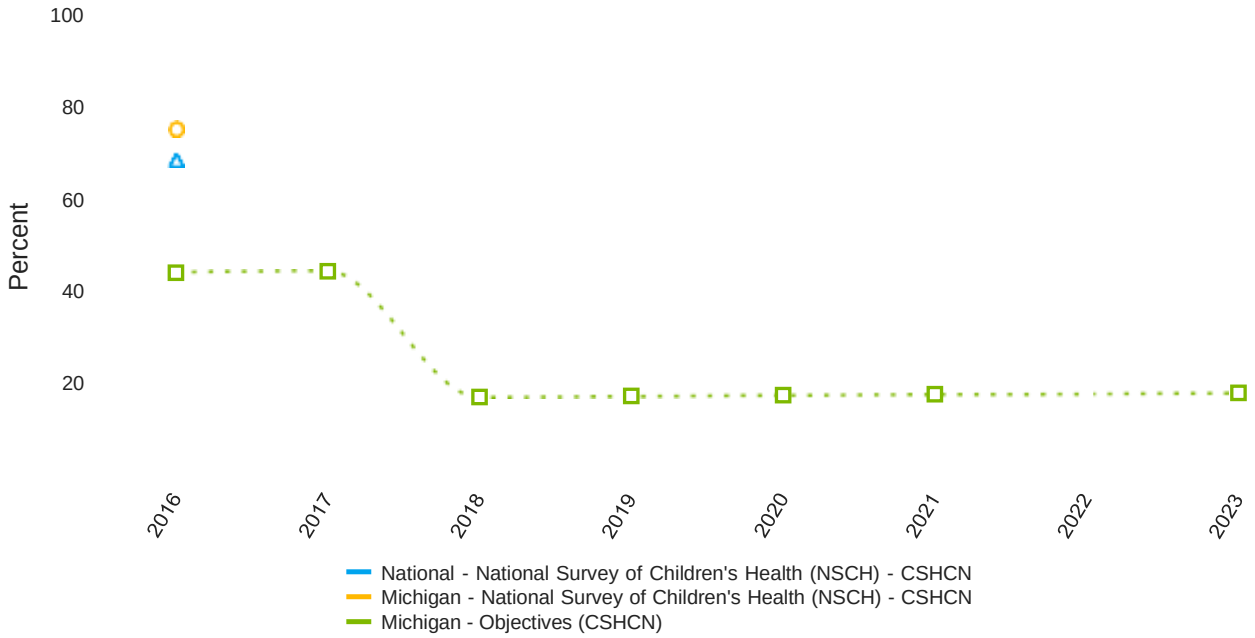
Children with Special Health Care Needs

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-2016	17.8 %	NPM 12

National Performance Measures

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care
Baseline 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**
Annual Objective		44.3
Annual Indicator		16.7
Numerator		32,776
Denominator		196,702
Data Source		NSCH-CSHCN
Data Source Year		2016

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						
	2018	2019	2020	2021	2022	2023
Annual Objective	17.0	17.2	17.4	17.6	17.7	17.9

Evidence-Based or –Informed Strategy Measures

ESM 12.2 - 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
Annual Objective	40
Annual Indicator	52.5
Numerator	1,705
Denominator	3,246
Data Source	CSHCS database, Medicaid Claims, UM Provider Datab
Data Source Year	2017
Provisional or Final ?	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	43.0	46.0	49.0	52.0	55.0	58.0

State Performance Measures

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		89.9
Annual Indicator	88.1	89.1
Numerator	14,253,020	20,556,206
Denominator	16,176,800	23,074,740
Data Source	CAHPS	CAHPS
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	90.9	91.9	92.9	93.9	94.9	95.9

State Action Plan Table

State Action Plan Table (Michigan) - Children with Special Health Care Needs - Entry 1

Priority Need
Increase family and provider support and education for Children with Special Health Care Needs

NPM
NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care

Objectives
A) By 2020, increase the number of youth who have a plan of care that includes transition planning beginning at age 14 by 4.1%
B) By 2020, increase the number of youth and families by 50 that are aware and understand the transition to adulthood process
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

Strategies
A1) Provide ongoing technical support to LHDs related to transition planning A2) Set in place an infrastructure for assuring transition planning onset at age 14 years A3) Establish a pilot project to create shared transition plans of care for CSHCS beneficiaries using CareConnect 360
B1) Develop and implement a marketing plan to promote the Adolescent Online Transition Course B2) Implement an AMCHP Replication project on the Six Core Elements of Transition within a school clinic setting
C1) Develop and implement online transition modules for physicians, nurses and social workers that offer free CEUs C2) Implement a transition-focused quality improvement initiative through the CYE learning collaborative

ESMs	Status
ESM 12.1 - Percent of local health departments with a transition policy in place	Inactive
ESM 12.2 - 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

Reduce barriers, improve access, and increase the availability of health services for all populations

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 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

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

C) By 2020, increase the availability of health services, particularly in underserved regions, through the utilization of telemedicine and community-based services

Strategies

A1) Cover specialty care related to a qualifying condition when insurance is not existent or is inadequate for children that require the recurring care form a pediatric sub-specialist A2) Complete a study of the Insurance Premium Payment Assistance Benefit; review findings and implement improvements A3) Implement an assessment of health disparities and racial inequalities for CSHCS population

B1) Improve the quality of CMDS clinics through the implementation of the Pediatric Integrated Care Survey B2) Customize the Pediatric Care Coordination Curriculum for Michigan use and develop a plan for its implementation

C1) Provide on-going technical assistance to CMDS clinics C2) Pilot a new field clinic model that is utilizes telehealth in Northern Michigan C3) Enroll providers and monitor the utilization of the new Pediatric Intensive Outpatient Feeding Program service model

CSHCN Overview

Children with special health care needs (CSHCN) include children through age 21 with a wide variety of conditions, some of which qualify to receive support through the Children's Special Health Care Services (CSHCS) program within MDHHS. The CSHCS Division is located in the Bureau of Medicaid Care Management and Quality Assurance. The CSHCS Division includes the Family Center for Children and Youth with Special Health Care Needs, which is parent-directed and designed to support and connect families with the care that they need using a family-centered approach. It also includes sections focused on customer support, policy and program development, quality and program services, and the Children with Special Needs fund. In this population health domain, Title V funds are primarily used to support medical care and treatment for CSHCN. Other federal funds that support CSHCN include a HRSA Epilepsy grant and Medicaid. Key partners include Medicaid, local health departments, 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 children and youth with special health care needs focuses on ensuring a well-functioning system. According to 2016 results of the NSCH, 20.21% of Michigan's children have special health care needs, as compared to the national average of 19.4%. However, nearly a third of non-Hispanic Black children (32.36%) were identified with a special health care need. Additionally, only 17.79% of parents of children with special health care needs report that their children receive care that includes all components of a well-functioning system. While 88.47% report the system is easy to access, only 16.66% report adequate transition support. Improving transition support is a critical goal for Michigan's CSHCS program.

Medical Home (FY 2017 Annual Report)

Through the five-year needs assessment process, the state priority issue of "Increase family and provider support and education for Children with Special Health Care Needs" was selected for the CSHCN population domain. Percent of children with and without special health care needs having a medical home (NPM 11) was one measure selected to address this priority need.

An environmental scan of ongoing pediatric projects that focus on medical home recognition and/or the furtherance of medical home concepts (i.e., care coordination, team-based approaches, increased access, etc.) demonstrates the attention this topic is receiving throughout the state. Some of these initiatives move beyond education and seek to address system integration, payment reform and the health care infrastructure in ways that will result in the transformation of how health care is delivered in Michigan.

CSHCS has embraced these concepts as well, as it continues its care coordination and case management efforts through the state's local health department (LHD) network and through its integrated, team-based, patient-centered care work available from various Children's Multi-disciplinary Specialty (CMDS) clinics. However, much of this work is centered on the 'medical neighborhood'—a term coined to reflect the clinical-community partnerships and supports needed to enhance health. As a result, CSHCS is retiring the medical home NPM in 2018.

CSHCS will continue to collaborate with partners when mission and purpose intersect, and as requested. It will also continue to focus on the medical neighborhood concepts, working through both the local public health network and the CMDS clinics to assure access to quality, patient-centered, integrated, coordinated care in specialty and community-based settings.

That being said, CSHCS—and to a greater extent MDHHS—has accomplished much during FY 2017 that relates to

medical homes, as highlighted in the following narrative description.

Objective A: By 2020, increase the number of CSHCN served in a medical home by 4.7%.

The Healthy People 2020 objective for the percent of all children having a medical home (63.3%) is higher than rates reported for both Michigan and the nation as a whole. According to the 2016 National Survey of Children's Health, about 50% of Michigan's CSHCN and Non-CSHCN children, ages 0 to 17 years, are seen in a medical home. For the CSHCN population, only 48% report access to a medical home, compared to 51% of the Non-CSHCN population. Nationally, only 43% of CSHCN children and 50% of Non-CSHCN children have access to medical homes. Factors influencing medical home accessibility vary and may include:

- Evolution of medical homes and the processes for obtaining medical home recognition;
- Health care professional shortages, complicated by a growing number of concierge medical practices; and
- Changes in the political climate as it relates to healthcare financing, the Affordable Care Act and immigration.

In addition to these factors, a more significant, non-health related factor may be at play: increased transience among low-income populations. Families that move frequently due to lack of secure housing may not have the ability to establish their children in a medical home practice. In Michigan, where more than two out of five children are Medicaid eligible and are living in families with incomes less than 200% of poverty, frequent moves due to housing concerns may be a contributing factor to patient participation in medical homes.

In spite of declining participation of children in medical homes, much work is being accomplished throughout the state related to the adoption of medical home principles and the establishment of medical home practices. The following list provides an overview of many of these efforts that are either spearheaded by MDHHS or done in collaboration with MDHHS and/or its partners:

- **Asthma, Allergy and Anaphylaxis.** Spearheaded by the American Academy of Pediatrics (AAP) in 2010, the AAP has established a successful Medical Home Chapter Champions Program on Asthma within their Children with Special Needs Division. In 2014, this program was expanded through a partnership with the Allergy and Asthma Network (AAN). The goal of the national program, with participants in Michigan, is to promote the delivery of high quality asthma, allergy and anaphylaxis care through team-based, family-centered care coordination and co-management.
- **Blue Cross/Blue Shield of Michigan (BCBSM) Patient-Centered Medical Home (PCMH) program**. This PCMH program is the largest of its kind in the nation. The program offers a graduated approach to PCMH implementation and rewards and recognizes those providers that have made significant progress towards PCMH adoption. As of 2016, BCBSM has designated 1,638 physician practices, representing more than 4,500 primary care physicians, as Patient-Centered Medical Homes. These PCMH practices are located throughout the state and can be found in 81 of Michigan's 83 counties.
- **Michigan Primary Care Consortium (MPCC).** MPCC is a nonprofit membership organization that seeks to improve the primary care delivery system in the provision of disease prevention, health promotion, and chronic disease services by aligning existing quality improvement initiatives, addressing accessibility gaps and engaging in problem-solving strategies that work to assure patient centered medical homes. Working in the priority areas of advocacy, advance care planning, value-based reimbursement and care coordination, the MPCC seeks to fill gaps through a collective impact model.
- **State Innovation Model (SIM) project.** Awarded a four-year grant in 2015 by CMS, the MDHHS SIM project builds on the work of the Michigan Primary Care Transformation Project (MiPCT). The project has established five Community Health Innovation Regions (CHIRs). Within these regions, the project is working to establish

Accountable Systems of Care, that focus on participatory decision making and implementing projects that support community health priorities. The project also contains a PCMH initiative that is built upon the principles of patient-centered medical home, and emphasizes enhanced access, whole person care and expanded care teams that focus on comprehensive coordinated care. All participating PCMHs are working on developing clinical-community linkages with community-based organizations as one of the transformational objectives. The organization they select to partner with must provide services and resources that address the significant socioeconomic needs of the practice's population. In addition, they must select a secondary practice transformation objective from a list of 11 approved activities, including: telehealth adoption, medication management, group visit implementation and integrated clinical decision making. For their participation, SIM PCMH Initiative participants receive payments for their attributed Medicaid beneficiaries. Practices receive $1.25 per member per month to support practice transformation and a PMPM care management and coordination payment that varies by type of Medicaid beneficiary from $3.00 to $8.00, which is paid through the 11 Michigan Medicaid Health Plans.

- **Mental Health Integration Pilot Projects**. In 2017, the legislature passed Section 298 of Public Act 107. This legislation instructed MDHHS to "implement up to 3 pilot projects to achieve fully financial integration of Medicaid behavioral health and physical health benefit and financial integration demonstration models." These projects are intended to test how the state may better integrate behavioral and physical health systems in order to improve behavioral and physical outcomes, maximize efficiencies, minimize costs and achieve material increases in behavioral health services, while cost-containing Medicaid spending. Beginning in October 2018, the Section 298 pilots will begin a two year project period. Using an integrated approach that is patient centered, they will work to align care management and care coordination between the health plan, community mental health agency, the provider, enrollee and family.
- **School-Based Health.** MDHHS has a well-defined network of Child and Adolescent Health Center programs throughout Michigan. The programs encompass three models which are located in schools or near schools and include: clinical health centers, school wellness program sites and behavioral health service sites. Many of these sites are located in medically underserved communities, where access to care issues exist. Staffed by nurses, nurse practitioners, social workers and medical assistants, many of the school clinics serve as a medical home for uninsured and underinsured students. Committed to providing high-quality, student-centered, coordinated health care delivered by a well-trained, culturally competent team of health care professionals, MDHHS, along with the School-Community Health Alliance of Michigan and its partners, are reviewing the NCQA School Based Medical Home Recognition standards and guidelines in the hopes of gleaning additional tools that can help them transform school clinics into school-based medical homes.
- **CSHCS Medical Home Incentives.** MDHHS has incentivized adoption of Medical Home concepts for primary care practitioners within Medicaid Health Plans who serve CSHCS enrollees. As part of the Medicaid Health Plans agreement, Primary Care Physicians (PCPs) who attest to meeting these requirements can receive an enhanced capitated payment of $4 Per Member Per Month for serving children that meet the Temporary Assistance for Needy Families (TANF) criteria, and $8 Per Member Per Month for serving children that meet the Aged, Blind, and Disabled criteria. As part of the self-attestation, PCPs must confirm that they are accepting CSHCS enrollees and have experience and an ability to serve children with complex, chronic health needs; offer expanded appointments for these children; and provide care coordination and transition services, as needed.

Combined, these initiatives move the dial towards the adoption and provision of accessible, coordinated, and family-centered care to Michigan residents including children with special health care needs.

In addition to these MDHHS and partner initiatives, CSHCS continues to use its sphere of influence to support care coordination services to CSHCS beneficiaries through the local public health network. In FY 2017, local health departments delivered 17,390 care coordination/case management services to 10,669 unduplicated CSHCS

beneficiaries. CSHCS also continued to support integrated, family-centered specialty care as offered by multi-disciplinary teams through the network of CMDS clinics. As of March 2018, over 3,800 client encounters were billed for CMDS services delivered in FY 17.

Objective B: Increase families' understanding of the benefits of the medical home model, and help connect families to medical homes in their region.

Targeting families with medical home information was another important strategy employed by CSHCS in FY 2016 and continued in FY 2017. Utilizing the training "Care Coordination: Empowering Families" two additional trainings were held. "Care Coordination: Empowering Families" is a one-day, eight-hour training that provides parents with new skills, knowledge and resources to coordinate care for children with epilepsy, and other complex needs, in partnership with a culturally competent medical home. Through this training, parents learn:

- Concepts of the medical home,
- Advocacy skills,
- Techniques to organize information and find reliable resources,
- Tips to navigate health care and insurance systems,
- Skills to increase communication and coordination between multiple providers,
- Transition planning,
- Importance of peer support, and
- Coping with stress.

The training uses a combination of facilitation, hands-on activities, videos and other methods designed to engage the adult learner. Thirty-eight additional parents participated in these two trainings held in Royal Oak (Southeast Michigan) and Grand Rapids (West Michigan). These trainings will continue in 2018.

Objective C: Improve the delivery of care within a medical home.

During FY 2017, CSHCS continued to develop its strategy for assessing CMDS clinics effectiveness in providing a coordinated, interdisciplinary approach to the management of specific complex medical conditions. As part of this strategy, CSHCS distributed a survey to CMDS clinic providers to identify issues related to the multi-disciplinary teams and the care coordination components they provide. The survey also provided an opportunity for clinics to self-assess their effectiveness in the areas of client accessibility and family engagement. Survey results have been collected and the data is undergoing analysis.

Also during 2017, a CMDS client experience pilot survey was completed. The survey tool, administered in 2016, collected client satisfaction and patient experience data via IPADs at the end of a child's visit at a CMDS clinic. The purpose of the pilot survey was to determine the feasibility and usefulness of paired data sets to assess outcomes of effectiveness. Submitted respondent data was matched with client-specific expenditure and utilization data retrieved from the MDHHS Warehouse. Data was analyzed to determine changes in healthcare utilization pre and post CMDS initiation. Data were stratified to determine differences in service provision between diagnoses, as well as between provider organizations. Results were also stratified on race and ethnicity. While the results of the pilot were small and not statistically significant or generalizable to CMDS clinic users, the pilot did serve as a proof of concept. Project work is continuing on into FY 2018 and will focus on incorporating portions of the National Center for Care Coordination Technical Assistance patient experience survey.

Lastly, CSHCS has been working to develop a set of program standards for measuring quality and assuring compliance with state policy and program requirements as it relates to care coordination, interdisciplinary teams and community linkages. Once completed, CSHCS will begin conducting site reviews of CMDS clinics, using a validated

site review assessment tool and instituting a standardized process. This new tool will detail the process and timeframes, materials to be reviewed, evidence of compliance and documentation suggestions. It will also describe phases associated with the site review, including: self-assessment, on-site review, site report, corrective action plan, reassessment and certificate of achievement.

An evidence-informed strategy (ESM) for measuring patient experience related to medical homes utilizes information gathered through the Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey, which is administered annually. A key metric related to medical home has been identified and looks at the respondent answers to three important questions:

1. In the last six months, how often did you have your questions answered by your child's doctors or other health providers?
2. In the last six months, how often did your child's doctor or other health providers explain things about your child's health in away that was easy to understand?
3. In the last six months, did anyone from your child's health plan, doctor's office, or clinic help coordinate your child's care among these different providers or services?

The combination of these three indicators provides a snapshot that is used to help determine how well Michigan's providers are incorporating patient-centered, care coordination concepts when working with children with special needs.

According to CAHPS data for FY 2017, of families with children enrolled in CSHCS, 82.9% of respondents gave a top box score of "usually", "always" and "yes" to these questions, which is slightly higher than the percentage reported for FY 2016 at 81.2%. More importantly, the data shows that Michigan is already ahead of its FY 2017 target of 55%.

Transition (FY2017 Annual Report)

Through the needs assessment process, Michigan identified the need to measure progress toward the "Percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care" (NPM 12). The needs assessment found that in 2010, only 41.2% of CSHCN received the services needed for transition to adult health care, which falls below the Healthy People 2020 target (NSCHCN). Furthermore, there are wide disparities in Michigan's performance on this measure. In FY2017, Michigan worked toward improving performance and reducing the disparity in this measure by supporting and educating providers and families on transition planning.

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%.

With the hiring of a Transition Specialist at the end of FY 2016, MDHHS was well positioned to begin work on meeting its objective to increase the number of youth who have a plan of care by the age of 14 years. Working from CSHSC's newly developed Transitioning Youth with Special Needs to Adulthood Strategic Plan, staff embarked on an ambitious set of activities designed to inform and educate health care providers and families on the importance of transition planning for youth with special health care needs (YSHCN).

Meeting with Got Transition staff, the Transition Specialist vetted the plan's strategies to assure that the broader focus described in the CSHCS plan was appropriate. While the CSHCS plan emphasized a health care transition component, it also sought to foster maximum independence and decision making for CSHCS youth in all aspects of

their lives.

As part of his orientation, the Transition Specialist surveyed a variety of evidence-informed resources made available by other states, in order to identify the best and most replicable models. He also met with key organizations that offered transition services, including members of MDHHS's Division of Services to Children and Families (that focus on children's and youth's mental health and developmental concerns) and the Bureau of Health and Developmental Disabilities (that provide adult mental health and substance abuse services). He reached out to the Michigan Developmental Disability Council and Michigan Rehabilitative Services to learn how they assist clients with transitioning to employment and/or independent living situations. He attended a transition training offered through a local educational system, recognizing there were potential opportunities for collaboration within the school settings. Fully oriented, the Transition Specialist began implementing the strategies as outlined in the newly developed strategic plan, looking for ways to maximize efforts, minimize costs and reach the greatest number of health care providers.

The first and second strategies centered on engaging and building capacity in Medicaid Health Plans (MHPs) and local health departments (LHDs) to provide transition services. Using survey results from the 2016 LHD regional meetings that identified transition planning as a key topic, CSHCS focused its 2017 regional trainings solely on transition and transition planning. Invitations were distributed to LHDs and CSHCS nurses and program representatives, Medicaid Health Plan Care Coordinators and Children's Multi-Disciplinary Specialty Clinic staff. Three regional meetings were held in June 2017 and drew a total of 262 participants representing: 45 LHDs; 10 of the 11 Medicaid Health Plans with CSHCS dual enrollees; representatives from CMDS clinics; other health service providers; CSHCS and Family Center staff; and members of the Bureau of Managed Care.

The full-day trainings, held across the state in Lansing, Gaylord and Marquette, introduced the six core elements of transition, outlined the CSHCS transition framework, described transition gaps youth currently face and featured new tools and processes developed to assist with transition care planning. Pre- and post-test data collected from registrants found the following training results:

- 16% increase in confidence among survey respondents in assisting clients with creating a transition plan;
- 19% increase in survey respondents' knowledge of the Got Transition's 'six core elements' and ability to incorporate these elements into their work;
- 20% increase in respondents' knowledge of available tools and resources that help clients prepare for adulthood.

In addition, 92% of respondents agreed or strongly agreed they knew the importance of transition planning and could communicate that to clients.

While the training was an important initiative, it was not the only work that occurred related to transition planning that targeted LHDS or MHPs. Prior to the training, the Transition Specialist reviewed each LHD's transition policy to assure its adequacy. The original Evidence-based or -informed Strategy Measure (ESM) for this performance measure was the percent of LHDs with a transition policy in place. Although the review determined that 100% of LHDs had a policy in place, it was also determined that a sample policy, along with a variety of educational materials, should be constructed and shared. Working collaboratively with a small subcommittee of CSHCS health department staff, the group developed a model policy which met the LHD accreditation requirements, as well as lowered the initiation age for transition plans of care to 14 years of age. The policy stipulates a minimum of four age-specific contacts that should occur between 14 to 21 years of age and includes the development of plans of care and the completion of self-assessments during these encounters, when appropriate. The model policy was shared at the training and has been posted on the MDHHS Transition to Adulthood website, along with a checklist for LHDs and self-assessment and plans of care tools. Once the training was complete, four LHDs and one managed care entity

contacted the Transition Specialist and requested a review of their policies or revised policies. Reviews were completed and recommendations made back to each entity.

A second subcommittee—consisting of a LHD representative, Family Center staff and family representatives, along with other MDHHS staff—was formed to review the state process for sending automated transition information letters to CSHCS beneficiaries. Beginning at age 14 and following the age guidelines specified by the model policy, four letters were crafted to convey age-appropriate transition messages and to point families back to their LHD for additional transition resources and assistance. Transition letters were reviewed to assure they were understandable and incorporated plain language principles. CSHCS is currently mapping system logic for the letters and identifying reporting parameters. Next, it will explore system release dates. Work on this strategy is continuing into FY 2018.

The third strategy for FY 2017 was to explore, promote and/or develop electronic solutions to identify and assist clients with unmet transition needs. At the beginning of FY 2017, CSHCS rolled out an electronic tool called CSHCS Healthcare Automated Support Services (CHASS). CHASS was constructed specifically for LHDs to monitor their case management and care coordination encounters and to facilitate non-emergency transportation approvals. As part of their monitoring, LHD staff have been trained to identify topics that were discussed as part of the case management/care coordination service. By the end of FY 2017, CHASS reported that 10,669 unduplicated CSHCS clients received a case management/care coordination services and for 8% (833) of those clients' transition needs were discussed.

Lastly, CSHCS partnered with University of Michigan's Child Health Evaluation and Research (CHEAR) unit to determine the percentage of children enrolled in CSHCS within selected diagnostic groups who had an outpatient visit with an adult specialist only, based on administrative claims. Selected groups include cardiology, endocrinology, gastroenterology, hematology-oncology, nephrology, neurology, pulmonology and rheumatology. This new indicator 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. Using this indicator, CSHCS will not only have information on who received care planning services that included transition planning, but more importantly, what percentage of clients actually transitioned to adult providers.

In 2017, CSHCS adopted this indicator as its new ESM for NPM 12, setting as a target that 40% of CSHCS clients, ages 18 to 21 years, within a select diagnosis group, will have transferred care from a pediatric to an adult provider. Actual data collected for FY 2017 shows that Michigan has already exceeded this target. More than half (52.5%) of the targeted clients have transferred their care.

Objective B: Increase youth and family awareness and understanding of the transition to adulthood process.

CSHCS is committed to a person-centered healthcare approach and to self-determination. Core to these concepts are individuals and families, who are not merely healthcare recipients, but drivers of their own care. Much of FY 2017 was spent in laying the foundation for future endeavors that will seek to enhance the educational outreach efforts to families and designed by families so that they can make better-informed decisions related to health care transition.

The first strategy focused on youth and included the development of a youth consultant position and the creation of an online transition course for adolescents. With funding provided by the Children and Youth with Epilepsy (CYE) grant, the Family Center began the process to hire a youth consultant who helps to assure that the youth perspective is represented in the Family Center's programming. During FY 2017, the Family Center developed a job description and posting materials. Unsuccessful at their first attempt to fill the position, the Family Center reposted and a

qualified candidate was recruited during the first quarter of FY 2018. This young person will be key to the development of future communication strategies, including the use of social media, and marketing ideas. She will also assist with reviewing educational materials and attend outreach events directed at youth.

Coinciding with the hiring of the youth consultant, the Family Center developed an online course titled “CSHCS: Transition to Adult Services.” This one-hour, five-lesson course covers the following topics:

- What is transition?
- Your Role in Transition
- Working with Doctors and Other Health Care Providers
- Health in the Home, Schools and Community
- Transition in Action

Designed to be highly interactive, the course encourages personal responsibility while offering concrete tools that foster independence. Adolescents learn about self-advocacy and self-determination, the value of respectful relationships and how to communicate their health needs. Participants are directed to a variety of online resources and mobile apps that can assist them with tracking their medical appointments and prescription refills, help them access health insurance and where to locate important health and human service resources in their local communities.

The course, which has been reviewed by Family Center staff and the newly hired youth consultant, has been found to be both age-appropriate and culturally relevant in content. It is scheduled to be released in FY 2018, once the marketing plan has been developed. This course has also been incorporated into an AMCHP replication project submission, scheduled to begin in June 2018.

The second strategy to increase youth and family awareness began by laying the foundation for a new effort to improve family engagement. Using Michigan’s 10 Enterprise regions as the basis, the Family Center spent much of the year creating the infrastructure for Michigan’s new Family Leadership Network. This network will consist of 20 parents (two from each of the 10 regions). It will provide guidance and feedback on programmatic issues, including planning and implementation of transition efforts, reviewing educational materials and helping to design outreach strategies. This group will provide further assurance that CSHCS and the Family Center’s work is patient-centered, culturally competent, educationally appropriate and inclusive of those for whom their services are designed to serve.

Objective C: Increase provider awareness and understanding of the transition to adulthood process.

The first strategy in FY2017 focused on training. Given the regional training emphasis on transition planning and the expanded invitation list that included CMDS clinic providers, CSHCS decided this format would be an appropriate place to pilot a presentation regarding healthcare transition from a provider’s perspective. Dr. Tisa Johnson-Hooper, a pediatrician from Henry Ford Health System (HFHS) and a well-known advocate for health care transition, presented information on the gaps in health care that can exist for youth ages 17 to 21 years, when transitions to adult providers fail. She described Henry Ford Health System’s experience in integrating the GotTransition’s six core elements of health care transition into their primary care practices and how they used a quality improvement approach to assure full integration. She also worked with participants to identify potential areas of collaboration between public health practitioners, managed care entities and health care providers, as it related to the health care transition care plan.

Using a series of scenarios based on real cases seen in her clinic, she explained why transitioning from a pediatric provider to an adult provider is so difficult for the YSHCN population and their families. She described the HFHS healthcare transition Quality Initiative, which was developed to improve primary care utilization by patients 17 to 21

years of age and to improve patient and provider satisfaction. The session was well-received and the information will be incorporated into future online training sessions designed to improve provider knowledge on the need for health care transition.

Rounding out the trainings, each site featured a parent panel that shared healthcare transition stories experienced by their own youth with special health care. The panel participants, recruited by the Family Center, provided a glimpse into what worked and what went wrong for families as they moved from pediatric to adult providers. Five parents of children with varying diagnoses that ranged in chronicity and severity, described their concerns of leaving pediatric practitioners they had trusted; how they were notified it was time to move to an adult provider; and the referral and introductory processes they underwent. This panel presentation followed Dr. Johnson-Hooper's session and served to reinforce for trainees the importance of healthcare transition in assuring continuity of care and alerted them to the possible problems that families encounter. This work, like the presentation shared by Dr. Johnson-Hooper, will be incorporated into future online sessions that target providers.

The second strategy employed to improve provider awareness and training built upon the work already begun through CareConnect 360, MDHHS's newly integrated, online, plan of care system. Early in FY 2017, CSHCS, working through MSU's Institute for Public Policy and Social Research, convened a meeting of LHD CSHCS staff and Medicaid health plan care coordinators for the purpose of introducing CareConnect 360 for CSHCS, a statewide care management web portal. The system—already being utilized by nearly 1,000 users representing Medicaid Health Plans, Community Mental Health Providers, Integrated Care Organizations, Foster Care and Federally Qualified Health Centers—offers an integrated data platform designed to improve care coordination for Medicaid beneficiaries by facilitating critical cross-system information to improve coordination of services delivered across multiple entities.

During the meeting, LHD and MHP participants received a demonstration of how the system worked at the client level, and then how data could be aggregated to provide population data, with mapping capabilities as an added system benefit. Participants were encouraged to identify ways they thought this system would benefit their clients and could be used within their organizations. They also shared concerns. Specifically, people asked questions about system integration possibilities with electronic medical records. By the end of FY 2017, more than 75% of LHDs had gained access to the system and a series of webinars are being planned to assist LHD staff in learning how CareConnect 360 can be utilized in their care planning. This important work continues into FY 2018.

Medical Care and Treatment (FY2017 Annual Report)

To address the priority area to "Reduce barriers, improve access, and increase the availability of health services for all populations," MDHHS developed an SPM for Children and Youth with Special Health Care Needs (CYSHCN): Percent of CYSHCN enrolled in CSHCS that receive timely medical care and treatment without difficulty. While access to public and private health insurance coverage has improved as a result of the Affordable Care Act (ACA), CYSHCN 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 if a family has access to private insurance. Family health care costs can include deductibles, cost sharing and premium payments.

In addition, private insurance may not include any covered benefit for a specific, medically necessary service. In other cases, only a limited benefit may be available through insurance. Transportation costs may also pose challenges to families who may need to travel long distances to appropriate specialty medical care. Although the ACA eliminated annual and lifetime dollar limits, other annual limits exist, and benefits may be exhausted for the current contract year

even though need continues. For each of these financing and resource challenges, CSHCS continues to be a significant resource for achieving adequate, appropriate health and specialist care and also provides a way to contain substantial costs to families.

Through this SPM on the provision of medical services and treatment for CYSHCN, Michigan has continued to refine strategies related to the CSHCS program, including the following: assist individuals with special health care needs in accessing the broadest range of appropriate medical care, health education and supports; assure delivery of these services and supports in an accessible, family-centered, and culturally competent manner; promote and incorporate parent/professional collaboration in all aspects of the CSHCS program; and remove barriers that prevent individuals with special health care needs from achieving optimal health.

A review of responses to the two CAHPS survey questions used to measure the "percent of CYSHCN enrolled in CSHCS that receive timely medical care and treatment without difficulty" (SPM 4) showed slight improvement during the past year. In 2016, 88.1% of CSHCS CAHPS respondents gave top box ratings of 'usually' or 'always' to questions related to getting care and treatment when needed. In 2017, 89.1% of CSHCS CAHPS respondents gave top box ratings to the same questions.

Objective A: Reduce barriers to medical care and treatment by minimizing financial barriers from the increased medical services associated with the child's special need.

A core strategy designed to reduce barriers to medical care and treatment is to minimize families' financial expenses by covering specialty care and treatment costs related to their child's qualifying condition. CSHCS assistance may be applicable when insurance is not existent or inadequate for children who require the recurring care from a pediatric sub-specialist. During FY 2017, CSHCS enrollment averaged 32,995 clients per month. Of these, 66.7% were dually enrolled in CSHCS and Medicaid.

The program provided payment for medical care and treatment related to the child's qualifying condition. These benefits, while not intended to cover all of the medical care and treatment needs, does much to offset the financial strain sub-specialty care costs can put on a family. The program intercedes by covering co-pays, deductibles (when present) and assisting families with out-of-pocket payments associated with prescription medications and pharmacy services, medical supplies and equipment, and various therapies associated with the child's qualifying diagnoses. The program works to reduce the families' financial burden and helps to reassure families that necessary specialty care for their child's qualifying diagnosis is affordable.

CSHCS is the payer of last resort and requires that families follow their primary and secondary insurance rules. Families who may be eligible for Medicaid are required to enroll. Those who do qualify for Medicaid are moved into Medicaid Health Plans (MHPs) if deemed appropriate. Out of the 22,013 monthly (average) dual enrolled beneficiaries, 80% were covered by one of 11 MHPs that accept CSHCS dual enrolled beneficiaries. According to the 2017 Consumer Assessment of Healthcare Providers and Systems (CAHPS) results, two-thirds of CSHCS respondents enrolled in a MHP rated their health plan with a Top-Box rating of 9 or 10 (out of 10 possible points).

Objective B: Improve access to medical care and treatment by improving the systems of care for CSHCN.

The core strategy to achieve this objective was to support models of care delivery, such as Medical Homes and Children's Multi-disciplinary Specialty (CMDS) clinics, which focus on increased care coordination and family partnership. CMDS clinics provide pediatric specialty care to children with complex medical needs. Clinics are provided by a multi-disciplinary team, comprised of a pediatrician, subspecialist, social worker, dietician, registered nurse, and other members identified as appropriate for inclusion. Together this team develops a comprehensive plan of care and provides ongoing medical treatment to a child or youth diagnosed with a specific qualifying condition.

The client and family are key members of the team and work with the team to identify individualized goals, objectives and needed resources.

In FY 2017, MDHHS helped to support 28 CMDS clinics (located in five tertiary and university hospital settings) through an enhanced reimbursement mechanism via the Community Health Automated Medicaid Processing System (CHAMPS). The enhanced reimbursement provides additional revenue to support ancillary team members of the clinical care team who assist with coordinating and integrating care, in an effort to wrap services around the client and family.

CMDS clinics are designed to address specific conditions/syndromes or related conditions such as diabetes, cancer, cleft palate, asthma, cystic fibrosis, sickle cell, hemophilia, kidney disease and various other related disorders and conditions. During FY 2017, these clinics reported 3,858 client encounters. New in FY 2017, the 22q.11.2 deletion syndrome clinic was added to the list of conditions for which the CMDS clinic framework can be applied.

A second strategy employed to improve systems of care for CSHCN focused on primary care linkages. While CSHCS does not pay for primary care, CSHCS recognizes the importance of primary care in the management of chronic diseases and its referring role to subspecialties. To improve awareness of the program among primary care providers and their patients and to facilitate their referrals to the local health department program, the Family Center awarded a $10,000 mini-grant to fund a local health department to implement a pilot project.

Working in collaboration with a subcommittee of local primary care providers, the local health department developed an informational packet that includes a brochure specifically designed for health care providers. The brochure explained the program's eligibility criteria, types of services and assistance available to families, and the health department's referral process. In addition, the packet contains a cover letter, various CSHCS program brochures, a referral form pad and referral postcards. Both the referral form and postcard were used to submit information referral requests to the health department. The referral form, completed by the provider and authorized by the client, could be faxed from the provider to the health department. The postcard could be given directly to the patient/family to make a self-referral for information. The local health department responded to both.

In addition, and as a companion piece to the information/referral packet, the local health department developed a series of lobby television vignettes. These vignettes, aired at local primary care offices that had received the packet, featured local health department staff and family members or caregivers talking about the benefits of the CSHCS program. By prepping patients and their family members immediately ahead of the appointment and preparing physicians to respond with information, the project attempted to increase both program awareness and information referrals. The project is now under review to determine if any or all of its components are replicable.

Objective C: Increase the availability of health services, particularly in underserved regions, through the utilization of telemedicine and community-based services.

The first strategy was to expand, promote, and support the use of telemedicine/telehealth in rural and underserved communities. FY 2017 marked the beginning of a third three-year grant cycle dedicated to improving access to quality care for children and youth with epilepsy. Working through a quality improvement learning collaborative, this project focused on the quality of the care received, utilizing innovative technologies such as telemedicine, teleconferences, smart phone apps and e-resources. By the end of FY 2017, seven primary care sites and three Epilepsy Centers had been recruited to participate and were in the process of implementing telemedicine. One in-person learning collaborative meeting and seven webinars were held, and additional resources were distributed to nearly 700 participants and parents of children with epilepsy living within Michigan. Activities around medical home,

family engagement and transition have begun and are continuing into FY 2018 and FY 2019.

A second strategy was to support and assist local health departments in providing care coordination, case management, and support services for CYSHCN and their families. At the beginning of FY 2017, local health departments began to utilize the new CSHCS CHASS system to track case management, care coordination and support system encounters. The CHASS system streamlines local health departments' non-emergency transportation approval process and helps to assure timely submission of care coordination and case management encounters for billing purposes.

As a result of this new system, CSHCS can also more easily monitor real-time data related to care coordination/case management encounters by date, county, health jurisdiction and beneficiary. During FY 2017, CHASS reported that local health departments provided 17,390 support services to 10,669 unduplicated CSHCS clients. Services included care coordination, case management and non-emergency transportation approvals. Of the care coordination/care management services, 7,761 (44.6%) of all services rendered resulted in the development of a plan of care. With the first year of data under review, CSHCS plans to establish baselines and to work with local health departments to explore ways it can use the data for ongoing performance monitoring and to conduct quality improvement initiatives.

Transition (FY 2019 Application)

Through the five-year needs assessment process, the state priority need to "Increase family and provider support and education for Children with Special Health Care Needs" 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. Work accomplished in FY 2017 within the area of medical transition has served as a springboard for current and future activities. Unfortunately, at the beginning of FY 2018, the newly hired transition specialist responsible for moving these efforts forward accepted a new position within MDHHS. This change created a staffing vacancy, which is being filled in 2018. The three objectives in this state action plan each contain broad-based educational strategies that are designed to increase knowledge concerning medical transition. These strategies target local health departments, medical providers, adolescents and families.

The associated strategies are more process-oriented and seek to increase the capacity for integrating transition planning, utilizing automation and newly developed systems of care, so as to wrap services around clients and assure family-centeredness. They also seek to promote the adoption of medical transition as part of the standard of care for adolescents. The strategies also expand the roster of providers to include Medicaid Health Plans. These objectives and strategies, when implemented in tandem, represent an approach that seeks to create both awareness and an ability to deliver medical transition services in Michigan that are comprehensive, coordinated and responsive to clients' needs.

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 is continuous and reflects the ongoing need for local health departments (LHDs) to receive technical assistance on medical transition. LHD staff turnover, combined with a new emphasis on transition planning as part of the LHD's accreditation site review, has resulted in increased demands for technical assistance. In addition, the rollout of the CSHCS Healthcare Automated Support Services (CHASS) system which facilitates transition tracking as part of the care coordination/case management service, provides new capacity for monitoring transition efforts performed by the LHDs. Moving forward, the new transition specialist will provide ongoing reporting on these activities on a regular basis.

The second strategy for this objective is the completion of infrastructure work, initiated during FY 2017. As part of the training for LHDs, managed care plans and providers, MDHHS set in place an infrastructure for assuring transition planning occurs at age 14 and includes a minimum of four contacts between the age of onset and age 21. Using automated letters generated from a CSHCS electronic data system, four age-specific letters will be mailed to clients/families informing them of upcoming changes they can expect related to their child's program eligibility, need for transition services or ability to obtain protected health information (PHI) once the child turns 18. Families are directed to LHDs for additional information and/or services. LHDs will also receive a report on which recipients were sent the mailing, so they can proactively contact these families. During these contacts LHDs can provide education about medical transition and its importance, and introduce the client and/or family to the readiness assessment and the transition plan of care.

For FY 2019, work will continue on developing this infrastructure. While the four letters have been finalized, additional work needs to be completed, including: mapping system logic for the automated letters; identifying reporting parameters for the LHD report; looping MHPs into the process for those in Medicaid managed care; and identifying system upgrade/release dates for implementation.

A third strategy, which was also initiated in FY 2017, builds upon work of the second strategy. This strategy furthers the use of shared plans of care via the Care Connect 360 system. CareConnect 360, an integrated care management system, improves the coordination of services delivered by multiple entities. It also improves the effective use of healthcare data for assessment and analysis purposes, which helps to improve decision-making processes and evaluation, and can lead to reduced costs and improved health outcomes. Care Connect 360 will facilitate joint care plans among LHDs, MHPs, community mental health (CMH), foster care, and other health and human service providers, so as to streamline the care planning process to assure that families are receiving maximum care coordination/case management services with minimum confusion.

During FY 2019, the new transition specialist will work with LHDs to assure they know how to access the CareConnect 360 system; how to use the system to integrate transition care plans with other providers; and how to utilize the population health data aspects for quality improvement purposes. The transition specialist will review LHD and MHP user permissions to assure that designated staff working with CSHCS clients have logins and permissions appropriate for their positions. CSHCS will also work with MSU's Institute for Public Policy and Social Research to convene a second training that will focus on skills development for system use and how to conduct quality improvement activities using CareConnect 360 data.

Once this activity is completed, the transition specialist will recruit two health departments—one rural and one urban—to assist with developing and implementing a pilot project that includes MHPs, CMH and other health and human service providers in the development of shared plans of care that include medical transition components for a subset of the LHD CSHCS enrollees who are within the target age group of 14 to 21. The purpose of this pilot will be to determine the feasibility of utilizing the system for the purposes of transition planning and to develop needed policies, protocols and informational materials as needed to simplify that process. From this pilot, a set of best practices to guide expansion of efforts will be identified.

In addition to using CareConnect 360 and electronic health record (EHR) interoperability for exchanging transition related information, CSHCS will also utilize the MDHHS Data Warehouse to track when CSHCS clients transfer care from a pediatric to an adult provider. With the assistance of the University of Michigan's Child Health Evaluation and Research (CHEAR) unit, CSHCS will be able to determine clients that are seen by pediatric and adult provider specialists. This work will support the new ESM for this performance measure, which is to measure the percent of CSHCS clients age 18 to 21 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider.

Objective B: By 2020, increase the number youth and families by 10% that are aware and understand the transition to adulthood process.

This objective will be measured by completion of the adolescent transition course. During FY 2018, CSHCS released its online adolescent transition course, which introduces youth to essential concepts regarding the importance of transitioning from pediatric to adult providers. The first step in achieving this objective is to develop and implement a marketing plan that makes students and their families aware of the online course and how to access it.

The marketing plan for the online adolescent transition course will focus on reaching both special needs and non-special needs adolescents. The marketing plan will be developed by a committee that consists of the Family Center youth consultant, Family Center parent consultants, members of the newly formed Family Leadership Network, LHDs and the transition specialist. The marketing plan will create branding for the online course, define the target market, and implement strategies designed to reach the target population. It will include a work plan with timeframes and responsible parties, and specify expected outcomes. In addition, the plan will include a budget and evaluation tools

that will be used to measure the plan's effectiveness.

Core to the marketing plan will be the development of a toolkit which can be used by MDHHS, LHDs and member organizations of the CSHCS Advisory Committee to disseminate information about the online course. Included within the toolkit will be informational flyers, postcards, sample news releases, newsletter articles, public service announcements, and postings for websites and various social media outlets. This plan, once established, will be reviewed and updated annually and sustained throughout the remainder of this Title V block grant period.

The second strategy to be implemented seeks to establish transition services within the MDHHS funded school-based and school-linked health centers, located throughout the state. MDHHS has a well-defined network of Child and Adolescent Health Centers (CAHCs) located throughout Michigan. The programs encompass three models: clinical health centers (82); school wellness sites (14); and behavioral health service models (4). These programs —staffed by mid-level practitioners, social workers and medical professionals—deliver a wide-range of services, focusing on primary, preventive and early intervention health care services. School clinic staff work collaboratively with students, parents, school personnel, LHDs and the human service community to assure that students have what they need to be healthy and successful. In FY 2018, MDHHS was awarded a Best Practices Technical Assistance Replication Project through the Association of Maternal and Child Health Programs (AMCHP). This project will replicate components of the "Using the Six Core Elements of Health Care Transition in Medicaid Managed Care" project in a school-based clinic.

The proposed project seeks to build upon the established school clinic network and its relationships with students, parents, school officials and the local health care system. The goal of the program is to assist adolescents, both those with special health care needs and those without, in developing the skills they need to make health care transitions from their pediatric providers to adult providers by using the Six Core Elements of Health Care Transition framework. The project will focus on school-based clinicians and local primary care practices and assist them in incorporating transition tools (e.g., policies, readiness assessments, plans of care, care coordination, etc.) into their standards of care, as well as provide the online training and additional resources and tools to adolescents, their families and local school personnel. Through this effort, MDHHS intends to build stronger linkages between the transition planning that is occurring via Michigan's educational and vocational systems and healthcare transition efforts, so as to assure a more inclusive, global and family-centered approach to adolescent medical transition.

As part of the pilot's sustainability efforts, CSHCS will work with the Child and Adolescent School Health section within the Bureau of Family Health Services at MDHHS to identify ways to incorporate medical transition into the quality improvement component of MDHHS funded school-based and school-linked clinicrequirements.

Objective C: Increase provider awareness and understanding of the transition to adulthood process by 25% through the establishment and offering of a free online Medical Transition course.

The first strategy for this objective focuses on increasing provider awareness and understanding among nurses, social workers and physicians. Baseline data to measure the objective will be established during the course's pilot phase. During FY 2019, CSHCS will develop an online program that is modeled after the University of Florida's "Health Care Transition Training for Health Care Professionals." MDHHS will work to condense the original 10 modules down to 3 to 5 modules and will seek to integrate Michigan-specific resources into the curriculum.

The training itself is based upon evidence-based materials from GotTransition's Six Core Elements 2.0. Through this training, participants will better understand how to:

- Establish a transition policy;
- Track and monitor transitioning youth and their activities;

- Assess transition readiness and orient adolescents to an adult practice;
- Develop a transition plan of care;
- Transfer care to an adult provider; and
- Assure the transfer is complete.

In addition, participants will receive coding and reimbursement information and condition-specific tools for subspecialists from the American College of Physicians. MDHHS will work with the Michigan Medical Association, the Michigan Nurses Association and the Michigan Chapter of the National Association of Social Workers to obtain CEUs for completing the course work.

As part of this strategy, the transition specialist will work with the CSHCS communication team to develop a marketing plan that can be integrated into the CSHCS communication plan to promote the free course to physicians, nurses and social workers. Evaluation data collected during the course will be used to monitor the course's effectiveness, as well as participant satisfaction with the overall course. The online course will be reviewed annually and updated as needed. A performance indicator will be selected and once baseline measures are identified during the pilot periods, outcomes will be monitored on an ongoing basis.

The second strategy related to this objective will be accomplished through the HRSA Children and Youth with Epilepsy (CYE) Grant. In Michigan, approximately 22.4% of children enrolled in CSHCS live in rural areas. Children with an epilepsy diagnosis comprise 10.2% of the CSHCS total enrolled population. Among these CYE, 76% rely on Medicaid for health insurance, compared to 66.6% of all Michigan CSHCS-enrolled families. According to a parent survey distributed in January 2016, many CYE parents expressed challenges or barriers to care. Medical transition was a prominent topic of training interest identified by these parents, with nearly two out of five parent respondents indicating interest in medical transition.

Under the auspices of the HRSA funding, one of the CYE project focus areas is to assure that Michigan youth with epilepsy have a transition plan in place that will enable the seamless transition from pediatric to adult care and services. The project has established a learning collaborative model to implement quality improvement practices. Working with seven primary care sites and three epilepsy centers, they seek to improve the transition infrastructure in the patient/family-centered medical home. Utilizing Plan, Do, Study, Act (PDSA) cycles, primary care sites will test and implement small, rapid changes that can demonstrate effectiveness to accomplish multiple goals across various sites. Specifically, clinics will focus on assuring transition policies are in place (and appropriately distributed), and they will identify strategies to incorporate transition readiness into clinic visits with youth. The project is governed by a collaborative partnership that consists of Family Center staff, CSHCS staff, parent and youth consultants, a medical consultant, a nurse consultant, primary care provider and representatives from the Epilepsy Foundation.

The CYE project has formulated an intervention change package which includes a triple aim that seeks to:

- Improve organizational readiness;
- Improve clinical competence; and
- Improve effective family and youth engagement.

In addition, the project will provide ongoing education, distribute materials and offer webinars to assure that families and providers alike have the most current, evidence-based information available to make decisions that will impact quality of care issues.

Medical Care and Treatment for CSHCN (FY 2019 Application)

Michigan's State Performance Measure (SPM) for the CSHCN population domain measures the percent of CYSHCN enrolled in Children's Special Health Care Services (CSHCS) that receive timely medical care and treatment without difficulty. This measure is aimed at addressing Michigan's 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. Its mission—to enable children to have improved health outcomes and enhanced quality of life—is accomplished by assisting children and their families in accessing the broadest range of appropriate medical care, health education and support. It does this by removing barriers to care, including financial barriers, improving access to services, and strengthening the systems of care that exist.

As of April 2018, 34,053 individuals were enrolled in CSHCS and of these individuals, 22,843 were also eligible for Medicaid. In FY2013, Michigan transitioned children who were eligible for both CSHCS and Medicaid from fee-for-service (FFS) to managed care. The switch to managed care was intended to improve access to and better coordinate primary care for children enrolled in Medicaid and CSHCS, allow for enhanced case management and care coordination services, increase access to mental health services and non-emergency transportation services, and support enhanced quality monitoring. While some dual CSHCS-Medicaid enrollees remain in fee-for-service Medicaid, most—19,092 as of March 2018—are enrolled in a managed care plan.

There is a yearly fee to enroll in CSHCS; however, this fee is waived if the client has Medicaid, MIChild, a court-appointed guardian or lives in a foster home. The fee is determined on a scale based upon family income and family size. For individuals below 200% of the Federal Poverty Level, the annual fee is $120. The payment agreement scale has six levels, with the highest level being for those above 500% of FPL.

Family empowerment is also a key focus of CSHCS. CSHCS empowers families to become engaged, self-determining, informed caregivers who are strong advocates for their children. Much of this work is accomplished through the CSHCS Family Center for Children and Youth with Special Health Care Needs, which provides ongoing support, education and resources to families of children with special health care needs. In FY 2017, the Family Center handled 13,456 phone calls through the family phone line and reported an additional 2,421 contacts with families through health fairs, presentations, trainings and other events.

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.

The first strategy to reducing barriers to medical care and treatment for CYSHCN is to provide payment assistance for specialty care and treatment related to a qualifying condition. CSHCS will continue to enroll 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. This benefit, while not intended to cover all of the care a child needs, helps 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 that families follow their primary and secondary insurance rules. Additionally, if a family's income indicates they may be eligible for Medicaid, they are required to apply for Medicaid.

Children with special needs who qualify for Medicaid and CSHCS will continue to receive care through Medicaid managed care plans, barring a few exceptions. Children who are already enrolled in Medicaid, and are determined medically eligible for CSHCS, will be automatically enrolled in the program. Automatically enrolling families in CSHCS benefits the family by increasing their access to care coordination and case management services.

In addition to assisting families with the cost of specialty care, CSHCS offers an Insurance Premium Payment

Assistance Benefit to eligible families. Families who lack sufficient financial resources to pay for the special needs child's part of the family's private or employer-based insurance premium, can apply for the premium payment assistance to receive financial support in reactivating or maintaining the private coverage.

A second strategy for FY 2019 is to complete a study of the Insurance Premium Payment Assistance Benefit that was initiated in FY 2018. The study, done in conjunction with the University of Michigan's Child Health Evaluation and Research Center and the Commonwealth Fund, seeks to evaluate the numbers and characteristics of children receiving the insurance premium benefit, as well as its cost effectiveness. Specifically, the project seeks to assess the predictors of program cost-effectiveness, describe the key components of the program, perceived program benefits or disadvantages, and its potential for expansion. Once completed, CSHCS will review the study's findings and work to make anyidentified improvements.

A third strategy that will be implemented in FY 2019 relates to health equity. During FY 2018, CSHCS began to consider its capacity to identify health disparities that exist within its service population. During FY 2019, CSHCS will begin an assessment process to identify health disparities and inequalities for children with special health care needs. The assessment will collect data, conduct analyses and report on trends for race and ethnicity. In addition, CSHCS will implement focused studies designed to gather qualitative information related to care needs, accessibility and utilization. Data will be stratified by geography, to help pinpoint regional concerns. The assessment will be reviewed by a group of stakeholders for the purposes of identifying barriers to care and identifying future priorities.

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, like many states, is feeling the impact of health professional shortages. According to the Kaiser Family Foundation, Michigan currently has 361 Primary Care Health Professional Shortage Designations, and is in need of an estimated 320 more practitioners to achieve a population to primary care ratio of 3,500 to 1. However, this shortage is not confined to primary care physicians, but also extends to specialists.

Understanding that the health professional shortages Michigan is experiencing reflects a national trend, CSHCS is working to minimize shortage effects by gaining efficiencies where possible. Knowing that team-based approaches are one way to address shortages and gain efficiencies, CSHCS supports the provision of specialty care through multi-disciplinary specialty clinics, which are designed to wrap services around families. Headed by a medical director and operated under the authority of hospitals/medical universities, these clinics provide coordinated, family-centered care, delivered by a team that includes social workers, nurses, therapists, dieticians and others, as needed. CSHCS enhanced reimbursement for CMDS services helps to support the ancillary members of the team, and helps to offset the time and resources needed to provide an enhanced level of care coordination.

During FY 2019, CSHCS will focus its efforts on improving quality within the specialty care settings it supports. The first strategy seeks to improve the quality and effectiveness of CMDS clinics through the implementation of evidence-based methods. Working with the National Center for Care Coordination Technical Assistance, CSHCS will complete the implementation of its patient experience survey, rolling out a revised version of the pediatric integrated care survey tool. This validated tool will help CSHCS collect outcomes of family-reported experience within integrated care settings as it relates to their child'shealth.

Once implemented, survey data will help inform the implementation of the second strategy, which is to implement the Pediatric Care Coordination Curriculum developed by Boston Children's Hospital. The curriculum consists of four modules that will assist clinics in:

- Building family centered programs,
- Building parent partnerships,
- Integrating care coordination, and
- Addressing health-related social service needs.

CSHCS will work with the National Center to tailor the program and incorporate Michigan specific information so as to make this a meaningful approach. In addition, CSHCS will continue to move forward on the development of standards of care for CMDS clinics started in FY 2017 and continued into FY 2018. These evidence-based and -informed tools will provide a strong framework for ongoing assessment and monitoring activities and will do much to improve the quality of services delivered through Michigan's CMDS clinics.

Objective C: By 2020, increase the availability of health services, particularly in underserved regions, through the utilization of telemedicine and community-based services.

CSHCS is working to increase access to specialty health care services through the support of specialty clinics. In FY 2019, CSHCS will move forward on three strategies related to improving access to care in underserved regions. This objective will be measured by the number of newly established telehealth services for specialty care that serve CSHCS enrollees in rural Michigan.

As described above, CSHCS will continue to support the CMDS clinics which utilized a team-based approach to delivering family-centered, coordinated care. Strategy one offers continuing staff support related to billing resolutions and technical assistance in order to maintain a network of CMDS providers.

In addition to the CMDS clinics, CSHCS also supports Field Clinics, another type of specialty clinics. In the field clinic model, an urban sub-specialist travels to a rural, out-state area and provides sub-specialty exams, evaluations, diagnostics and treatment for medical conditions specific to type of Field Clinic scheduled.

Currently, CSHCS supports nine field clinics in the upper portion of the Lower Peninsula and Upper Peninsula. Field clinic specialists are paid a stipend and are reimbursed for travel expenses. During FY 2016, 203 encounters at 10 field clinics covered the following diagnostic groups:

- Pediatric Cardiology
- Genetics
- Pediatric Hematology/Oncology
- Pediatric Hemophilia
- Neurology
- Neuromuscular

The second strategy builds upon the Field Clinic concept and incorporates telemedicine. During FY 2019, CSHCS will explore how an existing field clinic can be transformed into a telemedicine clinic, where the distal sub-specialist works with the local health care provider to provide medical specialty services. Using lessons learned through the CYE grant, CSHCS will pilot a telemedicine field clinic in Northern Michigan. Specifically, the pilot will seek to develop a new model for specialty care that improves access for children with special needs living in rural areas.

The third strategy relates to a third type of specialty care under the purview of CSHCS—pediatric outpatient intensive feeding program services. During FY 2018, CSHCS promulgated Medicaid policy to address the need for intensive feeding program services in Michigan. These outpatient services, like the CMDS clinics, utilize a team approach that applies medical and behavioral interventions designed to address the child's feeding issues. The services are delivered in a day treatment setting over the course of six weeks and focus on education and skill

development of both children and parents. Children must meet specific requirements to enter the program and be prior authorized to attend.

During FY 2019, CSHCS will enroll organizations, review providers to assure policy compliance and develop site review tools to monitor quality. As a result of the implementation of this policy, three organizations are expected to be added as service providers, thereby expanding options for Michigan's children in need of intensive feeding services to locations that are closer to home.

Cross-Cutting/Systems Building

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

No content was entered for the Cross-Cutting/Systems Building - Application in the State Action Plan Narrative by Domain section.

III.F. Public Input

The Michigan Department of Health and Human Services (MDHHS) engaged an array of stakeholders, including parents and consumers, prior to and during the Title V application process. In 2015, MDHHS completed a statewide five-year needs assessment to identify strategic issues and priority needs to drive creation of the 2016-2020 state action plan as required by 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. As a result, the needs assessment workgroups (which reflected the six original population health domains) included state and local MCH staff, state and local MCH system partners, parent consultants, consumers, and partners with expertise in health equity. Their input and experience directly shaped the issues and priority needs considered and included in Michigan's five-year application.

In 2018, a draft of the Title V FY 2019 application/FY 2017 annual report will be posted on the MDHHS website for public review and comment. Public input will be invited through notification to approximately 50 advisory groups, nonprofit partners, advocacy groups and other state programs. Notice will also be sent to local health departments. Stakeholders (including parents and consumers) who participated in the 2015 needs assessment workgroups will receive direct notification of the posting. Public input will be reviewed and shared with the Title V steering committee for review and consideration prior to the July 2018 submission date. The number and nature of public comments received, and how they were addressed, will be included in the final grant submission.

After the application has been submitted, MDHHS will continue to work with entities representing advocates, advisory bodies, providers and consumers to receive input on the programs, policies, reports and plans included in the Title V application. For example, the Children's Special Health Care Services (CSHCS) Division routinely works with parent consultants through the Family Center for Children and Youth with Special Needs (Family Center) and the CSHCS Advisory Committee (CAC). The Family Center provides information and support to families and input on CSHCS program operations. The CAC is comprised of professionals and family members who are involved in the care for children with special needs. The CAC makes recommendations to the CSHCS Division on policy and promotes awareness to assure that services reflect the voices of individuals with special health care needs and their families.

As another example, families and consumers are represented in strategic planning initiatives for the reduction of infant mortality and fetal alcohol syndrome disorders. They also serve on advisory committees for oral health, Family Planning, Child and Adolescent Health Centers, safe sleep, teen pregnancy prevention local coalitions, Parent Leadership in State Government, and maternal and child home visiting programs. Additionally, to implement the state's Infant Mortality Reduction Plan, MDHHS works with the Infant Mortality Advisory Council which consists of providers from hospitals and local health departments as well as partners from research institutions, professional associations, community organizations, state programs and nonprofit organizations.

III.G. Technical Assistance

In FY 2018 and during completion of the grant application, potential areas of training and/or technical assistance were assessed. These areas remained largely the same as the previous year, as follows:

- Best practices and tools related to Michigan's ongoing needs assessment priorities, specifically performance monitoring for National Performance Measures (NPMs) and Evidence-based or -informed Strategy Measures (ESMs);
- Support of local public health partners in implementing new requirements and priorities as they relate to Title V;
- Sharing of best practices and other peer learning opportunities (e.g., between states or within regions) for NPMs; and
- Ongoing learning opportunities and technical assistance related to identification, refinement, and assessment of ESMs.

A newly identified need may emerge around Michigan's maternal mortality reduction efforts. Some of these identified needs are met by training and professional development opportunities provided by HRSA and AMCHP throughout the year. In particular, Michigan is looking forward to the upcoming release of the "Strengthen the Evidence for MCH Programs" resource, which will expand information related to successful ESMs and best practices. Additionally, any training or technical assistance provided by HRSA or AMCHP—especially in relation to ESMs, NPMs, TVIS, and other Title V priorities or requirements—will be shared with relevant programs and staff in FY 2019.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - Michigan State Plan Title V - Medicaid Excerpt.pdf

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - New National Performance Measure Annual Objectives - FY 2018 Update FINAL.pdf

Supporting Document #02 - Family Consumer Partnership Survey 2017.pdf

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - MDHHS Org Chart 5-7-18 CSHCS and BFHS ONLY.pdf

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Michigan

	FY19 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 19,193,200	
A. Preventive and Primary Care for Children	$ 6,880,900	(35.8%)
B. Children with Special Health Care Needs	$ 6,994,200	(36.4%)
C. Title V Administrative Costs	$ 741,200	(3.9%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 14,616,300	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 46,999,800	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 500,000	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 68,309,200	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 115,809,000	
A. Your State's FY 1989 Maintenance of Effort Amount $ 13,507,900		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 135,002,200	
9. OTHER FEDERAL FUNDS Please refer to the next page to view the list of Other Federal Programs provided by the State on Form 2.		
10. OTHER FEDERAL FUNDS(Subtotal of all funds under item 9)	$ 381,595,500	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 516,597,700	

OTHER FEDERAL FUNDS	FY19 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 2,609,300
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 1,493,200
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 150,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 187,500
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventive Health and Health Services Block Grant	$ 200,000
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State and Local Healthy Homes and Childhood Lead Poisoning Prevention Programs (CLPPPs)	$ 327,400
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State Oral Disease Prevention Program	$ 310,600
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Vaccines For Children/Immunizations	$ 10,715,500
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 123,516,700
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy	$ 483,500
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 7,907,300
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Oral Health	$ 470,800
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 250,000
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	$ 1,360,900
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 7,485,000

OTHER FEDERAL FUNDS	FY19 Application Budgeted
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 224,030,800
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 97,000

	FY17 Annual Report Budgeted		FY17 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 19,025,100		$ 20,986,297	
A. Preventive and Primary Care for Children	$ 5,755,200	(30.3%)	$ 7,092,647	(33.7%)
B. Children with Special Health Care Needs	$ 7,020,800	(36.9%)	$ 7,357,237	(35%)
C. Title V Administrative Costs	$ 599,000	(3.1%)	$ 1,074,780	(5.2%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 13,375,000		$ 15,524,664	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 50,849,000		$ 40,501,426	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0		$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 450,000		$ 562,110	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 68,027,100		$ 63,683,177	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 119,326,100		$ 104,746,713	
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)	$ 138,351,200		$ 125,733,010	
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)	$ 320,292,289		$ 289,596,875	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 472,018,489		$ 415,329,885	

OTHER FEDERAL FUNDS	FY17 Annual Report Budgeted	FY17 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 1,574,727	$ 2,856,294
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 1,635,544	$ 1,563,747
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Birth Defects and Developmental Disabilities	$ 210,000	$ 213,701
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 175,000	$ 179,090
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 191,000	$ 213,346
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State and Local Healthy Homes and Childhood Lead Poisoning Prevention Programs (CLPPPs)	$ 327,353	$ 389,261
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > State Oral Disease Prevention Program	$ 741,121	$ 758,962
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program	$ 7,493,705	$ 7,102,785
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 250,000	$ 252,329
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Title XIX -- Grants to States for Medical Assistance Programs	$ 104,644,000	$ 100,568,325
Department of Health and Human Services (DHHS) > Office of Adolescent Health > Support for Pregnant and Parenting Teens	$ 1,500,000	$ 1,350,295
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 95,374	$ 94,060

OTHER FEDERAL FUNDS	FY17 Annual Report Budgeted	FY17 Annual Report Expended
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Ryan White	$ 1,149,797	$ 1,218,397
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 7,275,000	$ 7,163,563
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 192,289,668	$ 164,320,198
Department of Health and Human Services (DHHS) > Substance Abuse and Mental Health Services Administration > Youth Suicide Prevention	$ 740,000	$ 637,030
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Epilepsy		$ 515,492
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventive Block		$ 200,000

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**1.FEDERAL ALLOCATION**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: The increase in FY 2017 Federal Allocation was due to accounts payable adjustments and contracts not expending their total allocations in the previous fiscal year, resulting in one-time increased funding and one-time expenditures in FY 2017.	
2.	**Field Name:**	**Federal Allocation, A. Preventive and Primary Care for Children:**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: Line 1A was higher than budgeted due to realignment of expenditures in Preventive and Primary Care for Children.	
3.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: The increase in FY 2017 administrative costs resulted from a one-time IT project in CSHCS.	
4.	**Field Name:**	**3.STATE MCH FUNDS**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: Line 3, State MCH Funds, in FY2017 Annual Report Expended was lower than budgeted due to lower than anticipated CSHCS general funds available for Title V state match.	
5.	**Field Name:**	**5. OTHER FUNDS**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**
	Field Note: Line 5, Other Funds, in FY 2017 Annual Report Expended was higher than budgeted due to greater than anticipated revenue from the Children with Special Needs Fund.	

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	FY19 Application Budgeted	FY17 Annual Report Expended
1. Pregnant Women	$ 549,755	$ 577,183
2. Infants < 1 year	$ 1,861,845	$ 1,687,260
3. Children 1 through 21 Years	$ 6,880,900	$ 7,092,647
4. CSHCN	$ 6,994,200	$ 7,357,237
5. All Others	$ 2,165,300	$ 3,197,190
Federal Total of Individuals Served	$ 18,452,000	$ 19,911,517

IB. Non-Federal MCH Block Grant	FY19 Application Budgeted	FY17 Annual Report Expended
1. Pregnant Women	$ 1,274,900	$ 1,328,152
2. Infants < 1 year	$ 70,855,800	$ 66,267,554
3. Children 1 through 21 Years	$ 1,849,500	$ 1,664,887
4. CSHCN	$ 40,215,900	$ 33,546,817
5. All Others	$ 1,612,900	$ 1,939,303
Non-Federal Total of Individuals Served	$ 115,809,000	$ 104,746,713
Federal State MCH Block Grant Partnership Total	$ 134,261,000	$ 124,658,230

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	FY19 Application Budgeted	FY17 Annual Report Expended
1. Direct Services	$ 9,612,600	$ 9,825,071
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 247,600	$ 272,698
B. Preventive and Primary Care Services for Children	$ 2,476,000	$ 2,663,373
C. Services for CSHCN	$ 6,889,000	$ 6,889,000
2. Enabling Services	$ 4,991,800	$ 4,424,351
3. Public Health Services and Systems	$ 4,588,800	$ 6,736,875
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		$ 7,514,780
Physician/Office Services		$ 0
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 0
Dental Care (Does Not Include Orthodontic Services)		$ 380,171
Durable Medical Equipment and Supplies		$ 0
Laboratory Services		$ 0
Other		
Prenatal Care, Special Projects and Lcoal MCH		$ 1,930,120
Direct Services Line 4 Expended Total		$ 9,825,071
Federal Total	$ 19,193,200	$ 20,986,297

IIB. Non-Federal MCH Block Grant	FY19 Application Budgeted	FY17 Annual Report Expended
1. Direct Services	$ 36,079,400	$ 30,171,549
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 217,900	$ 208,087
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 35,861,500	$ 29,963,462
2. Enabling Services	$ 68,323,100	$ 64,596,236
3. Public Health Services and Systems	$ 11,406,500	$ 9,978,927
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		$ 21,003,853
Physician/Office Services		$ 1,570,121
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 4,522,163
Dental Care (Does Not Include Orthodontic Services)		$ 135,261
Durable Medical Equipment and Supplies		$ 2,706,315
Laboratory Services		$ 0
Other		
Medical Care and Treatment		$ 233,836
Direct Services Line 4 Expended Total		$ 30,171,549
Non-Federal Total	$ 115,809,000	$ 104,746,712

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

1.	**Field Name:**	**IIA. Federal MCH Block Grant, 1. A. Preventive and Primary Care Services for all Pregnant Women,Mothers, and Infants up to Age One**
	Fiscal Year:	**2017**
	Column Name:	**Annual Report Expended**

Field Note:
This category may also include women of childbearing age who are non-pregnant and not mothers yet.

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated

State: Michigan

Total Births by Occurrence: 110,473 **Data Source Year: 2017**

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Screen	(B) Aggregate Total Number Presumptive Positive Screens	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	109,735 (99.3%)	3,318	256	256 (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	ß-Ketothiolase deficiency
Trifunctional protein deficiency	Tyrosinemia, type I	Very long-chain acyl-CoA dehydrogenase deficiency	X-linked Adrenoleukodystrophy	

2. Other Newborn Screening Tests

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
Early Hearing Detection & Intervention (EHDI) Program	106,162 (96.1%)	5,133	149	149 (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 six coordinating centers, focused around different groups of NBS disorders (Primary Immune Deficiency, Endocrinology, Hemoglobinopathy, Cystic Fibrosis, Metabolic Disorders, and Lysosomal Storage Disorders). Each center is designated by MDHHS and works with MDHHS, the family, the newborn's primary care provider, and other specialists to triage infants with positive screens and facilitate prompt diagnostic testing, evaluation, and initiation of medical monitoring and/or treatment. Each center reports to MDHHS on the number of children seen, diagnostic work-ups provided, and results of those assessments. Information is crucial for measuring 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.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	**Field Name:**	**Total Births by Occurrence**
	Fiscal Year:	**2017**
	Column Name:	**Total Births by Occurrence Notes**
	Field Note: Based on 2017 births. Includes infants who are marked as deceased on their birth certificate and infants born in Michigan with an out-of-state address.	
2.	**Field Name:**	**Early Hearing Detection & Intervention (EHDI) Program - Receiving At Least One Screen**
	Fiscal Year:	**2017**
	Column Name:	**Other Newborn**
	Field Note: Preliminary data based on 2017 EHDI data. Final data are not available until 2019 as infants move through the follow-up process. 2017 EHDI data includes hospital and out-of-hospital births.	

Data Alerts: None

Form 5a
Count of Individuals Served by Title V

State: Michigan

Annual Report Year 2017

		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	7,762	42.5	0.0	55.9	1.5	0.1
2. Infants < 1 Year of Age	8,580	42.5	0.0	55.9	1.5	0.1
3. Children 1 through 21 Years of Age	368,547	35.6	0.0	60.6	3.8	0.0
3a. Children with Special Health Care Needs	44,164	72.0	3.5	21.0	3.5	0.0
4. Others	107,051	17.9	0.0	75.8	6.2	0.1
Total	491,940					

Form Notes for Form 5a:

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 in Michigan. WIC participants were not included, even though WIC rebates were included as program income on Line 6 of Form 2. Per the Title V guidance, WIC could be "included if Title V funds or staff time are used to promote or enhance services." However, this is not the case.

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2017**

Field Note:
Individuals in the pregnant women category include: Local MCH (Safe Sleep NPM as proxy), lead poisoning prevention, Prenatal Care Outreach (Monroe CHC Safe Sleep), Nurse Family Partnership, Rural Home Visiting, Centering Pregnancy, Perinatal Oral Health, FASD. Population estimates were used for Primary Sources of Insurance Coverage from Birth Certificate Resident Live Births, 2016.

2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2017**

Field Note:
Individuals in the infant category include: Local MCH (Safe Sleep NPM as proxy), lead poisoning prevention, Prenatal Care Outreach (Monroe CHC Safe Sleep), Nurse Family Partnership, Rural Home Visiting, and Centering Parenting infants. Population estimates were used for Primary Sources of Insurance Coverage from Birth Certificate Resident Live Births, 2016.

3.	**Field Name:**	**Children 1 through 21 Years of Age**
	Fiscal Year:	**2017**

Field Note:
The number of children ages 1-21 who received a direct or enabling service include: Local MCH (Direct and Enabling Services for NPM 5, NPM 10, NPM 12, SPM 1, SPM 3, SPM 5 and local performance measures); third grade sealants in oral health; Family Planning adolescents; childhood lead support and education, rural home visiting, Nurse Family Partnership, MI-APP, Taking Pride in Prevention, and FASD. The number recorded here is the number of children 1-21 plus the number of CSHCN (line 3a). Population estimates were used for Primary Sources of Insurance Coverage from American Community Survey, Children 1-21, 2016.

4.	**Field Name:**	**Children with Special Health Care Needs**
	Fiscal Year:	**2017**

Field Note:
Includes CSHCN for medical care and treatment. Medical insurance coverage is reported by the CSHCS program. Michigan serves a much larger CSHCS Medicaid population (72%) than the National Survey of Children's Health - CSHCN, 2016 (42.5%).

5.	**Field Name:**	**Others**
	Fiscal Year:	**2017**

Field Note:
The Other category includes women who are not pregnant or in 60 days postpartum window, but are in the childbearing age bracket. Examples of direct and enabling services reported include: Nurse Family Partnership, Rural Home Visiting, Local MCH (Direct and Enabling Services for childbearing, non-pregnant women in NPM 1, NPM 13, SPM 1, SPM 3, SPM 5), MI-APP, Bereavement Counseling, Safe Sleep in Monroe County, Family Planning, and Centering Parenting mothers. Population estimates were used for Primary Sources of Insurance Coverage from American Community Survey - Adults 22 +, 2016.

Data Alerts: None

Form 5b
Total Percentage of Populations Served by Title V

State: Michigan

Annual Report Year 2017

Populations Served by Title V	Total % Served
1. Pregnant Women	41
2. Infants < 1 Year of Age	100
3. Children 1 through 21 Years of Age	43
3a. Children with Special Health Care Needs	8
4. Others	4

Form Notes for Form 5b:

Form 5b is the total percentage of the population that received both Federal and Non-federal Title V supported programs. It includes all levels of the MCH pyramid. Direct and Enabling service numbers from form 5 a were added to public health services and systems. Denominators were provided by MCHB.

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women**
	Fiscal Year:	**2017**
	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 had Perinatal Care Quality Improvement (PCQI) projects in Regions 2, 3 4, 8 and 10. A population estimate of births in each region was used. Additionally 8 hospitals were awarded funding for promoting breastfeeding. Four hospitals were duplicative of the PCQI hospitals, 2 dropped out. The remaining two hospitals births in the region were added.	
2.	**Field Name:**	**Infants Less Than One Year**
	Fiscal Year:	**2017**
	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 hearing screening was used, which correlates to live occurrences births.	
3.	**Field Name:**	**Children 1 Through 21 Years of Age**
	Fiscal Year:	**2017**
	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. The curriculum is widely used across Michigan. Approximately 86% of Michigan schools implemented the curriculum to disseminate vital health promotion/disease prevention information to school-aged children.	
4.	**Field Name:**	**Children With Special Health Care Needs**
	Fiscal Year:	**2017**
	Field Note: CSHCS is a subset of Children 1-21. Form 5a CSHCS counts and the count of the Family Phone line calls were used for the service with the largest reach for a given population.	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2017**
	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 MCH Public Health Infrastructure and Support, adolescent health services training and a curriculum assessment.	

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: Michigan

Annual Report Year 2017

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	111,860	75,373	20,710	7,678	389	4,439	22	2,542	707
Title V Served	111,860	75,373	20,710	7,678	389	4,439	22	2,542	707
Eligible for Title XIX	47,793	25,848	14,164	4,771	245	1,077	10	1,396	282
2. Total Infants in State	111,435	75,073	20,655	7,638	388	4,427	22	2,529	703
Title V Served	111,435	75,073	20,655	7,638	388	4,427	22	2,529	703
Eligible for Title XIX	47,661	25,766	14,138	4,752	245	1,076	10	1,392	282

Form Notes for Form 6:

SOURCE: 2017 PROVISIONAL LIVE BIRTH FILE,
DIVISION FOR VITAL RECORDS AND HEALTH STATISTICS,
MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES.

Field Level Notes for Form 6:

None

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: Michigan

A. State MCH Toll-Free Telephone Lines	2019 Application Year	2017 Annual Report Year
1. State MCH Toll-Free "Hotline" Telephone Number	(844) 875-9211	(800) 262-4784
2. State MCH Toll-Free "Hotline" Name	2-1-1	800-26-BIRTH
3. Name of Contact Person for State MCH "Hotline"	Tom Page	Cheryl Bernard
4. Contact Person's Telephone Number	(517) 664-9811	(517) 335-9561
5. Number of Calls Received on the State MCH "Hotline"		14,047

B. Other Appropriate Methods	2019 Application Year	2017 Annual Report Year
1. Other Toll-Free "Hotline" Names	Family Phone Line	Family Phone Line
2. Number of Calls on Other Toll-Free "Hotlines"		13,456
3. State Title V Program Website Address		
4. Number of Hits to the State Title V Program Website		
5. State Title V Social Media Websites		
6. Number of Hits to the State Title V Program Social Media Websites		

Form Notes for Form 7:

None

Form 8
State MCH and CSHCN Directors Contact Information

State: Michigan

1. Title V Maternal and Child Health (MCH) Director	
Name	Lynette Biery
Title	Director, Bureau of Family Health Services
Address 1	333 South Grand Avenue
Address 2	
City/State/Zip	Lansing / MI / 48933
Telephone	(517) 284-4028
Extension	
Email	BieryL@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	320 South Walnut 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	320 South Walnut 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 2019

No.	Priority Need
1.	Reduce barriers, improve access, and increase the availability of health services for all populations
2.	Support coordination and linkage across the perinatal to pediatric continuum of care
3.	Invest in prevention and early intervention strategies
4.	Increase family and provider support and education for Children with Special Health Care Needs
5.	Increase access to and utilization of evidence-based oral health practices and services
6.	Foster safer homes, schools, and environments with a focus on prevention
7.	Promote social and emotional well-being through the provision of behavioral health services

Form 9 State Priorities-Needs Assessment Year - Application Year 2016

No.	Priority Need	Priority Need Type (New, Replaced or Continued Priority Need for this five-year reporting period)	Rationale if priority need does not have a corresponding State or National Performance/Outcome Measure
1.	Reduce barriers, improve access, and increase the availability of health services for all populations	Replaced	
2.	Support coordination and linkage across the perinatal to pediatric continuum of care	Replaced	
3.	Invest in prevention and early intervention strategies, such as screening	Replaced	
4.	Increase family and provider support and education for Children with Special Health Care Needs	Replaced	
5.	Increase access to and utilization of evidence-based oral health practices and services	Replaced	
6.	Foster safer homes, schools, and environments with a focus on prevention	Replaced	Michigan will develop two SPMs to address this priority need in FY2016.
7.	Promote social and emotional well-being through the provision of behavioral health services	New	Michigan will develop a SPM to address this priority need in FY2016.

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 10a
National Outcome Measures (NOMs)

State: Michigan

Form Notes for Form 10a NPMs, NOMs, SPMs, SOMs, and ESMs.

For NPM-10, NPM-12, and NPM-13b, the annual objective for year 2017 was based on original NSCH data and therefore is not reflective of the current annual indicator.

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
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%, 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
2015	138.6	4.1	1,154	83,253
2014	145.1	3.6	1,613	111,152
2013	145.4	3.7	1,605	110,385
2012	147.9	3.7	1,628	110,115
2011	138.5	3.6	1,540	111,183
2010	143.3	3.6	1,599	111,606
2009	137.8	3.5	1,577	114,454
2008	126.6	3.3	1,493	117,905

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 2 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2012_2016	19.4	1.9	110	567,582
2011_2015	19.4	1.9	110	568,275
2010_2014	22.7	2.0	129	569,494
2009_2013	24.3	2.1	139	572,413
2008_2012	23.3	2.0	135	580,051
2007_2011	23.1	2.0	137	592,221
2006_2010	22.8	1.9	138	605,696
2005_2009	24.1	2.0	149	618,871

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
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	8.5 %	0.1 %	9,548	112,995
2011	8.4 %	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%, 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
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	9.8 %	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%, 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
2016	24.3 %	0.1 %	27,478	113,276
2015	23.7 %	0.1 %	26,818	113,267
2014	22.9 %	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%, 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
2016/Q2-2017/Q1	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:

□Indicator results were based on a shorter time period than required for reporting

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
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
2015	6.5	0.2	739	113,312
2014	6.5	0.2	739	114,375
2013	7.1	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
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
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
2015	236.5	14.5	268	113,312
2014	248.3	14.8	284	114,375
2013	267.9	15.4	304	113,489
2012	299.8	16.3	339	113,091
2011	264.0	15.2	301	114,008
2010	295.1	16.1	338	114,531
2009	308.6	16.3	362	117,294

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.4 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	100.6	9.4	114	113,312
2014	104.0	9.5	119	114,375
2013	107.5	9.7	122	113,489
2012	78.7	8.4	89	113,091
2011	83.3	8.6	95	114,008
2010	89.1	8.8	102	114,531
2009	102.3	9.3	120	117,294

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.5 - Notes:

None

Data Alerts: None

NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	6.2 %	0.8 %	6,729	107,826
2013	7.1 %	0.8 %	7,783	109,332
2012	6.1 %	0.7 %	6,640	108,444
2011	6.2 %	0.7 %	6,761	109,422
2010	6.8 %	0.8 %	7,511	110,204
2009	7.2 %	0.7 %	8,062	112,665
2008	7.8 %	0.8 %	9,118	116,419
2007	6.8 %	0.7 %	8,160	119,804

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has an unweighted denominator between 30 and 59 or has a confidence interval width that is inestimable or >20% and should be interpreted with caution

NOM 10 - Notes:

None

Data Alerts: None

NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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)

FAD Not Available for this measure.

NOM 12 - Notes:

None

Data Alerts: None

NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)

FAD Not Available for this measure.

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
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
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
2016	35.7	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
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
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
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
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
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
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
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
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
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 or a relative standard error ≥30% and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	14.3 %	0.9 %		
2013	13.0 %	0.9 %		
2011	12.1 %	0.8 %		
2009	11.9 %	0.7 %		
2007	12.4 %	1.0 %		
2005	12.0 %	1.1 %		

Legends:

Indicator has an unweighted denominator <100 and is not reportable

Indicator has a confidence interval width >20% 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
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
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 that is inestimable or >20% and should be interpreted with caution

NOM 21 - Notes:

None

Data Alerts: None

NOM 22.1 - Percent of children, ages 19 through 35 months, who completed the combined 7-vaccine series (4:3:1:3*:3:1:4)

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	70.2 %	3.9 %	114,209	162,645
2015	67.6 %	3.7 %	109,543	162,007
2014	65.0 %	4.4 %	105,178	161,836
2013	70.0 %	3.8 %	114,033	162,940
2012	70.5 %	3.7 %	114,503	162,484
2011	66.2 %	3.9 %	110,115	166,313
2010	65.2 %	3.5 %	111,999	171,698
2009	52.1 %	3.8 %	97,818	187,622

Legends:

□Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

□ Estimates with 95% confidence interval half-widths > 10 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
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 95% confidence interval half-width/estimate > 0.6

□ 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 (Female)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	70.5 %	4.6 %	225,376	319,494
2015	67.6 %	4.2 %	218,735	323,369
2014	58.0 %	4.7 %	189,537	326,932
2013	66.0 %	4.6 %	216,725	328,469
2012	48.1 %	5.0 %	159,306	331,349
2011	55.6 %	5.0 %	186,379	335,319
2010	49.4 %	5.1 %	168,016	340,182
2009	39.0 %	4.0 %	136,932	351,066

Legends:

□Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

□ Estimates with 95% confidence interval half-widths > 10 might not be reliable

Data Source: National Immunization Survey (NIS) - Teen (Male)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	52.5 %	5.1 %	174,972	333,597
2015	52.3 %	4.3 %	176,851	338,464
2014	39.8 %	4.8 %	136,428	342,591
2013	30.0 %	4.1 %	103,355	344,390
2012	13.1 %	3.5 %	45,515	348,546
2011	NR	NR	NR	NR

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 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
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 half-width/estimate > 0.6

□ Estimates with 95% confidence interval half-widths > 10 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
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 half-width/estimate > 0.6

□ Estimates with 95% confidence interval half-widths > 10 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
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	32.0	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
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% and should be interpreted with caution

NOM 24 - Notes:

None

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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 10a
National Performance Measures (NPMs)

State: Michigan

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**
Annual Objective	74.6	77.2
Annual Indicator	69.0	68.2
Numerator	1,141,612	1,123,599
Denominator	1,654,185	1,648,059
Data Source	BRFSS	BRFSS
Data Source Year	2015	2016

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	72.7	74.0	75.2	76.4	77.6	78.7

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
2.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
3.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
4.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
5.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
6.	**Field Name:**	**2023**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	

NPM 3 - Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

FAD for this measure is not available for the State.

State Provided Data		
	2016	2017
Annual Objective	89.4	90.1
Annual Indicator	91.2	89.5
Numerator	1,560	1,521
Denominator	1,711	1,699
Data Source	2015 Michigan Resident Live Birth File	2016 Michigan Resident Live Birth File
Data Source Year	2015	2016
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	91.6	92.4	93.0	93.6	94.2	94.7

Field Level Notes for Form 10a NPMs:

None

NPM 4A - Percent of infants who are ever breastfed

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	79.1	79.7
Annual Indicator	80.8	75.9
Numerator	82,892	86,976
Denominator	102,591	114,556
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	80.5	81.2	81.8	82.4	83.0	83.6

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
2.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
3.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
4.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
5.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
6.	**Field Name:**	**2023**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	

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

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2016	**2017**
Annual Objective	20.6	21.5
Annual Indicator	26.6	22.6
Numerator	25,900	25,415
Denominator	97,537	112,351
Data Source	NIS	NIS
Data Source Year	2013	2014

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	31.1	32.9	34.7	36.5	38.3	40.2

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
2.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
3.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
4.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
5.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	
6.	**Field Name:**	**2023**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated based on currently available data.	

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

Federally Available Data	
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)	
	2017
Annual Objective	
Annual Indicator	81.4
Numerator	86,585
Denominator	106,318
Data Source	PRAMS
Data Source Year	2015

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	87.6	89.0	90.5	91.9	93.3

Field Level Notes for Form 10a NPMs:

None

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

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	74.7
Numerator	77,520
Denominator	103,790
Data Source	PRAMS
Data Source Year	2015
Provisional or Final ?	Final

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	80.8	81.8	82.8	83.8	84.8

Field Level Notes for Form 10a NPMs:

None

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

FAD for this measure is not available for the State.

State Provided Data	
	2017
Annual Objective	
Annual Indicator	74.6
Numerator	78,063
Denominator	104,629
Data Source	PRAMS
Data Source Year	2015
Provisional or Final ?	Final

Annual Objectives					
	2019	**2020**	**2021**	**2022**	**2023**
Annual Objective	84.0	87.4	90.7	94.0	97.4

Field Level Notes for Form 10a 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.

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**
Annual Objective		91.3
Annual Indicator		81.0
Numerator		633,720
Denominator		782,076
Data Source		NSCH
Data Source Year		2016

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						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	82.6	83.5	84.3	85.1	86.0	86.8

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase. The annual objective for the previous year (2017) was based on original NSCH data and therefore is not reflective of the current annual indicator.	
2.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
3.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
4.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
5.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
6.	**Field Name:**	**2023**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care - Children with Special Health Care Needs

Federally Available Data		
Data Source: National Survey of Children's Health (NSCH) - CSHCN		
	2016	**2017**
Annual Objective		44.3
Annual Indicator		16.7
Numerator		32,776
Denominator		196,702
Data Source		NSCH-CSHCN
Data Source Year		2016

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						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	17.0	17.2	17.4	17.6	17.7	17.9

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase. The annual objective for the previous year (2017) was based on original NSCH data and therefore is not reflective of the current annual indicator.	
2.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
3.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
4.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
5.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
6.	**Field Name:**	**2023**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	

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**
Annual Objective	55.1	56.2
Annual Indicator	50.3	53.6
Numerator	54,731	57,883
Denominator	108,763	108,083
Data Source	PRAMS	PRAMS
Data Source Year	2013	2015

Annual Objectives						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	56.4	57.4	58.5	59.6	60.6	61.7

Field Level Notes for Form 10a 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**
Annual Objective		82.4
Annual Indicator		76.1
Numerator		1,584,320
Denominator		2,082,991
Data Source		NSCH
Data Source Year		2016

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						
	2018	**2019**	**2020**	**2021**	**2022**	**2023**
Annual Objective	77.6	78.4	79.2	80.0	80.8	81.6

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2018**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase. The annual objective for the previous year (2017) was based on original NSCH data and therefore is not reflective of the current annual indicator.	
2.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
3.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
4.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
5.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	
6.	**Field Name:**	**2023**
	Column Name:	**Annual Objective**
	Field Note: Annual objectives were recalculated to align with new NSCH. Due to the availability of only a single year of data, annual objectives were calculated based on a 1% relative annual increase.	

Form 10a
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 positive capillary test

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		22.1
Annual Indicator	23.6	25
Numerator	1,208	1,048
Denominator	5,116	4,190
Data Source	MDHHS Data Warehouse	MDHHS Data Warehouse
Data Source Year	2016	2017
Provisional or Final ?	Provisional	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	24.6	27.1	29.6	32.1	34.6	37.1

Field Level Notes for Form 10a 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.

SPM 2 - A) Percent of infants put to sleep alone in their crib, bassinet or pack and play and B) Percent of infants put to sleep without objects in their crib, bassinet or pack and play

Measure Status:	Inactive - SPM 2A and SPM 2B are now included as National Performance Measures.

State Provided Data		
	2016	2017
Annual Objective		75.9
Annual Indicator	77.6	74.7
Numerator	80,756	77,520
Denominator	104,115	103,790
Data Source	PRAMS	PRAMS
Data Source Year	2014	2015
Provisional or Final ?	Final	Final

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Weighted numbers were used to represent general population for SPM 2, part A.
This is a two-part measure. Reporting data for SPM 2, part B is included in the Supporting Documents.

SPM 3 - A) Percent of high school students who report feeling sad or hopeless almost every day for two or more weeks in a row and B) Percent of women enrolled in MIHP who are screened for maternal depression

Measure Status:	Inactive - This measure will be retired based on information from the ongoing needs assessment.

State Provided Data		
	2016	2017
Annual Objective		31.1
Annual Indicator	31.7	37.3
Numerator	135,280	159,526
Denominator	427,166	427,216
Data Source	YRBS	YRBS
Data Source Year	2015	2017
Provisional or Final ?	Final	Final

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
The numerator and denominator are population-weighted estimates.

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
Annual Objective		89.9
Annual Indicator	88.1	89.1
Numerator	14,253,020	20,556,206
Denominator	16,176,800	23,074,740
Data Source	CAHPS	CAHPS
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	90.9	91.9	92.9	93.9	94.9	95.9

Field Level Notes for Form 10a 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).

SPM 5 - 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
Annual Objective		76
Annual Indicator	74.7	75
Numerator	125,343	125,853
Denominator	167,778	167,842
Data Source	Michigan Care Improvement Registry	Michigan Care Improvement Registry
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	77.0	78.0	79.0	80.0	80.0	80.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Completion rate will be measured at the end of the year.

SPM 6 - Percent of adolescents 13 to 18 years of age who have received a completed series Human Papilloma Virus vaccine

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	32.0	34.0	36.0	40.0	50.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**

Field Note:
This SPM was originally part B of a two-part Immunization SPM. In 2018 it was established as its own separate SPM in the Adolescent Health population domain.

Form 10a
Evidence-Based or –Informed Strategy Measures (ESMs)

State: Michigan

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
Annual Objective		61.3
Annual Indicator	60.3	64.3
Numerator	846,111	914,885
Denominator	1,404,213	1,423,068
Data Source	Michigan Behavioral Risk Factor Surveillance Syste	Michigan Behavioral Risk Factor Surveillance Syste
Data Source Year	2015	2016
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	62.3	63.3	64.3	65.3	66.3	67.3

Field Level Notes for Form 10a ESMs:

None

ESM 3.1 - Number of CenteringPregnancy sites in Michigan

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		12
Annual Indicator	14	12
Numerator		
Denominator		
Data Source	Centering Health Institute	Centering Health Institute
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	12.0	12.0	12.0	12.0	16.0	16.0

Field Level Notes for Form 10a ESMs:

None

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

Measure Status:	Active

State Provided Data		
	2016	2017
Annual Objective		17
Annual Indicator	14.3	14.5
Numerator	12	12
Denominator	84	83
Data Source	Baby-Friendly USA, Inc.	Baby-Friendly USA, Inc.
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	20.0	23.0	26.0	29.0	31.0	33.0

Field Level Notes for Form 10a 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.

ESM 5.1 - Number of birthing hospitals trained on infant safe sleep

Measure Status:	Active

Annual Objective	8.0	16.0	24.0	32.0	40.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**
	Field Note:	Annual objectives based on Infant Safe Sleep program staff providing training to eight birthing hospitals per year.

ESM 5.2 - Number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	85.0	90.0	95.0	105.0	110.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**

Field Note:
Annual objectives based on current number of 110 MIHP agencies in 2018. This number could fluctuate (increase or decrease) with future changes in the total number of MIHP agencies.

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
Annual Objective		93
Annual Indicator	87.5	93.3
Numerator	7	28
Denominator	8	30
Data Source	MDHHS Participant Assessment Tool	Evaluation tool / SurveyMonkey
Data Source Year	2016	2017
Provisional or Final ?	Final	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	95.0	95.0	98.0	98.0	98.0	98.0

Field Level Notes for Form 10a 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).	

ESM 12.2 - 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
Annual Objective	40
Annual Indicator	52.5
Numerator	1,705
Denominator	3,246
Data Source	CSHCS database, Medicaid Claims, UM Provider Datab
Data Source Year	2017
Provisional or Final ?	Provisional

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	43.0	46.0	49.0	52.0	55.0	58.0

Field Level Notes for Form 10a 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.

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

Measure Status:	Active

Annual Objectives					
	2019	2020	2021	2022	2023
Annual Objective	390.0	410.0	430.0	450.0	470.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2019**
	Column Name:	**Annual Objective**

Field Note:
This ESM was newly established in 2018 to align with NPM 13.1.

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
Annual Objective		5,927
Annual Indicator	8,039	6,677
Numerator		
Denominator		
Data Source	SEAL Michigan Annual All Grantee Report	SEAL MI 2017 All Grantees Data Report
Data Source Year	2016	2017
Provisional or Final ?	Provisional	Final

Annual Objectives						
	2018	2019	2020	2021	2022	2023
Annual Objective	6,127.0	6,327.0	6,527.0	6,727.0	6,927.0	6,927.0

Field Level Notes for Form 10a 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.	

Form 10b
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 positive capillary test
Population Domain(s) – Child Health

Measure Status:	Active
Goal:	To reduce the number of young children in Michigan with an unconfirmed elevated blood lead level
Definition:	**Numerator:** Number of children 0-71 months of age who received a venous blood lead test within 30 days of an initial capillary or unknown test result of greater than or equal to 5 µg/dL **Denominator:** Number of children 0-71 months of age with an initial capillary or unknown test result of greater than or equal to 5 µg/dL **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	EH-8: Reduce blood levels in children
Data Sources and Data Issues:	These data are provided by the Michigan Department of Health and Human Services (MDHHS) Childhood Lead Poisoning Prevention Program (CLPPP). Some blood lead levels are reported to CLPPP as decimal values, but currently all are recorded in the data warehouse as integers (decimals are rounded up at ≥0.5).
Significance:	Exposure to lead, which can enter the body through ingestion or inhalation, can result in negative health effects. Children less than six are vulnerable to the effects of lead poisoning, especially at younger ages when they are likely to put contaminated hands and items (such as toys) into their mouths. Exposure to high levels of lead can result in brain damage and even death in extreme cases. Low levels of lead in the body have been shown to affect IQ, the ability to pay attention, and academic achievement. Capillary blood lead tests are considered to be screening tests, and are prone to false positives. It is important to obtain a confirmatory venous test before interventions areinitiated.

SPM 2 - A) Percent of infants put to sleep alone in their crib, bassinet or pack and play and B) Percent of infants put to sleep without objects in their crib, bassinet or pack and play
Population Domain(s) – Perinatal/Infant Health

Measure Status:	Inactive - SPM 2A and SPM 2B are now included as National Performance Measures.
Goal:	To better understand parental behavior around a key behavior associated with infant safe sleep
Definition:	**Numerator:** Weighted number of women with a recent live birth who report that their infant usually sleeps in a crib/portable crib and does not usually sleep with the mother or another person **Denominator:** Weighted number of women with a recent live birth who responded to question **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	Related to MICH – 1.9: Reduce the rate of infant deaths from sudden unexpected infant deaths (includes SIDS, Unknown Cause, Accidental Suffocation, and Strangulation in Bed)
Data Sources and Data Issues:	Pregnancy Risk Assessment Monitoring System (PRAMS) will be used. Current data are based on the phase 7 questionnaire. In subsequent years, the phase 8 questionnaire (implemented in 2016) will capture the percent of infants who always slept alone in his or her own crib or bed in the past 2 weeks.
Significance:	This measure will assist the program in better understanding parental behavior related to infant safe sleep. Sleeping infant alone in a crib, bassinet or pack and play is a key component of infant sleep safety according to the American Academy of Pediatrics (AAP) guidelines. An infant should never sleep in an adult bed, either alone or with others, or on any furniture such as a couch, armchair, bean bag, etc. The AAP also advises against the use of swings, car seats, bouncy chairs or other sitting devices for routine sleep. The risk of sudden death due to suffocation, strangulation, entrapment or overlay increases greatly when an infant sleeps in any of these unapproved settings. The program currently has several efforts underway to educate parents about the need for infant to sleep alone in his/her own sleep space. Establishing this SPM will help to track progress made on this behavior. Examining parental behaviors individually will assist in pinpointing where to target interventions. Additionally, knowledge of parental behavior will help the program develop more effective programming, media and messaging. This is a two-part measure, which includes B) Percent of infants put to sleep without objects in their crib, bassinet or pack and play. The additional SPM detail sheet and targets for measure B are included in the Supporting Documents.

SPM 3 - A) Percent of high school students who report feeling sad or hopeless almost every day for two or more weeks in a row and B) Percent of women enrolled in MIHP who are screened for maternal depression
Population Domain(s) – Adolescent Health

Measure Status:	Inactive - This measure will be retired based on information from the ongoing needs assessment.
Goal:	To decrease the prevalence of depressive symptoms in the adolescent population
Definition:	**Numerator:** Weighted number of students in grades 9-12 who reported feeling so sad or hopeless almost every day for 2 or more weeks in a row that they stopped doing some usual activities during the past 12 months **Denominator:** Weighted number of students in grades 9-12 who responded to question **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	Related to MHDM-4.1: Reduce proportion of adolescents aged 12-17 years who experience a major depressive episode (MDE)
Data Sources and Data Issues:	Michigan Youth Risk Behavior Survey (YRBS). The survey is conducted biennially.
Significance:	Mental health is essential to health, well-being, relationships, and the ability to live a full and productive life. Adolescents with untreated mental health disorders are at higher risk for unhealthy and unsafe behaviors, including alcohol or drug abuse, violent or self-injuring behavior, and suicide. In 2014, suicide was the second leading cause of death among 15-24 year-olds in Michigan, with 17.6 deaths per 100,000 residents. Additionally, depression has been shown to increase the risk and progression of certain types of chronic disease, including diabetes and heart disease. Note: This is a two-part measure. The full measure for A is A) Percent of high school students who report feeling sad or hopeless almost every day for two or more weeks in a row, to the extent they stopped doing usual activities during the prior 12 months. The second measure focuses on the maternal aspect of the life course: B) Percent of women enrolled in MIHP who are screened for maternal depression. The additional SPM detail sheet and targets for measure B are included in the Supporting Documents.

SPM 4 - Percent of children with special health care needs enrolled in CSHCS that receive timely medical care and treatment without difficulty
Population Domain(s) – Children with Special Health Care Needs

Measure Status:	Active
Goal:	To reduce the proportion of CYSHCN who are unable to obtain, or are delayed in obtaining, necessary medical care.
Definition:	**Numerator:** The combined score of respondents who reported they usually or always got an appointment for their child to see a specialist as soon as needed and it was easy to get the care, tests, or treatment their child needed in the past 6 months **Denominator:** Number of questions contributing to the numerator **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	AHS-6: Access to Health Services: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines.
Data Sources and Data Issues:	Consumer Assessment of Healthcare Providers and Systems (CAHPS) – Children with chronic conditions custom survey. Challenges with the data include the following: the survey is conducted bi-annually; limited number of respondents when controlled for certain demographic factors.
Significance:	This measure is significant because it provides insight into parents'/caretakers' assessment of their ability to get needed care for their child with special needs. The numerator for the measure is determined by taking the average score from two questions of the CAHPS survey: "In the last 6 months, how often did you get an appointment for your child to see a specialist as soon as you needed?" and "In the last 6 months, how often was it easy to get the care, tests, or treatment your child needed?" Questions are scored by calculating the percentage of respondents that answer "Usually" or "Always."

SPM 5 - Percent of 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 to 80%.
Definition:	**Numerator:** Number of 19-36 month old children who have a completed 4313314 series. **Denominator:** Population of 19-36 month old children **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	80% of children aged 19 to 35 months who receive the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella and pneumococcal conjugate vaccine (PCV).
Data Sources and Data Issues:	Data will be obtained from the Michigan Care Improvement Registry (MCIR). Since 1998, Michigan has operated the MCIR to collect all immunizations administered to individuals less than 20 years of age and born after December 31, 1993. MCIR has become a robust immunization tool used by immunization providers to assure that all children are vaccinated according to the ACIP schedules. Tracking immunizations in the MCIR help immunization providers forecast for needed doses of vaccine and at the same time prevent over-vaccination of individuals due to poor record-keeping or moving from one provider to another.
Significance:	Children die or are hospitalized every year from vaccine preventable diseases. These are avoidable outcomes if we can assure that all children have received all recommended vaccines based on the schedule recommended by the ACIP. Note: This was formerly a two-part measure. As of 2018, the second part of this measure (Percent of adolescents age 13-18 who have received a completed HPV vaccine series) is included in a separate SPM.

SPM 6 - 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 HPV coverage rate by 30% by the year 2020.
Definition:	**Numerator:** Number of 13 to 18 year old adolescents in the MCIR who have a completed the HPV 3 dose series **Denominator:** Population of 13 to 18 year old adolescents in MCIR **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	80% of adolescents 13-15 years of age to receive 3 doses of HPV vaccine
Data Sources and Data Issues:	Data will be obtained from the Michigan Care Improvement Registry (MCIR). MCIR is a population-based registry. Since 1998, Michigan has operated the MCIR to collect all immunizations administered to individuals less than 20 years of age and born after December 31, 1993. MCIR has become a robust immunization tool used by immunization providers to assure that all children are vaccinated according to the ACIP schedules. Tracking immunizations in the MCIR helps immunization providers forecast for needed doses of vaccine and simultaneously prevent over-vaccination of individuals due to poor record-keeping or moving from one provider to another.
Significance:	HPV is a safe and effective vaccine. It is estimated that 79 million Americans are currently infected with HPV. Every year in the United States, 27,000 people are diagnosed with cancer caused by HPV in both females and males. In 2011, over 11,000 newly diagnosed cases of cervical cancer in women and 4,000 attributable deaths occurred. Routine vaccination will prevent over 90% of cases of cervical cancer. Data from other countries have shown that obtaining at least a 50% coverage level has decreased the prevalence of HPV by at least 68%.

Form 10b
State Outcome Measure (SOM) Detail Sheets

State: Michigan

No State Outcome Measures were created by the State.

Form 10c
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Michigan

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
NPM 1 – Percent of women, ages 18 through 44, with a preventive medical visit in the past year

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Increase the number of women 18-44 who have contraceptive and other reproductive health needs identified; increase the number of intended pregnancies; and ultimately lead to a reduction in adverse pregnancy-related outcomes</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Numerator:</td><td>Number of female respondents aged 18-44 who indicated ‘Yes’ to having ever discussed pregnancy planning or prevention during a visit with a doctor, nurse, or other health professional</td></tr>
<tr><td>Denominator:</td><td>Total number of female respondents aged 18-44 who indicated ‘Yes,’ or ‘No'</td></tr>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Data source will be the Michigan Behavioral Risk Factor Survey (BRFS). The reproductive life planning variable that will be used to quantify the identified strategy measure was a state-added question to the Michigan BRFS starting in 2015. The Centers for Disease Control and Prevention is currently in the process of weighting Michigan’s 2015 BRFS data. The final weighted data file will not be available until August 2016. Once available, the proportion of female respondents aged 18-44 who indicated ‘Yes’ to having ever discussed pregnancy planning or prevention during a visit with a doctor, nurse, or other health professional will be used as a baseline and annual targets will be developed for subsequent years. NOTE: Until the BRFS variable and baseline data are available, PRAMS data were used as a proxy measure to set annual objectives. Once available, BRFS baseline data will be used to revise the proxy annual objectives.</td></tr>
<tr><td>Significance:</td><td>Reproductive life planning provides an opportunity for providers to assess patients’ personal goals about pregnancy planning or prevention, opening the door for providers to educate patients on how their reproductive life plan impacts their contraceptive and other reproductive health decision-making, and actively involving patients in developing personal strategies to enhance their reproductive health and wellness (e.g., selecting a contraceptive method that fits well with their life circumstances). Reproductive life planning has the potential to reduce unintended pregnancies, increase the use of highly effective contraception, increase the number of adequately spaced births, and foster healthy pregnancy-related outcomes for mom and baby. The Centers for Disease Control and Prevention and the Office of Population Affairs recognize reproductive life planning as a component of quality family planning services, a national standard of care.</td></tr>
</table>

ESM 3.1 - Number of CenteringPregnancy sites in Michigan
NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Measure Status:	Active
Goal:	Support and maintain the existing CenteringPregnancy sites in Michigan
Definition:	**Numerator:** N/A – This is a count measure **Denominator:** N/A – This is a count measure **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	Centering Healthcare Institute https://centeringhealthcare.secure.force.com/WebPortal/ListOfCenteringSites?stateName=MI
Significance:	The CenteringPregnancy group prenatal care model has been proven effective in reducing premature births and eliminating racial disparities. Funding for new CenteringPregnancy sites is not secured beyond FY2017; therefore, the goal of this ESM currently focuses on maintenance and support of existing sites. Maintaining and helping to strengthen the current sites in Michigan will assist in improvements in the NPM and associated NOMs.

ESM 4.1 - Percent of Baby-Friendly designated birthing hospitals in Michigan
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	By increasing the number of Michigan birthing hospitals with Baby-Friendly designation, the proportion of live births that occur in Michigan birthing hospitals that provide recommended care for lactating mothers and their babies will increase
Definition:	**Numerator:** Number of Michigan birthing hospitals with Baby-Friendly designation **Denominator:** Number of Michigan birthing hospitals **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	Baby-Friendly USA, Inc. (BFUSA)
Significance:	Baby-Friendly designated birthing hospitals and centers 1) promote breastfeeding as the best method of infant feeding; 2) implement evidence-based practices to support breastfeeding and lactation; 3) facilitate informed health care decision-making for mothers and families; 4) ensure health care delivery that is sensitive to cultural and social diversity, 5) protect mothers and families from false or misleading product promotion and advertising, and 6) educate parents on safe and appropriate methods for formula mixing, handling, storage, and feeding when a mother has chosen not to breastfeed or has chosen to supplement. The Baby-Friendly Hospital Initiative is a global program launched by the World Health Organization and the United Nations Children's Fund in 1991 to encourage and recognize hospitals and birthing centers that provide the best level of care for infant feeding and mother/baby bonding. Baby-Friendly designation is built on the implementation of Ten Steps to Successful Breastfeeding and the International Code of Marketing of Breast-Milk Substitutes, which empowers birthing facilities to examine maternity care policies and procedures, requires training and skill building for all levels of staff, and involves the development of quality assurance mechanisms within all aspects of maternity care operations. Baby-Friendly designated birthing hospitals and centers support healthy outcomes for both baby and mom, and can help to reduce breastfeeding disparities, especially within communities of color and low socioeconomic status communities.

ESM 5.1 - Number of birthing hospitals trained on infant safe sleep
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Increasing the number of birthing hospitals trained on infant safe sleep will help ensure parents receive safe sleep messaging and that infant safe sleep is modeled by hospital staff, thereby reducing the number of sudden unexpected infant deaths.
Definition:	**Numerator:** N/A - this is a count **Denominator:** N/A - this is a count **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	Data Source will be the Infant Safe Sleep Program. The Infant Safe Sleep Program will track all trainings provided to birthing hospitals.
Significance:	When health care providers, including nurses, are educated on infant safe sleep, families are more likely to follow recommended infant safe sleep practices. One study showed that those who are educated on safe sleep by their health care provider were more likely to intend to sleep safely and follow-through with that intention (Factors Associated with Choice of Infant Sleep Position, http://pediatrics.aappublications.org/content/140/3/e20170596). Nursing education and role modeling increases parental adherence to infant safe sleep practices (TodaysBaby Quality Improvement: Safe Sleep Teaching and Role Modeling in 8 US Maternity Units, http://pediatrics.aappublications.org/content/early/2017/10/11/peds.2017-1816).

ESM 5.2 - Number of Maternal Infant Health Program (MIHP) agencies that have staff trained to use motivational interviewing with safe sleep
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

Measure Status:	Active
Goal:	Improvements in how home visitors talk to families about infant safe sleep will lead to improvements in parent behavior, with the ultimate goal to reduce the number of sudden unexpected infant deaths.
Definition:	**Numerator:** N/A - this is a count **Denominator:** N/A - this is a count **Unit Type:** Count **Unit Number:** 1,000
Data Sources and Data Issues:	Maternal Infant Health Program (MIHP). MIHP agencies will provide data after staff have completed the three-part motivational interviewing and safe sleep webinar series.
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 that families will follow the safe sleep guidelines. MIHP agencies serve approximately 20,000 pregnant moms on Medicaid annually. Targeting MIHP providers will allow the most high-risk mothers and families to be reached.

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
NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Measure Status:	Active
Goal:	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.
Definition:	**Numerator:** 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. **Denominator:** Number of providers who complete both the Motivational Interviewing web course and professional development training **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	MDHHS (participant assessment tool)
Significance:	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.

ESM 12.2 - Percent of CSHCS clients age 18 to 21 years in selected diagnosis groups that have transferred care from a pediatric to an adult provider
NPM 12 – Percent of adolescents with and without special health care needs, ages 12 through 17, who received services necessary to make transitions to adult health care

Measure Status:	Active
Goal:	To monitor and increase the number of young adults that appropriately transfer care from a pediatric to an adult health care provider.
Definition:	**Numerator:** The number of CSHCS enrollees, aged 18 to 21, that have transferred care from a pediatric to an adult provider. **Denominator:** The total number of CSHCS enrollees, aged 18 to 21, that have received care from a pediatric provider. **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	This ESM combines three separate data sources: 1) the CSHCS database, 2) the CHAMPS (Medicaid Claims) database, and 3) a University of Michigan provider database. These three databases provide information on CSHCS clients, and the providers they see.
Significance:	This measure is significant as it allows us to evaluate the percentage of adolescents and young adults with special needs that are transferring care from a pediatric to an adult provider. By analyzing the providers these young adults are seeing (CSHCS authorized providers and Medicaid Claims), we can determine if new providers have been identified, and if the initial visit with the adult provider was completed.

ESM 13.1.1 - Number of medical and dental professionals who receive perinatal oral health education through MDHHS
NPM 13.1 – Percent of women who had a preventive dental visit during pregnancy

Measure Status:	Active
ESM Subgroup(s):	Pregnant Women
Goal:	Increase provider knowledge of perinatal oral health as well as provider comfort in discussing the importance of oral health with patients.
Definition:	**Numerator:** N/A - This is a count **Denominator:** N/A - This is a count **Unit Type:** Count **Unit Number:** 1,000
Data Sources and Data Issues:	The data source for this measure will be a tracking database developed by the MDHHS oral health program. This database includes a monthly count of the number and types of providers trained in perinatal oral health as well as the location and mechanism of education.
Significance:	Studies indicate that the medical community may not be prepared to discuss the importance of oral health with patients, specifically during pregnancy. Furthermore, the dental community may be misinformed about practices and protocol surrounding dental treatment during the perinatal period. By educating providers, patients will in turn be better informed of the significance of perinatal oral health and will be more likely to seek dental care during the perinatal period.

ESM 13.2.1 - Number of students who have received a preventive dental screening through the SEAL! Michigan program
NPM 13.2 – Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

Measure Status:	Active
Goal:	Increase the number of students who have received a preventive dental screening within a school based dental program
Definition:	**Numerator:** N/A - This is a count measure **Denominator:** N/A - This is a count measure **Unit Type:** Count **Unit Number:** 10,000
Data Sources and Data Issues:	The SEAL! Michigan annual all grantee report will be used for the data source. Annual data are gathered each October at the end of the fiscal year and reports are developed by the following August. This timeframe could cause the annual indicator to be delayed by one year. In addition, the Sealant coordinator position and epidemiologist position are funded under the CDC cooperative agreement.
Significance:	A school-based dental program is an ideal environment to prevent dental decay across the population. This goal helps meet the Healthy People 2020 indicator for oral health, with the objective to increase the amount of dental screenings that are completed in children ages 1 to 17.

Form 11
Other State Data

State: Michigan

The Form 11 data are available for review via the link below.

Form 11 Data