Maternal and Child Health Services Title V Block Grant

Maryland

FY 2022 Application/ FY 2020 Annual Report

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I. General Requirements

I.A. Letter of Transmittal

Larry Hogan, Governor · Boyd K. Rutherford, Lt. Governor · Dennis R. Schrader, Secretary

September 1, 2021

Maternal and Child Health Bureau
Health Resources and Services Administration
5600 Fishers Lane, 18th Floor
Rockville, MD 20857

To Whom It May Concern:

As the Director for the Maternal and Child Health Bureau at the Maryland Department of Health, I hereby submit this application letter for the Title V Maternal and Child Health Block Grant to States Program funding for Federal Fiscal Year (FFY) 2021. The online application has been completed in accordance with the published guidance (OMB 0915-0172) for this year's application and annual report.

Should you have any questions or need additional information, please contact me via phone at 443-571-3424 or by e-mail at shelly.choo@maryland.gov.

Thank you for your consideration and review of the Maryland Title V Maternal and Child Health Block Grant Application for FFY 2022 and Annual Report for FFY 2020.

Sincerely,

Shelly Choo, MD, MPH
Director
Maternal and Child Health Bureau
Maryland Department of Health

cc: Donna Gugel, MHS
Courtney McFadden, MPH
Jed Miller, MD, MPH

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I.B. Face Sheet

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

I.C. Assurances and Certifications

The State certifies assurances and certifications, as specified in Appendix F of the 2021 Title V Application/Annual Report Guidance, are maintained on file in the States' MCH program central office, and will be able to provide them at HRSA's request.

I.D. Table of Contents

This report follows the outline of the Table of Contents provided in the *"Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms,"* OMB NO: 0915-0172; Expires: January 31, 2024.

II. Logic Model

Please refer to figure 4 in the "Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms," OMB No: 0915-0172; Expires: January31, 2024.

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

Maternal and Child Health in Maryland: Maryland Department of Health is committed to ensuring lifelong health and wellness for all Marylanders. This vision can be achieved through disease prevention, access to care, quality management, and community engagement. Maryland has a history of robust funding for MCH programs. In SFY 2020, Title V provided direct, enabling, and public health systems services to 269,233 pregnant people, infants, children, including children with special health care needs, and adolescents.

The Role of Title V: The mission of Maryland Title V is to protect, promote, and improve the health and well-being of women, infants, children, and adolescents, including those with special health care needs. Maryland Title V strengthens the Maternal and Child Health (MCH) infrastructure within the state to ensure the availability, accessibility, and quality of primary and specialty care services for women, infants, children, including those with special health care needs, and adolescents.

As Maryland's Title V agency, the Maryland Department of Health's Maternal and Child Health Bureau (MCHB) provides the leadership infrastructure to implement strategies focused on improving the health and well-being of MCH populations across the state. MCHB staff works across other Bureaus and Offices within the Department and collaborate with other state agencies to fulfill Title V's mission. Through Title V, MCHB addresses ongoing and emerging health care priorities across the five MCH population domains: women/maternal health, perinatal health, child health, children with special health care needs, and adolescent health. During Covid-19, Title V responded to the pandemic by conducting surveillance and outreach activities, permitting flexibility with partners in funding, developing guidance for programs, rapidly providing resource information to partners, and addressing the emergent needs of families.

Maryland Title V funds support direct, enabling, and public health systems services at the state health department, all twenty four of the state's local health departments, higher educational institutions, community based organizations, and health care systems. Partnerships are key to the success of Title V to expand reach to the MCH population and address their needs. This annual report/application provides an overview of Maryland Title V activities and accomplishments across the five domains, as well as continued progress towards the selected NPMs and SPMs.

Program Framework: The three guiding frameworks for Maryland Title V are the Life Course Model, Socio-Ecological Framework, and the Health Equity Framework. The life course model recognizes that structurally patterned exposures during critical and sensitive periods of the life course results in shifts in health trajectories that may endure despite later interventions.[1] The Socio-Ecological Model considers the impact of and interplay between individual factors, relationships, community factors and societal factors such as policies on health and health outcomes. The Health Equity Framework brings together the Life Course and Socio-Ecological Model to look at class, race/ethnicity, gender, sexual orientation, and immigration status and recognizes how institutional and structural inequities can create unequal living conditions. The unequal living conditions can then shape the health behaviors and health outcomes.

Needs Assessment and State Action Plan: Title V completed an updated Needs Assessment and State Action plan in SFY 2020. Through a ten month process that included both primary and secondary data collection and analysis, nine National Performance Measures were identified. Nine NPMS were used and during the past year, Title V has also identified the need for State Performance Measures to align with statewide health improvement

plans. Four SPMS were developed.

Women/Maternal Health: Maryland has identified as priority needs in Women/Maternal Health “ensuring all birthing people are in optimal health before, during, after birth, and “addressing the racial disparities in Severe Maternal Morbidity rates among Black NH and White NH.” To this end, the National Performance Measures selected include NPM 13.1 Percent of women who have a preventive dental visit during pregnancy, and NPM 14.1 Percent of women who smoke during pregnancy. There are two State Performance Measures: SPM 1: Overdose Mortality Rate for Women, ages 15-49 in Maryland per 100,000 population and SPM 2: Excess Rate of Black Non-Hispanic Severe Maternal Morbidity Rate to White Non-Hispanic Severe Maternal Morbidity rate. Both SPMs align with Maryland’s Statewide Integrated Health Improvement Strategy (SIHIS) that focuses on maternal and child health and decreasing overdose fatalities.

SPM 1: Number of Overdose Mortalities for Women, ages 15-49 in Maryland per 100,000 population: Title V has added a State Performance Measure related to Overdose Mortality Rate for women, ages 15-49 to reflect the urgent need to address the increasing number of overdose deaths in the state and align with the Statewide Integrated Health Improvement Strategy (SIHIS). SIHIS is designed to engage State agencies and private sector partners to collaborate and invest in improving health, addressing disparities, and reducing overall health care costs. The strategy has identified opioid overdose fatalities as a population health priority as well as maternal health. In Maryland, overdose deaths are the leading cause of maternal mortality. Strategies to prevent overdose fatalities include facilitating linkages to substance use disorder treatment with the electronic prenatal risk Assessment with State Medicaid and Centers for Disease Control and Prevention Overdose Data to Action partners, updating the postpartum infant maternal referral form, developing a linkage to care toolkit for providers of birthing people, and understanding opioid use through PRAMS surveillance. In addition, Maryland is a recipient of the Centers for Medicare and Medicaid Innovation Maternal Opioid Misuse Model to partner with Managed Care Organizations for robust case management for treatment and addressing social needs.

SPM 2: Excess Rate of Black Non-Hispanic Severe Maternal Morbidity Rate to White Non-Hispanic Severe Maternal Morbidity Rate: In order to address disparities, Title V is aligning with the Statewide Integrated Health Improvement Strategy goals to reduce the gaps in Severe Maternal Morbidity rate. Title V supports activities and efforts with federal and matching funds to improve maternal health and decrease disparities through Perinatal Support Program, Perinatal Quality Collaborative, Maternal Mortality Review Program, home visiting and care coordination through the local health departments, and collaboration with the State Maternal Health Innovation Program.

NPM 13.1: Percent of women who have a preventive dental visit during pregnancy: Title V continues to work with the Office of Oral Health (OOH) to implement prenatal provider training begun as part of the HRSA funded Perinatal and Infant Oral Health Quality Improvement (PIOHQI) grant. The three part outreach initiative includes promotion of Smiles for Life: A National Oral Health Curriculum, dissemination of “Oral Health Care During Pregnancy: Practice Guidance for Maryland’s prenatal and dental Providers,” and a health literacy/social marketing campaign.

NPM 14.1: Percent of women who smoke during pregnancy: Title V funds programs at the local health department who provide services to prenatal/postpartum women through home visiting, home birth certification, and care coordination, routinely screen women for tobacco use and offer referrals to the state’s QuitLine. The local health departments report on a quarterly basis the number of women referred. Additionally, in partnership with the Center for Tobacco Control and Prevention, Title V is able to track the total number of pregnant women who are referred by all providers throughout the state. The Maryland Family Planning Program has also worked to implement

SBIRT (Screening, Brief Intervention, Referral to Treatment) into 62 clinic sites.

<u>Perinatal/Infant Health</u>: Maryland has identified the following priority needs in Perinatal/Infant Health as "ensuring that all babies are born healthy and prosper in their first year." The National Performance Measures selected for this population domain include NPM 3: Percent of VLBW and LBW infants delivered at appropriate level hospitals; NPM 4: Percent of infants ever breastfed; and NPM 5: Percent of infants placed on their back to sleep.

NPM 3: Percent of VLBW infants born at appropriate level hospitals:
Title V supports several initiatives that focus on improving perinatal/infant health including the Maryland Perinatal System Standards that provides standards for all Maryland birthing hospitals. Compliance to these standards is assessed by the Maryland Institute for Emergency Medical Services Systems (MIEMSS) and the Morbidity, Mortality, Quality, Review Committee. Other initiatives include the Maryland Perinatal Support Program, and the Maryland Perinatal Quality Collaborative. Each of these initiatives supports providers throughout the state to ensure that high risk pregnancies are treated and delivered at appropriate level hospitals.

NPM 4: Percent of infants ever breastfed: Recognizing the importance of breastfeeding for optimal health in childhood and across the life course, Title V supports activities that promote breastfeeding. Local health departments provide breastfeeding information/education through home visiting and care coordination programs. Title V also collaborates with the Maryland WIC program on the Breastfeeding Policy Committee that provides support to hospitals across the state to become certified "Breastfeeding Friendly," through maternity staff training modules, and physician webinars.

NPM 5: Percent of infants placed on their back to sleep: Maryland's infant health domain NPM is the placement of infants on their back to sleep, as sleep-related infant deaths are the third leading cause of overall infant mortality and the leading cause of post-neonatal deaths in Maryland. Through Title V funding, local health departments and Babies Born Healthy Initiatives, infant safe sleep education and portable cribs are distributed. Title V supports local FIMR activities to investigate causes of infant death. Title V also supports infant mortality reduction activities in local health departments across the state through home visiting and care coordination services for high-risk women and infants that screen and refer for mental health and substance use and provide education on prenatal nutrition support. Additionally, Title V has supported the development of an Infant Safe Sleep communication strategy and will assess the feasibility of implementation.

<u>Children's Health</u>: Maryland has identified the following priority needs for Child Health, "ensuring that all children have the opportunity to develop and reach their full potential," and "ensuring children with asthma and their families have the tools and supports necessary to manage their condition so that it does not impede their daily activities." Title V efforts in Maryland continue to focus on children who receive a developmental screen (NPM 6). Title V has added a State Performance Measure (SPM) 3 on the receipt of primary care during early childhood as well as a SPM related to childhood asthma. In an effort to align with the Statewide Integrated Health Improvement Strategy (SIHIS), Maryland will begin in SFY 2022 to monitor and report on SPM 4: Annual ED visit per 1,000 for ages 2-17 for the primary diagnosis of asthma.

NPM 6: Percent of children age 19-35 who have completed a developmental screen: Through Title V funding, local health departments implement programs and services related to child development. Local health departments that choose to focus on child health services support programs such as lead case management, early intervention, and hearing and vision screening. Parents enrolled in home visiting programs (maternal health services) also receive information regarding the importance of child developmental screenings through their medical home.

SPM 3: Receipt of primary care during early childhood: In 2020, 67% of children enrolled in Medicaid who reached aged 15 months who had 5 or more well care visits in their first 15 months of life. Title V will continue to monitor and track receipt of primary care in early childhood through Medicaid data. Title V staff at local health departments provide essential services such as vaccinations and vision and hearing screenings. Title V also funds home visiting programs who help coordinate and promote primary care services. Finally, Title V will partner with MSDE for school based health centers and school health services.

SPM 4: Number of ED visit per 1,000 for ages 2-17 with a primary diagnosis of asthma: Beginning in SFY 2022, local health departments will have the option to use Title V funds to support asthma programming/services. These programs/services will include asthma home visiting, asthma collaboratives, and/or regional partnerships. Title V will also partner with the Environmental Health Bureau to support existing asthma programs such as asthma home visiting through the State Plan Amendment (SPA) and the Children's Health Insurance Program (CHIP) in the jurisdictions across the state that have high incidents of emergency department visits for asthmatic children.

Adolescent Health: Title V has identified as priority needs in adolescent health to "Ensure that adolescents ages 12-17 receive comprehensive well visits that address physical, reproductive, and behavioral health needs" There is one National Performance Measure that addresses adolescent health-percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year (NPM 10) and SPM 4: Annual ED visit per 1,000 for ages 2-17 for the primary diagnosis of asthma.

NPM 10: Percent of adolescents ages 12 through 17, with a preventive medical visit in the past year: Title V supports adolescent health through funding to local health departments for school based health services. These services include physical health assessments as well as screening and referral for mental health and/or substance use. Additionally, Title V funds support an Adolescent Health Coordinator at the state level who manages the SRAE and MOAHP grants.

Children with Special Health Care Needs (CYSHCN): Maryland has identified, "ensuring optimal health and quality of life for all children and youth with special health care needs and their families by providing services within an effective system of care in alignment with the six core outcomes." These priorities focus on medical home access and transition support/services for children and youth with special health care needs as priority focus areas in SFY 2022.

NPM 11: Percent of children with and without special health care needs, ages 0-17, who have a medical home: Maryland recognizes that the medical home approach to providing comprehensive and high quality primary care is the best practice for children with and without special health care needs. Despite the model's introduction fifty years ago, limited progress has been made in universal implementation. In SFY 2022, OGPSHCN will explore challenges to medical home implementation in MD and strategize effective outreach and training opportunities.

NPM 12: Percent of adolescents with and without special health care needs, ages 12-17, who received services to prepare for the transitions to adult health care:
Maryland continues the overarching goal of increasing the percent of adolescents with and without special health care needs who have received the services necessary to make transitions to adult health care but will be conducting a thorough analysis of current strategies and evaluating the need for revised strategies in SFY 2022.

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[1] Jones NL, Gilman SE, Cheng TL, Drury SS, Hill CV, Geronimus AT. Life Course Approaches to the Causes of Health Disparities. Am J Public Health. 2019;109(S1):S48-S55. doi:10.2105/AJPH.2018.304738

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

Through the Title V Maternal and Child Health Services Block Grant, Maryland is able to provide core public health services funding to all 24 jurisdictions (23 counties and Baltimore City) in the state to advance vital maternal and child health services and initiatives that are specific to the needs of each community. Funding is used for direct, enabling, and public health systems services/initiatives for children, children and youth with special health care needs, and maternal health. Additionally, funds are used for population-based services through community education of emerging public health issues and through the continued development and advancement of public health infrastructure to ensure the health and well-being of Title V eligible populations. These services highlight the mission and vision of the Department of Health's Prevention and Health Promotion Administration, in which Maryland Title V resides.

Without critical Title V funding, the State would be unable to maintain the level of support necessary to continue to successfully improve the health outcomes of the State's women, infants, children, adolescents, and children/youth with special health care needs. Title V funds State staff who serve essential roles for the MCH population such as epidemiology and surveillance, program management and coordination, policy development and analysis, partnership coordination, and outreach. Title V funding supports the efforts of local health departments to advance Title V priorities at the community level through the implementation of evidence-based and evidence-informed programs, activities, and initiatives.

Each fiscal year, Maryland receives approximately $11,850,506 million in federal Title V funding for maternal and child health services. The state's FY 1989 required Maintenance of Effort (MOE) amount is $8,262,484. Historically, Maryland has matched federal Title V funds above the required MOE to ensure that services are adequately funded across all population and service domains. In SFY 2020, the state match totaled
$8,887,880 and supported services such as family planning/reproductive health clinics, care coordination services for pregnant individuals (Babies Born Healthy), Child Fatality Review (CFR), various perinatal infrastructure projects, and medical day care for children and youth with special health care needs.

III.A.3. MCH Success Story

Baltimore Healthy Start:

Title V provides funding to the Baltimore City Health Department through a Child Health Systems Improvement Grant. This grant funds several programs including a community asthma program, immunization services, and home visiting. A sub-recipient of the grant is Baltimore Healthy Start, a federally funded program that works in Baltimore City communities with high rates of infant mortality and other adverse perinatal outcomes. Baltimore Healthy Start uses Title V funds to support a Certified Registered Nurse Practitioner (CRNP). The CRNP provides home-based and on-site family planning, education, counseling, and contraceptive dispensing to patients. The CRNP, along with Baltimore Healthy Start's Community Health Workers, are responsible for ensuring that all patients have a reproductive life plan. During SFY 2020, the CRNP and Community Health Workers completed a total of 550 reproductive life plans, representing a 50% increase over SFY 2019. Additionally, the CRNP provided in-home birth control counseling and prescriptions to 51 birthing people. Despite the COVID-19 pandemic that led to the closure of clinics and home visiting programs, the Healthy Start CRNP was able to continue to see patients in-home ensuring that birthing people continued to have access to reproductive health services.

Surveillance and Quality Initiatives:

Title V funds Surveillance and Quality Initiatives which includes Child Fatality Review teams and Community Action Teams. Community Action Teams (CAT) review the findings of the FIMR team and are charged with advocating for creating large-scale systems change to benefit all pregnant or postpartum people and children. Howard County launched the "It's OK to Ask" campaign aimed at reducing youth suicide as a result of increasing rates of teen suicide in the county. The Child Fatality Review team's recommendations to address youth suicide led to the development of the campaign, as well as a Youth Suicide Strategic Plan. The campaign focuses on reducing suicides by 1) increasing awareness and reducing stigma, 2) prevention, 3) early identification and intervention, 4) referral to treatment, and 5) postvention. The local health department staff worked with community organizations in providing specialized training and presentations. A Teen Mental Health Ambassador program was implemented in county high schools, where student interns are points of contact about the campaign for their peers. For these efforts, the Howard County Health Department was awarded a 2021 National Association of Counties (NACo) Award.

III.B. Overview of the State

Introduction

Maryland is a small but diverse state comprising 24 jurisdictions, including 23 counties and the city of Baltimore. With an estimated population of more than 6 million in 2018, Maryland is the nation's 19th most populous state, yet ranks as the ninth smallest state according to land area. Although a small state in size and population, Maryland has great geographic diversity. The State is characterized by mountainous rural areas in the western part of the State, densely populated urban and suburban areas in the central and southern regions along the I-95 corridor between Baltimore and Washington DC, and flat rural areas on the eastern shore. Maryland is geographically unique with the Allegheny Mountains and Chesapeake Bay separating its western and eastern regions from the population centers of the state. These geographic "barriers" often create special challenges in the procurement of health care services due to lack of access (transportation and distance), lack of providers, and lack of specialty care.

The State's Maternal and Child Health (MCH) population includes an estimated 1.2 million women of childbearing age (ages 15-45), 1.5 million children and adolescents (ages 0-19), and 371,115 young adults (ages 20-24) in 2019. According to the National Survey of Children's Health in 2019, an estimated 272,432 Maryland children and youth (ages 0-17) have special health care needs (NSCH 2019 Survey).

Maryland's Health Care Environment

Maryland's health care system includes 24 local health departments (LHDs), 77 hospitals, 21 federally qualified health centers (FQHCs), the Medicaid Program, private insurers, regulatory agencies, provider groups, advocacy groups and countless health practitioners. MCH specific resources include 32 birthing hospitals, nearly 2,600 pediatricians and/or adolescent practitioners, over 1,200 obstetricians and/or gynecologists, and nearly 1,900 family/general practitioners. Maryland is also home to Johns Hopkins University consistently ranked as one of the nation's top hospitals and some of the best diagnostic centers for developmental conditions in children, such as Kennedy Krieger Institute, University of Maryland Division of Behavioral and Developmental Pediatrics, Sheppard Pratt, and Mount Washington Pediatric Hospital.

Maryland was one of the six initial states approved to begin a Health Benefit Exchange under the Affordable Care Act (ACA). The Maryland Health Benefit Exchange, known as Maryland Health Connection (MHC), was launched in 2013 and has implemented ongoing efforts to increase knowledge among individuals and communities about the importance and availability of health insurance coverage. Within local health departments and through regional consumer assistance organizations, health navigators assist individuals with applying for health insurance options available through MHC. Maryland also expanded Medicaid eligibility through the ACA to cover income eligible adults ages 19-64 regardless of parental status.

The Maryland Medicaid Program serves as the major source of publicly sponsored health insurance coverage for children, adolescents, and pregnant women. According to Medicaid data, during calendar year 2018 over 1.4 million Marylanders were eligible for Medicaid coverage. During calendar year 2020, 665,988 children and adolescents (ages 0-22) were enrolled in the Medicaid Program at some point during the year, representing a 3% decrease from 2019 enrollment. Maryland has generally been supportive of expanding health insurance coverage for uninsured children and pregnant women. The Maryland Children's Health Program (MCHP) began operating as a Medicaid expansion program on July 1, 1998. The MCHP program expanded comprehensive health insurance coverage to children up to the age of 19 with family incomes at or below 200% of the federal poverty level (FPL). In 2001, Maryland initiated a separate children's health insurance program expansion, MCHP Premium. MCHP also provides insurance coverage for pregnant women with incomes between 185% and 250% of the federal poverty level. In 2019, according to VSA data, Medicaid covered hospital delivery costs for 38.8% of Maryland births.

Health care workforce shortages/distribution affects many Maryland communities. There are federally designated health professional shortage areas and medically underserved areas/populations located throughout the State, particularly in urban and rural areas. Data from the HRSA Data Warehouse indicates that 19 of Maryland's 24 jurisdictions are currently either entirely or partially federally designated as health professional shortage areas for primary care and/or dental services, and 18 are shortage areas for mental health. Twenty three of the State's 24 jurisdictions are currently either fully or partially designated as medically underserved areas. Federally qualified health centers are located in 22 jurisdictions in the State.

Maryland was ranked by the Census Bureau as the wealthiest state in the nation as measured by median household income in 2019. Its health care environment is also one of the most robust in the nation as measured by physician to population ratio and the availability of internationally recognized high quality health services. In spite of Maryland's relative affluence and significant health care assets, progress on health measures for the State is often mixed due to the geographic factors that limit access to care.

The 2020 Kids Count Data Book (Annie E. Casey Foundation), ranked Maryland 21st in overall child well-being, slipping seven spots from its ranking in 2019. Despite the State's overall wealth, Maryland still faces many challenges related to maternal and child health outcomes. Poverty, which is a significant social determinant of health, measured 9% in 2019 according to the Census Bureau. The infant mortality rate in Maryland continues to see stable declines from 7.4 in 2005 to 5.9 in 2019, a 3% decline from 2018. However, in Maryland there remains persistent disparities in infant mortality rates by race/ethnicity. For example, in 2019 the infant mortality rate for Non-Hispanic Whites was 4.1 compared to 9.3 for Non-Hispanic Blacks. Additionally, 12.1% of the state's children live in poverty and 3% of children (age 0-18) do not have health insurance. For children with special health care needs, successful transition to adult health care is often inconsistent due to the lack of adult specialty care providers for congenital and childhood onset conditions.

Maternal and Child Health Bureau and Title V

Maryland's lead public health agency is the Maryland Department of Health (MDH), led by Secretary Dennis Schraeder, who was appointed in 2021. Maryland Department of Health houses Title V in the Maternal and Child Health Bureau (MCHB) within the Prevention and Health Promotion Administration (PHPA). The Bureau's mission is to provide state leadership to improve the health and well-being of Maryland women, infants, children including those with special health care needs, adolescents, and their families. MCHB focuses on prevention across the lifespan for children and women of childbearing age and serves as MDH's primary prevention unit for unintended and adolescent pregnancy; infant mortality and low birth weight reduction; breastfeeding promotion, preventive and primary care for children and adolescents; and systems development for children and youth with special health care needs. MCHB also has the lead responsibility for reducing racial disparities/inequities in perinatal health outcomes for women and children.

Key goals of the Maternal and Child Health Bureau, which intersect with Title V priorities, include improving pregnancy and birth outcomes, improving the health of children and adolescents, including those with special health care needs, assuring access to quality health care services, eliminating health disparities, and strengthening the MCH infrastructure. Title V programs and services are provided across the three levels of the MCH pyramid to protect and promote the health of all women, children, and families.

Title V funds support programs and activities in four of the five offices of the Maternal Child Health Bureau. These offices include the Office of Operations; Office of Family and Community Health Services (OFCHS); the Office of Quality Initiatives (OQI); and the Office for Genetics and People with Special Health Care Needs (OGPSHCN).

Title V and the Bureau collaborate with other MDH units as well as other State agencies to address access to prenatal care, breastfeeding promotion, childhood lead screening, access to family planning, screening and treatment of sexually transmitted infections, immunizations, postpartum depression, school based health, substance use screening and referral, and tobacco use prevention. A leading strategy is systems building through partnerships with Medicaid and Behavioral Health (also housed within MDH); other State agencies (e.g., Education, Juvenile Services); local health departments; academic institutions; health care systems, professional organizations (ACOG, AAP); private non-profits; FQHCs; and community based organizations.

Title V provides $4.4 million in funding to all 24 local health departments each year to drive improvements in the health of women, children, and families at the community level. Title V works with state and local agencies to ensure coordination of services for all women and children, but particularly those with limited access to care and children and youth with special health care needs (CYSHCN).

In addition to Title V, MCHB manages programs and budgets drawn from several different federal grants, including the Women's and Infants Program (WIC); Title X Family Planning; Maternal, Infant and Early Childhood Home Visiting Program (MIECHV); Abstinence Education / Title V Sexual Risk Avoidance Education (Section 510); Maryland Optimal Adolescent Health Program; and the Personal Responsibility Education Program (PREP).

MCHB's staff is multidisciplinary and includes physicians, nurses, social workers, epidemiologists, educators, community outreach specialists, public health administrators, public administrators, and administrative support staff. At any given time, there are also as many as four public health interns and two preventive medicine residents contributing to the work of MCHB.

Maternal and Child Health Needs

Perinatal Health

In 2019, Maryland's infant mortality rate declined 3% from 6.1 infant deaths per 1,000 live births in 2018 to 5.9. Although infant mortality has declined over the last few years, significant racial disparities still exist. In 2019, the infant mortality for Non-Hispanic black infants was 9.3, a decline from the 2018 rate of 10.2, yet still remarkably higher than the infant mortality rate for Non-Hispanic White infants, which was 4.1 deaths per 1,000 live births in 2019. Additionally, Maryland jurisdictions continue to experience regional disparities in infant mortality rates, including Allegany County (15.5 per 1,000), Baltimore City (8.8 per 1,000), and Washington County (7.9 per 1,000).

Infant mortality reduction remains a State priority. While Maryland has made tremendous progress in reducing overall rates of infant deaths, racial/ethnic disparities continue and will thus remain a focus of Title V activities throughout the next budget year. Title V supported Fetal and Infant Mortality Review (FIMR) activities in all 24 jurisdictions from 1998-2020, and currently supports 8 teams as of FY2021. FIMR not only provides important insight into opportunities for systems improvement, but also serves as a mechanism for local and regional communication, coordination, and collaboration on broader maternal and child health issues. In all, 135 fetal and infant deaths were reviewed by FIMR teams in FY 2020.

Babies Born Healthy, funded with Title V state match funds, was established in 2007 to reduce infant mortality, improve birth outcomes, and reduce racial disparities. Babies Born Healthy provides funds to eight sites located in the seven jurisdictions in Maryland with the highest infant mortality rates and highest racial disparities in infant mortality. Jurisdictions focus their resources on tobacco cessation, substance use prevention and treatment, prenatal care, long acting reversible contraception, and other strategies driven by site-specific data to promote healthy maternal and infant outcomes

Preventing child and adolescent deaths through Child Fatality Review (CFR) is another Title V priority. CFR was established in Maryland statute in 1999. Title V supports a 24 member State CFR Team whose purpose is to prevent child deaths by: (1) understanding the causes and incidence of child deaths; (2) implementing changes within the agencies represented on the State CFR Team to prevent child deaths; and (3) advising the State leadership on child death prevention. The State CFR Team also sponsors an all-day training for local CFR team members on select topics related to child fatality issues.

The State CFR Team oversees the efforts of local CFR teams operating in each jurisdiction. Each month the local CFR teams receive notice from the Office of the Chief Medical Examiner (OCME) of unexpected resident child (under age 18) deaths and are required to review each of these deaths. Local teams meet at least quarterly to review cases and make recommendations for local level systems changes in statute, policy, or practice to prevent future child deaths, and work to implement these recommendations.

The OCME referred 176 child deaths to local CFR teams during Calendar Year 2019, of which 161 were reviewed by local CFR teams. The leading manner of child fatalities in 2019 was undetermined, accounting for 27% of all child deaths, and 60% of all infant deaths in the state. Infant safe sleep promotion continues to be a Title V priority.

In March 2017, Governor Larry Hogan declared a state emergency and committed additional funding in response to Maryland's current opioid addiction crisis. The CDC reports that in 2014 Maryland ranked fifth in the number of pregnant women using opioids. MCHB monitors the number of infants born with Neonatal Abstinence Syndrome (NAS). According to the Maryland Health Services Cost Review Commission, the number of infants born with NAS increased annually from 2009 with 569 infants to a high of 954 in 2014. Since 2014, amidst the transition from ICD-9 to ICD-10 diagnosis code tracking of NAS, the number of infants born with NAS has decreased and in 2019 there were 800 infants born with NAS. It is unclear if this is a true decrease in NAS or a result of the ICD-9 to ICD-10 code transition and changes in coding practices. MCHB is committed to addressing substance use among the state's MCH population, and Title V funds are used to support standardization of care for infants with NAS as well as linkage to substance use treatment for women of childbearing age through funding awarded to local health departments.

Child and Adolescent Health

OFCHS partners with Medicaid to monitor the percentage of children and adolescents who follow through with well visits. With lead support from OGPSHCN and in collaboration with the MDH-PHPA, youth transition to adult health care remains an MCHB priority focus area. Strengthening systems of care for children and youth with special health care needs through the Medical Home model is another priority for OGPSHCN. The Medical Home and Health Care Transition efforts have expanded throughout the State of Maryland to include promotion, implementation, and evaluation of care within most statewide health systems. Developing "Best Practice Models" to improve and build strong infrastructures to support providers who serve CYSHCN while focusing on direct access, effective care coordination, and family involvement are all targeted efforts. Continued collaboration with existing programs and community-based organizations will remain a priority as well as developing new collaborations, both internally and externally.

Children and Youth with Special Health Care Needs

Through the varied programs housed under this umbrella, OGPSHCN focuses efforts on the six core outcomes for CYSHCN: Family-Professional Partnership; Medical Home; Adequate Insurance; Early and Continuous Screening; Easy-to-Use Services and Supports; and Youth Transition to Adult Health Care. Grant funding is provided to LHDs, Community-Based organizations, academic and clinical institutions with a primary concentration on medical home, family professional partnership, early and continuous screening and health care transition, while internal efforts are focused on those core outcomes plus adequate insurance and easy-to-use services and supports.

OGPSHCN reaches every child born in Maryland with the dual initial birth screenings for hearing and congenital metabolic disorders, as well as critical congenital heart disease and birth defects surveillance. Outreach and intervention continue for some children across the life course, with follow up for any out of range screening results, referral to early intervention services where warranted, continued information dissemination and education for certain diagnosed conditions, and ongoing efforts to effect transition to adult systems of care.

While Family-Professional Partnership (FPP) is categorized as an individual outcome, OGPSHCN will endeavor to incorporate FPP into all programs as an integral component of the workflow.

COVID -19 Impact

The COVID-19 has impacted the State significantly. On March 5, 2020, Governor Hogan declared a state of emergency. The Maryland Department of Health with local health departments and partners worked to expand COVID-19 testing capacity, maintain adequate patient surge capacity, supply personal protective equipment, execute robust contact tracing operations, and deploy and administer COVID-19 vaccinations.

Essential activities that Maryland Department of Health have taken in response to the pandemic include:

- Developing COVID-19 data dashboards that present case rates by county, testing by county and zip code, Intensive Care Units (ICUs) and Acute Hospital beds, testing volume, testing per day, and percent positive rate over 7 days, school outbreak data, nursing home outbreak data, and COVIDLink Contact tracing Data
- Updating public health partners including local health departments, schools, healthcare facilities, college and universities, health emergency preparedness teams with most up to date guidelines
- Launched COVIDConnect, a free platform for individuals who have been affected by COVID to connect with other individuals who are recovering
- Developed public and private partnerships with pharmacies, health care facilities, community based organizations to launch mass testing and vaccination sites throughout Maryland
- Developed frequently answered questions for COVID-19
- Launched the GoVax Campaign, a communication campaign on the importance of COVID vaccinations
- Implemented MD Covid Alert that uses exposure notification technology to notify users who may have been exposed to an infected person

As a result of the Governor's Executive Order extending eligibility for certain services during the COVID-19 Pandemic State of Emergency, no children were disenrolled from the Children's Medical Services. This ensured that services would still be provided for children with special health care needs.

Many staff, including Title V staff at both the state and local level, were deployed to provide assistance to the COVID-19 pandemic though testing, serving on outbreak and contact tracing teams, developing guidance for partners, or providing vaccinations.

III.C. Needs Assessment
FY 2022 Application/FY 2020 Annual Report Update

During Fiscal Year 2020, the Bureau had an Acting Director. The Deputy Director started during the middle of the FY 2020. Two of the Bureau's Offices recruited for Directors during this time period. Office and program staff remained relatively stable otherwise.

Data Updates

The following section provides an overview of population level data updates available during the reporting period.

Women's/Maternal Health:

Substance Use/Misuse/Disorder: The Maryland Vital Statistics Administration (VSA) reported that in 2020, there were 2,773 unintentional intoxication deaths involving drugs and alcohol, a 16.6% increase from 2019. Ninety percent of these deaths were categorized as opioid-related, higher than at any other point during the opioid crisis. The number of opioid-related unintentional intoxication fatalities increased 18.7%, from 2,106 in 2019, to 2,499 in 2020. This is substantially less than the 70% increase between 2015 and 2016, which was the largest single year increase that has been recorded. Fentanyl-related deaths continue to rise, increasing 20.7% from 1,927 in 2019 to 2,326 in 2020. Maryland Vital Statistics data indicates that drug and alcohol intoxication deaths among women increased from 640 deaths in 2018 to 654 deaths in 2019, a two percent increase.

Mental Health: According to 2019 Pregnancy Risk Assessment Monitoring System (PRAMS) data, 13.1% of women reported depression before pregnancy and 15.6% of mothers reported symptoms of postpartum depression. During the three months before pregnancy, 20.5% of women reported they had anxiety.

Maternal Mortality and Morbidity: Due to delays caused by the COVID-19 Pandemic, numbers for Maternal Mortality are pending. The 2013-2017 maternal mortality rate (MMR) in Maryland decreased 2% from the 2008-2012 rate. The MMR among Black women is 4.0 times the MMR of White women. The leading cause of pregnancy-associated deaths in 2017 was substance use with unintentional overdose, accounting for 38 percent of these deaths.

Preventive Dental Visits in Pregnancy: According to 2019 PRAMS data, 54.1% of women reported having their teeth cleaned during pregnancy, a one percent increase from 53.4% in 2018.

Smoking in Pregnancy: According to 2019 PRAMS data, 11.0% of women reported that they smoked during the three months before pregnancy (down from 16.1% in 2013), 5.0% of women reported that they smoked during the last three months of pregnancy (down from 7.8% in 2013), and 7.8% reported that they smoked postpartum. Non-Hispanic Black women reported the highest rates of smoking during the three months before pregnancy (13.2%) and postpartum (11.9%), while non-Hispanic White women reported the highest rates of smoking during the last three months of pregnancy (6.3%). All smoking rates were highest among women under the age of 25. Prenatal smoking rates in Maryland are slightly higher than the Healthy People 2030 objective for smoking during pregnancy (4.3%).

Perinatal Health of Maryland Women and Infants:

Prenatal Care: The annual percentage of Maryland women who initiated prenatal care during the first trimester has risen to 84.8% in 2019, a 2.4% increase from 82.8% in 2018, according to PRAMS data. Among non-Hispanic White women, 93.2% initiated prenatal care during the first trimester, compared to 79.5% among non-Hispanic Black women, and 72.0% among Hispanic women. First trimester prenatal care initiation increased as the woman's age increased.

Infant Mortality: Maryland VSA reported the infant mortality rate in Maryland in 2019 was 5.9 per 1,000 live births, a 3.3% decrease from 6.1 per 1,000 live births in 2018, and down from 8.5 per 1,000 live births in 2004. The leading causes of death were disorders related to short gestation and low birth weight, congenital abnormalities, SIDS, maternal complications of pregnancy, infectious diseases, cardiovascular disorders, and complications of the placenta, cord, and membranes. Maternal complications of pregnancy include conditions such as premature rupture of membranes and cervical incompetence.

Low Birth Weight: Maryland VSA reported in 2019, 8.7% of live births in Maryland were low birth weight (LBW), weighing less than 2,500 grams at birth. Non-Hispanic Black mothers were nearly twice as likely to have a LBW infant (12.6%) than Non-Hispanic White mothers (6.6%).

Very Low Birth Weight: Maryland VSA reported in 2019, 1.6% of all live births in Maryland were very low birth weight (VLBW), weighing less than 1,500 grams at birth. Non-Hispanic Black mothers were over twice as likely as other races to have VLBW infants (2.8% Non-Hispanic Blacks, 0.9% Non-Hispanic Whites, and 1.2% for Hispanics).

Preterm Birth: Maryland VSA reported in 2019, 10.3% of live births occurred before 37 weeks of gestation in Maryland, a 1.0% increase from 10.2% in 2018.Non-Hispanic Black mothers were more likely to have a preterm birth than other races with 13.0%, compared to 8.9% and 9.7% for Non-Hispanic White and Hispanic births, respectively.

Breastfeeding: In 2019, according to PRAMS data, 91.4% of Maryland mothers reported having ever breastfed their babies, an increase from 89.6% in 2018. Rates of breastfeeding in Maryland were high across all races ranging from 89.1% for Non-Hispanic Black mothers to 99.6% among Asian mothers.

Infant Safe Sleep: In 2019, according to PRAMS data, 12.8% of mothers in Maryland reported not placing their infants on their back to sleep and 37.4% of mothers reported that their baby slept with a blanket, 8.1% slept with toys, cushions, or pillows, and 11.2% slept with bumper pads. Over 80 percent of mothers reported that their baby slept in the same room as the mother.

Child Health:

Mortality: According to Maryland VSA data, in 2019, there were 681 deaths to infants and children ages 0 to 18 years old in Maryland. Most of these deaths occurred in infancy. The 2019 child death rate decreased by 3.0% compared to 2018. Congenital abnormalities were the leading cause of death for the 70 children ages 1 to 4 years. Injuries were the leading cause of death for the 77 children ages 5 to 14, followed by congenital abnormalities.

Preventive Health Care: According to 2020 Medicaid data, 67.0% of Medicaid enrolled patients who turned 15 months old during 2020 had five or more well-child visits during their first 15 months of life.

Child Development Screenings: Data from the National Survey of Children's Health (NSCH), 2018-2019, showed that 40.9% of children ages 9 through 35 months received a developmental screening using a parent-completed screening tool in the past year, a slight increase from 39.3% during the 2017-2018 survey period.

Asthma: Data from the Health Services Cost Review Commission (HSCRC) showed that emergency department visits for asthma among children ages 2 to 17 was 8.5 per 1,000 population in 2019. There were large racial disparities, with a rate of 3.4 per 1,000 population among White non-Hispanic children, 18 per 1,000 population among Black non-Hispanic children, and 5.3 per 1,000 population among Hispanic children.

Adolescent Health:

Mental Health and Suicide: According to Maryland VSA data, the rate of suicide deaths among youth ages 15-19

years was 8.7 per 100,000 population in 2019. This represented a 10% increase from the 2018 rate of 7.9 per 100,000 population. The actual numbers of suicides in this age range increased from 30 in 2018 to 33 in 2019. The suicide rate remained highest for non-Hispanic White male teens in 2019.

Teen Pregnancy and Reproductive/Sexual Health: Maryland VSA data showed that the adolescent birth rate decreased 55.4% from 31.2 births per 1,000 adolescent females ages 15-19 years in 2009 to 13.9 births per 1,000 adolescent females in 2019. Hispanic females had the highest adolescent birth rate with 36.7 births per 1,000 adolescent females, which was more than double the adolescent birth rate for Black, non-Hispanic females (17.0 per 1,000 adolescent females) and more than five times the adolescent birth rate for White, non-Hispanic females (7.3 per 1,000 adolescent females).

Children and Youth with Special Health Care Needs:
Medical Home: According to the 2018-2019 National Survey of Children's Health, there are an estimated 260,596 children and youth ages 0 to 17 with special health care needs in the state. The survey estimated that 44.9% of these children have a medical home.

Transition to Adult Care: The 2018-2019 National Survey of Children's Health estimated that 26.9% of adolescents ages 12-17 with special health care needs received services necessary to make transitions to adult health care.

Program Capacity:
The Title V program is managed by the Maternal and Child Health Bureau (MCHB) in the Prevention and Health Promotion Administration (PHPA) at the Maryland Department of Health (MDH).

Maryland Department of Health's Prevention and Health Promotion Administration leadership includes:

- Donna Gugel, MHS, serves as the Director of PHPA. Ms. Gugel has been the Director since 2016 and previously served as Deputy Director.
- Courtney McFadden, MPH, serves as Deputy Director of PHPA. Ms. McFadden has been the Deputy Director since 2018 and previously served as the Director of the Maternal and Child Health Bureau.

Maryland Department of Health's Maternal and Child Health Bureau leadership includes:

- Shelly Choo, MD, MPH serves as the Director of the Maternal and Child Health Bureau.
- Alena Troxel, MPH serves as the Deputy Director of the Maternal and Child Health Bureau.
- Jed Miller, MD, MPH serves as the Director of the Office of Genetics and People with Special Health Care Needs. Dr. Miller also serves as the State Title V CSHSN Director.
- Stacy Taylor serves as the Deputy Director of the Office of Genetics and People with Special Health Care Needs.
- Jennifer Wilson, MEd, RD, LDN, serves as the Director of the Maryland WIC Program.
- Melissa Beasley served as the Director of the Office of Family and Community Health Services until July 2021.
- Maisha DouyonCover, MPH served as the Director of the Office of Quality Initiatives until May 2021.
- Kristin Silcox, MS serves as the Epidemiology Program Manager within the Office of Quality Initiatives.
- Colleen S. Wilburn, MPA has served as the Title V Manager since 2019.

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

III.C.2.a. Process Description

Methodology

The Needs Assessment was structured into six stages:

Stage 1 was the Planning Stage and included the initial meeting with the Steering Committee and a formal research plan; Stage 2 entailed gathering existing data from a variety of data sources to better understand the population needs, available services and disparities in access or health; Stage 3 consisted of data collection, including 31 key informant interviews and four public forums. Analytic Insight (AI) also held a meeting with the Steering Committee to get their feedback on the data gathered to date;
Stage 4 focused on identifying priorities through strategic planning sessions with key stakeholders across the state and continuing to gather feedback from the public. AI held six strategic planning sessions which covered Children and Youth with Special Health Care Needs (CYSHCN). Due to COVID-19 restrictions planning sessions for Maternal and Child Health were canceled and could not be rescheduled; Stage 5 was reserved for public comment and will include an online survey, accessible through the Internet and optimized for access using any mobile device; and, Stage 6 was for report development.

Secondary Data Analysis

Secondary data analysis assessed the data used to measure outcomes for the National Performance Measures (NPMs) and State Performance Measures (SPMs) by other states and evaluate the applicability of those indicators to the activities, policies and populations under study in Maryland. Health outcomes from the previous five-year needs assessment were tracked in order to measure change as a result of actions that were developed as part of those plans, comparisons between Maryland and similar states and, where possible, key differences between regions and subgroups within Maryland. This report uses several national datasets, including:

- National Survey of Children's Health (NSCH), conducted by the United States Census Bureau, Associate Director for Demographic Programs on behalf of the United States Department of Health and Human Services (HHS), Health Resources and Services Administration's (HRSA) Maternal and Child Health Bureau (MCHB).
- The Behavioral Risk Factor Surveillance System (BRFSS) is conducted by the Centers for Disease Control and Prevention (CDC). The survey covers health-related risk behaviors, chronic health conditions, and use of preventive services.
- The Youth Risk Behavior Surveillance System (YRBSS) YRBSS is a national school-based survey conducted by CDC and state, territorial, and local education and health agencies and tribal governments. It monitors six categories of health-related behaviors that contribute to the leading causes of death and disability among youth and adults including behaviors that contribute to unintentional injuries and violence, sexual behaviors, alcohol, tobacco and other drug use, dietary behaviors and physical activity, as well as the prevalence of obesity and asthma and other health-related behaviors.
- The National Vital Statistics System (NVSS) provides data on the vital statistics of the population of the United States. It is produced in a coordinated effort of state health departments and the National Center for Health Statistics, a division of the Centers for Disease Control and Prevention. Maryland Vital Statistics Administration are also cited in this report.

Selection of National Performance Measures

Ten NPM priority areas were selected among those most prioritized by the greatest number of members. During subsequent investigation and deliberation, NPM 9 on bullying was eliminated to avoid duplication of efforts conducted by Maryland's Department of Education. NPM 2, Low-Risk Cesarean Delivery was also eliminated because significant progress has been made in this area and hospitals plan to continue with their efforts.

The following selection of NPMs were reviewed and approved by the Title V Manager:

NPM 3 Risk Appropriate Perinatal Care
NPM 4 Breastfeeding
NPM 5 Safe Sleep

NPM 6 Developmental Screening
NPM 10 Adolescent Well-Visit
NPM 11 Medical Home
NPM 12 Transition
NPM 13.1 Preventive Dental Visit - Pregnancy
NPM 14.1 Smoking - Pregnancy

Key Informant Interviews
The Maryland Department of Health and Maternal and Child Health Bureau identified 75 stakeholders of interest to complete key informant interviews. Interview invitations were distributed by email in mid-December, with follow-ups in mid-January and early February. Follow-ups for those who had not responded to emails began in March, however the COVID-19 emergency may have impeded our ability to interview all stakeholders. Analytic Insight (AI) completed 31 stakeholder interviews with service providers, staff at community organizations, local health departments and other state agencies. Interviews included representatives from each region of the state, as well as representatives who work with each of the Title V populations.

Public Forums
Four in-person public forums were held to collect early public feedback regarding the Maryland residents maternal and child-health related needs. The locations for these forums included: Baltimore, Allegany County, Prince George's County and Salisbury.

The public forums were live-streamed to maximize the participation opportunities for those unable to attend in-person. Information about tuning in to the stream was also provided in the advertising materials.

Unfortunately, due to COVID-19 concerns and social distancing protocol, four additional public forums scheduled to take place in April 2020 were canceled. Attendees were offered an opportunity to provide input through telephone interviews.

Planning Sessions for Children and Youth With Special Health Care Needs
Analytic Insight (AI), MCHB's vendor for the Title V Needs Assessment, facilitated six strategic planning sessions with service providers to assess the health needs of children and youth with special health care needs and identify and prioritize key findings from the data collection stage, particularly regarding the selected NPMs (Bullying, Medical Home and Transition) with a special emphasis on health equity in underrepresented and underserved populations. Sessions were held from November 18 through 22, 2019.

For the larger planning sessions, following an introduction to the assessment and planning process, participants broke into small groups and discussed actions the community and specific organizations can take to address each NPM goal for about 10-15 minutes. Each group completed action cards detailing the ESM they believe would best address each need.

Once each small group completed their action cards, we discussed the results as a larger group to determine consensus and feasibility of the selected ESMs. The rationale for the selections, needed resources, timeline and additional details were discussed.

The moderator and note taker reviewed and documented each proposed action on a white board or large post-it note paper as they are discussed with the larger group. This exercise was repeated for each identified goal.

On each action card, we asked participants to provide the specific actions that need to be taken to address the goal, the rationale behind their selection, resources that will be needed to complete the proposed action, a potential timeline to complete the proposed action and any additional information.

Due to Covid-19 concerns and social distancing protocol, the remaining Maternal and Infant Health and Children and Adolescent Health strategic planning sessions that were scheduled to take place in March 2020 were canceled.

Public Comment Period

The public comment period began June 16 and remained open for 32 days. An online survey was available for public feedback during the public comment period. The online survey was also distributed to key informants. The survey was also distributed to Title V MCH staff at local health departments, and to the newly formed statewide Maternal Health Task Force, a HRSA funded project, of which the Title V Manager chairs.

III.C.2.b. Findings

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

Overview of the State

Maryland is comprised of 24 political jurisdictions – 23 counties and the City of Baltimore. With a population of roughly 6 million in 2019, the U.S. Statistical Abstract ranks Maryland as the nation’s 19th most populous and in the bottom 10 of states according to land mass. Although a small state in size and population, Maryland has great geographic diversity. The State is characterized by mountainous rural areas in the western part of the State, densely populated urban and suburban areas in the central and southern regions along the I-95 corridor between Baltimore and Washington DC, and flat rural areas in the eastern region. The “Eastern Shore” borders Delaware, the Atlantic Ocean and the Chesapeake Bay, the largest estuary in the United States. The Bay is a treasured geographic asset, but the fact that it bisects the State presents special challenges (e.g., transportation, access to specialty care services) for Eastern Shore residents.

The State’s Maternal and Child Health (MCH) populations include an estimated 1.2 million women of childbearing age (ages 15-44) and 1.5 million children and adolescents (ages 0-19) in 2019, 19.2% of whom have special health care needs.

Maryland has been identified as the nation’s seventh most diverse State. Maryland has one of the nation’s lowest poverty rates, with American Community Survey (ACS) estimating that in 2017 9.3% of Marylanders were poor, as compared with 13.4% of Americans nationwide. Maryland’s female residents are 24% more likely to live in poverty than males. African American Maryland residents have a poverty rate of 14.1%, below the national rate for Blacks of 25.2% but significantly higher than that of white Marylanders, 6.6%.

Population Trends

The population of the state of Maryland is projected to be 6,125,441 in the year 2021. The state’s population has increased about 10% since 2010 and doubled since 1960. Although the rate of increase has slowed, the state population continues to grow. Maryland is among the ten fastest growing states and the population is projected to reach 6,274,000 in 2025.

By county, the largest population increases over the past ten years border Washington DC and include Montgomery, Prince George’s and Frederick Counties. Allegany County had the smallest population increase during this period. None of the Maryland counties decreased in population.

Although much of the state is considered large fringe metropolitan, several counties are classified as nonmetro, or rural counties. These include Caroline, Dorchester, Kent, Talbot and Garrett Counties.

Birth Rates

The birth rate for Maryland residents has declined since 2008, from 13.7 in 2008 to 11.8 in 2018. This decline was consistent across racial and ethnic groups.

Infant mortality has decreased for Maryland residents. Racial and ethnic disparities in infant mortality have decreased somewhat from a difference between Black and White mortality rates of 9.2% in 2009 to a difference of 6.1% in 2018. These disparities remain substantial.

There have been several years in which the rate of infant mortality among Maryland residents of Hispanic origin surpassed that of white residents. In 2003, 2015, 2016 and 2017 Hispanic infant mortality rates exceeded the rate of non-Hispanic, White infant mortality.

Race and Ethnicity

Maryland includes areas with a great deal of racial and ethnic diversity and others with less diverse populations. In Baltimore City/County and Prince George's County, over half of residents are African American. In Montgomery County, about one in five residents are Hispanic. In contrast, in Garrett and Carroll Counties, roughly nine out of ten residents are white.

Poverty

Statewide, 6.4% of Maryland families live in poverty. In Baltimore city, 16.6% of families live in poverty, and 15.9% of families in Somerset County. The unemployment rate is highest in the city of Baltimore, 16.6%, as compared with 6.4% statewide.

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

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

Maryland Department of Health (MDH) has four major operational divisions: Public Health Services, Behavioral Health, Developmental Disabilities and Medicaid Administration. MDH also houses a fifth division called Operations. In addition, the department has 26 boards that license and regulate health care professionals; and various commissions that issue grants and research and make recommendations on issues that affect Maryland's health care delivery system.

Title V resides within the Public Health Services division of the Maryland Department of Health.

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

Title V resides within the Prevention and Health Promotion Administration (PHPA) within Public Health Services. The Prevention and Health Promotion Administration is organized into five Bureaus that oversee a diverse array of public health programs targeting all of Maryland citizens and work collaboratively to support the core functions of public health. The bureaus are Infectious Disease Epidemiology and Outbreak Response, Infections Disease Prevention and Health Services, Maternal and Child Health, Cancer and Chronic Diseases, and Environmental Health.

The Office of Family and Community Health Services (OFCHS), the Office of Quality Initiatives, and the Office of Genetics and People with Special Health Care Needs (OGPSHCN) reside in the Maternal and Child Health Bureau (MCHB) at the Maryland Department of Health and are referred to collectively as the MCH Program. These three offices share responsibility for MCH Block Grant development, implementation and evaluation.

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

Maryland's Maternal and Child Health Bureau (MCHB) includes a highly skilled and diverse team of public health professionals representing a variety of disciplines. This team plans, manages and monitors Title V activities for Maryland and supports a variety of MCH staff in local health departments, including a cadre of community health nurses, physicians, program administrators and clerical personnel, which are also supported by Title V funds. The Maternal and Child Health Bureau has four offices: the Office of the Maryland WIC Program (WIC); the Office of Family and Community Health Services (OFCHS); the Office of Genetics and People with Special Health Care Needs (OHPSCHN); and the Office of Quality Initiatives (OQI). The MCHB also collaborates and coordinates activities with other State agencies on health issues that affect women and children including immunizations, injury prevention, mental health care, medical assistance, oral health care, substance use disorder and smoking cessation.

An adequately prepared workforce is essential to building capacity to address MCH needs and to provide essential services. Key Title V staff are afforded opportunities to attend both national and state conferences and training that afford opportunities to acquire new skills and strengthen existing ones. Staff annually attend AMCHP, CityMatch and MCH Epidemiology meetings.

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

State Agencies

The Governor's Office for Children (GOC) is the coordinating unit for Maryland Governor's Children's Cabinet. The Children's Cabinet coordinates the child and family-focused service delivery system by emphasizing prevention, early intervention and community-based services for all children and families. The Children's Cabinet includes the Secretaries from the Departments of Budget and Management; Disabilities; Health; Human Services; and Juvenile Services; as well as the State Superintendent of Schools for the Maryland State Department of Education and the Executive Director of the Governor's Office of Crime Control and Prevention. The Executive Director of the Governor's Office for Children chairs the Children's Cabinet.

At the local level, GOC funds Local Management Boards (LMBs) in every jurisdiction. The LMBs are comprised of the local agency counterparts to the Children's Cabinet agencies, including local child-serving agencies, local child providers, clients of services, families and other community representatives to empower local stakeholders in addressing the needs of and setting priorities for their communities. The Boards serve as the coordinator of collaboration for child and family services. The LMBs conduct periodic needs assessment and this data is shared with Title V. Input from the LMBs is also more broadly sought by Title V on issues and needs impacting children and families in Maryland.

MDH shares responsibility for school health with the Maryland Department of Education (MSDE). MCHB coordinates with the MDH Office of School Health on school health issues. MSDE has lead responsibility for early childhood issues in Maryland with much of the work coordinated through an Early Childhood Advisory Council (ECAC). Other key child serving agencies include the Maryland Department of Human Resources (DHR), the Governor's Office for Crime Control and Prevention and the Department of Juvenile Services.

Title V is represented on the Governor's State Council on Child Abuse and Neglect. MCHB provides consultation and technical assistance on adolescent health and teen pregnancy prevention to the Department of Juvenile Services. The Medical Director for Reproductive Health represents the MDH Secretary on the Governor's Office of Crime Control and Prevention's Family Violence Council.

The Maryland Community Health Resources Commission (CHRC) was created by the Maryland General Assembly in 2005 to expand access to health care services in underserved communities in Maryland. MCHB collaborated with the Maryland Community Health Resources Commission to establish infant mortality reduction as a priority for Commission grants to safety net providers (primary FQHCs). MCHB provides technical assistance for review of proposals and has joined in site visits to grantees with Commission staff. CHRC and MDH also collaborated on implementation of the 2013 Health Enterprise Zone initiative focused on reducing health disparities in targeted Maryland communities.

MDH Agencies
Maternal and Child Health Bureau (MCHB) is one of five bureaus within the Prevention and Health Promotion Administration (PHPA). MCHB plays a major leadership role for maternal and child health issues across the Administration and its bureaus. Three of the four offices within MCHB: OFCHS, OGPSCHN, and OQI manage Title V Block Grant Funds. The fourth office, the Maryland WIC Program, works closely with the Title V agencies on several issues including preconception health, breastfeeding, nutrition and obesity prevention and family planning outreach.

MCHB collaborates with the Environmental Health Bureau (EHB) on several environmentally linked child health issues including birth defects, asthma and childhood lead poisoning. MCHB is represented on the Children’s Environmental Health Advisory Council which is staffed by EHB. EHB also includes the Center for Injury and Sexual Assault Prevention. MCHB coordinates with the Center on childhood injury prevention, intimate partner violence and child abuse and neglect. Title V’s adolescent health coordinator is a member of the Center’s Teen Distracted Driving Task Force and works with staff on violence prevention issues including bullying.

Local health departments are unique and key Title V partners who serve as important service delivery arms for many Title V activities. The Office of Population Health Improvement (OPHI), reporting directly to the Deputy Secretary for Public Health Services, oversees the State’s Health Improvement process as well as administering matching funds for core public health services to local health departments. MCHB partners with this Office to deliver vital maternal and child health services to jurisdictions throughout the State using Title V support.

The Behavioral Health Administration (BHA) which directs mental health and addiction activities for the State is an important Title V partner. Areas of partnership include early childhood mental health, youth suicide prevention, perinatal depression, perinatal substance abuse and Fetal Alcohol Spectrum Disorders (FASD). MCHB supports a Fetal Alcohol Coalition with assistance from BHA staff. Title V is represented on BHA’s Early Childhood Mental Health Steering Committee and the Governor’s Commission on Suicide Prevention. Maryland Title V is represented on the National Association of FASD State Coordinators.

MCHB collaborates with the MDH Office of Minority Health and Health Disparities (OMHDD) on infant mortality reduction as well as other overall reductions in disparate MCH outcomes. MCHB is a frequent presenter at the State’s annual health disparity conference sponsored by this Office.

The Vital Statistics Administration (data and surveillance) and the Office of the Chief Medical Examiner (child fatality, maternal mortality) are other major agency partners. MCHB staffs and oversees the State’s Child Fatality Review Team, the Maternal Mortality Review Committee as well as the Morbidity, Mortality, and Quality Review Committee (MMQRC), which includes representatives from Vital Statistics and the Office of the Medical Examiner.

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

Women’s and Maternal Health Care

The needs presented reflect the broader general priority areas which are most important for women and maternal health including: access to women’s and maternal health care, mental health, substance use, intimate partner violence, cesarean deliveries and maternal mortality and morbidity.

Access to Care
Maryland is a Medicaid Expansion state which has dramatically increased the proportion of insured to uninsured residents. Over the past four years, Maryland residents have enjoyed significantly higher rates of health care coverage, including private health insurance, prepaid plans such as HMOs, and government plans such as Medicare and Indian Health Service. Women have had slightly higher rates of coverage than men both within Maryland and nationally. Currently, about 95% of Maryland women have some type of healthcare coverage, compared with 91% nationally[1].
Maryland women are more likely to have visited a doctor for a routine checkup within the past year as compared to women nationally, a gap that is increasing as the national rate declines. Additionally, a higher percentage of Maryland women had a mammogram as compared with the national average (80% and 74.7%, respectively).

Mental Health

Maryland is ranked number 5 out of 51 (including Washington D.C.) for providing access to mental health services***[2].***
Approximately 20% of Maryland women have been diagnosed with a depressive disorder, including depression, major depression, dysthymia or minor depression. Nationally, about 23% of women were diagnosed with depressive disorder[3].

The mental health of Maryland women was consistent with the national trend in 2018, with more than half reporting zero days of poor mental health over a 30-day period. Both nationally and in Maryland, there has been a slight decrease in mental health since 2016[4].

Substance Use

In 2018, Females were dramatically less likely to die of drug- and alcohol-related intoxication death than their male counterparts (640 vs. 1,766, respectively). However, both genders are seeing an increasing trend. Non-Hispanic White individuals account for the greatest number of drug- and alcohol-related intoxication deaths, followed by Non-Hispanic Black individuals (1,479 vs. 823, respectively). Individuals 25-years and older made up the majority of drug- and alcohol-related intoxication deaths[5].
Since 2015, roughly half of Maryland women reported having an alcoholic drink in the past 30 days. Consistent with the national trend, approximately 5% of Maryland women reported having had more than seven drinks per week[6].

In 2018, women in Maryland reported smoking less frequently than the national trend (69.1% and 64.0 respectively). Approximately 30% of Maryland women reported smoking at least some days[7]. Since 2015, Maryland has had a slight decrease in the percentage of females who smoke every day. The percentage of Maryland women who have smoked at least 100 cigarettes in their lifetime remains at approximately 34%, consistent with the national trend[8].

In 2017, Fentanyl related deaths spiked and surpassed Heroin as number one, making up approximately 61% of opioid-related deaths. Prescription opioid related-deaths have remained consistent over the last decade and currently represent approximately 12% of opioid-related deaths[9].

Intimate Partner Violence

In 2017, 3.3% of Maryland women experienced interpersonal violence during the 12 months before pregnancy by a husband or partner and/or an ex-husband or partner compared with 3% nationally. This is an increase from 2.9% in 2016. Both differences are within the margin of error. 2.9% of Maryland women experienced interpersonal violence during pregnancy by a husband or partner and/or an ex-husband or partner, up from 2.2% in 2016, although this difference is also within the margin of error[10].

Low-Risk Cesarean Deliveries

Low-risk cesarean deliveries varied by counties in 2018, with a range from roughly 16% to roughly 33%. Baltimore County and Somerset County represented the highest percentage of low-risk cesarean deliveries, while Kent County and Talbot County represented the lowest.

Furthermore, low-risk cesarean deliveries also varied by race and ethnicity. In 2018, Black non-Hispanic women were most likely to receive a low-risk cesarean delivery, whereas Hispanic women were least likely[11].

Maternal Mortality and Morbidity

A five-year average is used to assess Maryland’s MMR because there are a small number of maternal deaths and that number may vary widely from year to year, particularly in a small state like Maryland. Although the Maryland MMR has been higher than the national average historically, from 2011 to 2015 the Maryland MMR was slightly lower than the national rate for the first time.

The MMR rates for 2012-2017 show that the Maryland MMR is 23.0 deaths per 100,000 live births. This is significantly less

than the national rate of 28.4. Between the two 5-year periods, the U.S. MMR increased by 37.2 percent whereas the Maryland rate decreased by 7.6 percent. Both, however, remain above the Healthy People 2020 Objective of 11.4 maternal deaths per 100,000 live births.

Nationally, Black women have an MMR that is 2.4 times higher than that of White women, a disparity that has persisted since the 1940s. In Maryland, the MMR for white women decreased by 6.4% in the period since 2007-2011, whereas the MMR for Black women increased by 7.6%, exacerbating the racial disparity. The 2012-2016 Black MMR is 3.7 times the White MMR. Given this racial disparity, it appears that the recent decrease in Maryland's MMR is attributable solely to the decrease in the White MMR.

Findings from Key Informants

The most common stated barrier to women's and maternal health is access. Several key informants stated that access issues include access to OBs for their prenatal care, specifically high-risk OB, which is hindered by the number of providers, transportation and travel, insurance eligibility and immigration status among other things. Some key informants also alluded to a lot of unmet social needs, such as a lack of stable, safe, and affordable housing, food insecurity and a lack of education that include health and financial literacy.

Several key informants mentioned that among the immigrant population, there may be low literacy rates and limited English skills. A lack of interpretation presents challenges to receiving adequate prenatal care. Furthermore, one key informant reported that when immigrants come into the country pregnant, they often have no history of prenatal care. In some cases, these women come to the county during the late stages of their pregnancy. Additionally, cultural reasons were also given, such as a lack of trust in the provider and the role of the woman in the culture; some women may not be comfortable traveling to an appointment without their husbands. The lack of trust in the provider can stem from a lack of continuity from prenatal care to delivery as well as being afraid of signing any papers. When asked if these barriers differ for families with low-income and for families of color, many key informants agreed that these barriers are increased for both groups. Many key informants reported that racism affects the healthcare received by women of color and that they are not treated equally due to the systematic biases.

Perinatal and Infant Health

The priorities and concerns for this population include prenatal care, preterm birth, low birthweight and very low birthweight, infant mortality, risk-appropriate perinatal care, breastfeeding, smoking in pregnancy and safe sleep.

Prenatal Care

Maryland women are more likely to have private insurance for prenatal care as compared with women nationally and less likely to have Medicaid that covers their prenatal care. Maryland women are slightly more likely than the national average to have no insurance[12].

Preterm Birth

In 2018, 1 of every 10 infants born in the United States was premature. From 2007 to 2014, preterm birth rates decreased, in part due to declines in the number of births to teens and young mothers. However, preterm birth rates rose for the fourth straight year in 2018[13]. Globally, preterm birth complications are the leading cause of death among children under the age of 5 years[14].

Over the last decade, Maryland has consistently remained at approximately 10% for preterm birth rates. While the national trend is more downward than that of Maryland, it remains higher. In 2018, Maryland reported 1.4% less preterm births than the national average.

When looking at preterm birth rates by race and ethnicity, the largest percentage of preterm births is for Black babies (12.9%). Hispanic babies represented the second highest for preterm birth rates (9.3%). Maryland's racial and ethnic disparity is consistent with what is seen nationwide, where in 2018 Black women had a 50% higher rate of preterm birth than

White women[15].

Low Birthweight and Very Low Birthweight

The incidence of low birth weight infants was 8.9% in 2018, which represented no change from the 2017 rate. Maryland's percentage of low birth weight infants has remained consistent over the last decade, with a slightly higher percentage than the national average.

When looking at low birth weight and very low birthweight by race and ethnicity, non-Hispanic Black infants represented the largest percentage (12.5% and 2.9%, respectively), while Hispanic infants and non-Hispanic White infants were comparable at 6.9% and 6.8%, respectively for low birth weight, and 1.2% and 1.1% respectively for very low birth weight. Maryland's racial and ethnic disparity is consistent with the national averages for all three groups[16].

Infant Mortality

The leading causes of infant death in 2018 were low birth weight, congenital abnormalities, Sudden Infant Death Syndrome, maternal complications of pregnancy, and cardiovascular disorders. The total number of infant deaths declined between 2017 and 2018, from 462 to 432, along with the number of births. In 2018, Maryland's infant mortality rate was 6.1% per 1,000 live births, a 6% decline compared with 2017, which represents the lowest rate ever recorded in Maryland. The neonatal mortality rate and post neonatal mortality rates both declined slightly between 2017 and 2018 as well. The neonatal mortality rate was 4.2 per 1,000 live births compared to a rate of 4.4, while the post neonatal mortality rate was 1.9 per 1,000 live births compared to a rate of 2.0.

Although the average infant mortality rate has fallen by 4% in Maryland over the last decade, with an 8% decline for Non-Hispanic Black infants and a 2% decline for Non-Hispanic White infants, the Hispanic infant mortality rate has unfortunately increased by 15%. There were 231 (10.2%) deaths among infants born to non-Hispanic Black women, 123 (4.1%) deaths among infants born to non-Hispanic White women, 47 (3.8%) deaths among infants born to Hispanic women, and 25 deaths among infants born to non-Hispanic Asian women. The neonatal mortality rate by race and ethnicity was 2.6 among non-Hispanic Whites, 6.9 among non-Hispanic Blacks and 2.9 among Hispanics. The Hispanic rate decreased by 17.1% from 2017 to 2018. The post neonatal mortality rate was 1.5 among non-Hispanic Whites, 3.3 among non-Hispanic Blacks and 0.9 among Hispanics. The Hispanic rate decreased by 18.2% between 2017 and 2018.

Risk-Appropriate Perinatal Care

In 2018, 79.2% of very low birthweight (VLBW) infants were born in a level III or higher NICU, which represents an increase of approximately 1% since 2017. Maryland saw its highest percentage of VLBW infants with level III or higher NICU in 2013 (82.8%) and saw a negative trend until 2018[17].

Non-Hispanic Black VLBW infants and Hispanic VLBW infants are seen by level III or higher NICU's less often (77.2% and 77.7%, respectively) than non-Hispanic White VLBW infants and other non-Hispanic VLBW infants (82.3% and 85.0%, respectively). This is consistent with the national trend.

Breastfeeding

In 2016, the most recent year for which data are available, Maryland was slightly above the national average for infants ever breastfed (84.1% and 83.8%, respectively). Both nationally and in Maryland, there is an upward trend for infants ever breastfed, apart from 2015, where Maryland saw a spike of 91.0% infants breastfed before falling slightly in 2016.

Smoking in Pregnancy

In Maryland, 5.2% of pregnant women smoked during pregnancy. White non-Hispanic women were more likely to smoke during pregnancy, followed by Black women. Women who received Medical Assistance were more likely to smoke during pregnancy than those with other kinds of coverage. In the county with the highest rate of smoking during pregnancy, Allegany County, almost one in four pregnant women smoked in 2018[18].

Safe Sleep

In 2017, Maryland reported an increase in the percentage of infants placed to sleep on their backs (78.2%) but has a rate which is less than the national average of 79.8%.

Maryland reported an increase in the percentage of infants placed to sleep on a separate approved sleep surface (29%), which was approximately 4% lower than the national average. With regard to the percentage of infants placed to sleep without soft objects or loose bedding, Maryland reported an increase of 51.6%, which is higher than the national average[19].

Findings from Key Informants

When key informants were asked about perinatal and infant health, many stated that infant health is based on the level of care of their parents, where there are disparities for families of color and families of low-income. Key informants reported that safe affordable housing, mental health, presence of sickness and illness, access to transportation and childcare largely contribute to perinatal and infant health.

Several key informants highlighted a lack of safe, affordable and stable housing. Due to this lack of adequate sleeping space for a crib, this may lead to multiple people sharing a bed, which can then lead to unsafe sleep practices and suffocation.

Key informants expressed that racial disparities and income status are heavily present when it comes to gaps and barriers to breastfeeding. One key informant stated that there is a lack of cultural support for breastfeeding. Several referenced the cruel legacy of American slavery, which may have left an association of breastfeeding with the forced breastfeeding of slave owners' children. Another key informant mentioned that women in lower-paying jobs are often not allowed to take adequate time to pump their milk at work.

Child Health

The priorities and concerns for this population include immunizations, medical home approach, and injury hospitalizations.

Immunizations

Immunization of young children is a positive predictor of avoidance of illness, death, disability, or developmental delays associated with immunization-preventable diseases. Maryland's immunization rates are higher than the national average for children aged 19 through 35 months. For 2019, Maryland's immunization rate was 75.2%, well above the national rate of 70.4%[20]. The Healthy People 2020 Goal for Immunizations is 90%. During the COVID-19 pandemic, childhood immunizations have decreased compared to the year before. In April 2020, there was a 46% decrease in immunizations compared to April 2019[21].

Medical Home Approach

The Medical Home, also known as Patient or Family Centered Medical Home, is an approach to providing comprehensive primary care that facilitates partnerships between patients, clinicians, medical staff, and families. In 2018, Maryland saw a reduction in the percentage of children with and without special health care needs, ages 0 through 17, who met the criteria for having a medical home. With both populations, Maryland's percentage was higher than the national average (50.6% vs. 42.7% and 49.7% vs. 49.4%, respectively)[22].

Injury Hospitalizations

In Maryland, the rate of injury hospitalizations is measured by the number of hospital admissions among children ages 0 through 9 years with a diagnosis of unintentional or intentional injury. This rate excludes readmissions for the same event. Changes in injury hospitalization coding from ICD-9 to ICD-19 in October 2015 may have influenced the number of child injuries in these years. Furthermore, data reflects Maryland residents in Maryland hospital only.

In 2018, the rate of injury hospitalizations for ages 0 through 9 and for ages 10 through 19, non-Hispanic Black children had

a higher rate than other racial and ethnic groups (40.8% and 69.8%, respectively). The methodology used to identify race in HSCRC files changed in 2013, so differences in outcomes by race before and after 2013 may be due to data collection.

Findings From Key Informants

Several key informants discussed challenges associated with developmental screenings. Many highlighted that there is a lack of knowledge of resources out there, a lack of providers and other personnel and a lack of trust. Furthermore, there is a lot of stigma associated with diagnoses that cause fear for the parents.

Many key informants felt that a true Medical Home is not available for most due to a lack of funding and reimbursement, a lack of physician and other medical personnel time, a lack of care coordination and an overall lack of understanding.

Adolescent Health

The priorities and concerns for this population include overweight/obesity and physical activity, mental health, substance use, teen pregnancy and reproductive/sexual health, and medical transition to adult care.

Overweight/Obesity and Physical Activity
In 2017, Maryland's obesity rate for 10-17-year-olds was 14.5%, a decrease from 15.7% in 2016. This was slightly below the national obesity rate of 15.3%[23]. Maryland was below the US average with obesity, overweight and adolescents describing themselves as either slightly or very overweight. Among Maryland high school students, 27.1% described themselves as overweight, as compared with 31.5% nationally and 12.6% had obesity, as compared with 14.8% nationally. A similar percentage were overweight (15.2% vs. 15.6%, respectively.)

In 2017, 21.6% of Maryland high school students reported not being physically active (any kind that increased their heart rate and made them breathe hard some of the time) for a total of at least 60 minutes on at least one day during the last seven days, higher than the national average of 15.4%. Similarly, 64.8% reported not being physically active at least 60 minutes on five or more days, higher than the average of 53.5%. 82.1% reported not being physically active at least 60 minutes on all 7 days, higher than the national average of 73.9%. 84.7% of Maryland high school students reported not going to PE classes on all 5 days, almost 15% higher than the national average.

Non-Hispanic Black and Hispanic adolescents reported not being physically active for at least 60 minutes at least one day the most (27.4% and 26.6%, respectively).

Mental Health
Depression is a leading risk factor for suicide among high school students residing in Maryland. According to the 2017 YRBSS, 29.9% of Maryland high school students felt so sad or hopeless for two or more weeks in a row that they stopped doing usual activities. While slightly lower than the national average, this is an increase since 2007. Females were more likely to report feeling sad or hopeless than their male counterparts (38.7% and 21.0%, respectively). Hispanic adolescents were more likely to report feeling sad or hopeless than other races and ethnicities (37.2%).

Almost one in five Maryland high school students (17.3%) seriously considered attempting suicide in the last 12 months, consistent with the national average at 17.2%. The rate was higher for females than their male counterparts (21.8% and 12.4%, respectively).

Substance Use
According to the 2017 YRBSS, 8.2% of Maryland high school students reported currently smoking cigarettes, compared with 8.8% nationally. Males were more likely than their female counterparts to report smoking cigarettes (9.3% and 6.3%, respectively). 13.3% of Maryland high school students reported currently using electronic vapor products, compared with

13.2% nationally. Again, males were more likely than their female counterparts to report smoking electronic vapor products (14.0% and 12.1%, respectively). 6.2% of Maryland high school students reported currently using smokeless tobacco, compared with 5.5% nationally. Males reported using smokeless tobacco at a rate more than double of their female counterparts (8.3% and 3.2%, respectively). 9.0% of Maryland high school students reported currently smoking cigars, compared to 8.0% nationally. Males again reported higher rates of cigar smoking than their female counterparts (10.9% and 6.3%, respectively). 12.9% of Maryland high school students reported currently smoking cigarettes or cigars, compared to 12.3% nationally. Males were more likely than females to smoke cigarettes or cigars (14.9% and 9.9%, respectively).

Among Maryland middle school students, 7.9% said they had tried cigarette smoking (even one or two puffs) and 1.3% had smoked cigarettes on at least one day during the 30 days before the survey. Of those students who had smoke in the past 30 days, 12.3% smoked more than 10 cigarettes per day on the days they smoked. Almost one in five Maryland middle school students (18.4%) have used an electronic vapor product (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens).

According to the 2017 YRBSS, 25.5% of Maryland high school students reported currently drinking alcohol, compared with 29.8% nationally. Females were more likely than their male counterparts to report drinking alcohol (28.6% and 22.2%, respectively). 18.4% of Maryland high school students reported currently using marijuana, compared with 19.8% nationally. Again, females were more likely than their male counterparts to report using marijuana (19.0% and 17.6%, respectively). 23.5% of Maryland high school students reported instances of being offered, sold or given an illegal drug on school property, which is higher than the national percentage at 19.8%. Males reported higher instances than their female counterparts (24.6% and 22.2%, respectively).

Teen Pregnancy and Reproductive/Sexual Health

According to the 2017 YRBSS, 22.1% of Maryland high school students reported currently being sexually active, compared with 28.7% nationally. Females were slightly more likely to be sexually active than their male counterparts (22.2% and 21.8%, respectively). 43.1% of Maryland high school students reported not using a condom during their last sexual intercourse, compared with 46.2% nationally. Almost half of females reported not using condoms, while roughly one third of males reported not using a condom (49.3% and 35.8%, respectively).

Medical Transition to Adult Care

According to the 2017-2018 National Survey of Children’s Health, 15.3% of children received services necessary to transition to adult health care, compared with 14.2% nationally. 21.6% of children and youth with special health care needs received services necessary for transition to adult health care, compared with 18.9% nationally.
In looking at Maryland adolescents without special health care needs who received transition services by race and ethnicity, there was a slight difference in rate between non-Hispanic White and non-Hispanic Black, where non-Hispanic Black adolescents received transition services more often.

Findings From Key Informants

Key informants agreed that well-check visits are low for this population, with many reporting that families focus on bringing their children in for immunizations and start to taper off with their adolescents. Challenges to successful transition included a lack in adult providers and specialty providers, long waitlists, a lack of pediatric training on transition, a lack of family training on transition and a lack of trust with a new provider.

Children and Youth With Special Health Care Needs

According to the 2017-2018 National Survey of Children’s Health, Maryland reported that 19.2% of children ages 0 through 17 are CYSHCN, compared with 18.5% nationally.

Among Maryland children 0-5 years of age, 5.4% have been identified as having special health care needs, as compared to 10.3% nationally, almost double the Maryland percentage. For children 6-11 years of age, 20.8% have been identified as having special health care needs, consistent with the national average of 20.6%. For adolescents ages 12-17 years, 29.8%

have been identified as having special health care needs, which is higher than the national average at 24.2%.

Racial and Ethnic Disparities In CYSHCN

The social determinants of health, including poverty, racial and ethnic disparities and geographic disparities continues to have an impact on the health care of CYSHCN.

About 20% of non-Hispanic White children have been identified as having special health care needs in Maryland and nationally. However, 16.2% of non-Hispanic Black children have been identified as special needs, compared to 24.9% of non-Hispanic Black children nationally. In contrast, Maryland has identified an estimated 23.5% of Hispanic and 20.8% of “other” children as special needs, as compared with national rates of 15.5% and 15.7%, respectively.

Among children in Maryland, an estimated 7.6% of those who speak a language other than English have been identified as children with special healthcare needs, as compared with 21.0% of English-speaking children. According to the 2018 National Survey of Children’s Health, 6.5% of non-Hispanic White CYSHCN were reported to currently be receiving services to meet developmental needs, whereas Hispanic and non-Hispanic Black CYSHCN was roughly half of that (3.5% and 3.0%, respectively). “Other” CYSHCN were reported to be currently receiving services the most at 9.3%.

The priorities and concerns for Children and Youth With Special Health Care Needs include quality of care, developmental screening for special health care needs, medical home, and services needed to transition to adulthood.

Quality of Care

According to the 2018 National Survey of Children’s Health, 4.3% of Maryland CYSHCN ages 0-5 years old are receiving services to meet developmental needs. Similarly, 9.2% of CYSHCN ages 6-11 years old and 2.5% of CYSHCN ages 12-17 years old are receiving services to meet developmental needs.

Less than one in ten, 8.3%, of Maryland children with special health care needs were reported to be receiving care in a well-functioning system, significantly below the national percentage of 13.9%[24].

Developmental Screening for Special Health Care Needs

In 2018, according to the National Survey of Children’s Health, 39.3% of Maryland children, ages 9-35 months, received a developmental screening using a parent-completed screening tool during the last year, higher than the national percentage of 35.2%. While the national trend is increasing, Maryland saw a peak in 2016 (43.0%), however Maryland’s trend has increased from 2017 at 29.8%.

Medical Home

See the Medical Home section in Child Health for more information on Maryland residents’ access to the medical home approach.

According to the National Survey of Children, 44.9% of CYSHCN in Maryland received coordinated, ongoing, comprehensive care within a medical home, compared to 42.1% nationally. The national trend has remained relatively consistent since 2016, whereas Maryland has seen a decrease since both 2016 and 2017 (57.8% and 54.9%, respectively).

In 2018, 83.0% of Maryland children with more complex special health care needs reported having at least one personal doctor or nurse, while 79.5% of Maryland children with less complex special health care needs reported having at least one personal doctor or nurse. Both percentages reflect a rate higher than for children with no complex special health care needs at 71.9%.

Services Needed to Transition to Adulthood

In 2018, according to the National Survey of Children’s Health, 21.6% of adolescents with special health care needs received services to transition to adult health care. This percentage is higher than the national average of 18.9% and reflects an increase from 2017 (16.2%).

Findings From Key Informants

Children and youth with special health care needs experience the same challenges as their neurotypical counterparts, with the added stress of more appointments and specialty care. A few key informants reported that families may have to travel far distances, such as to Johns Hopkins, because providers in the area may not have the expertise. Some key informants reported a shortage of respite services in Maryland. Without respite services, day to day activities are difficult for families and can lead to family structures breaking down, which can directly hinder health outcomes.

Many key informants reported that it can be challenging to identify adult providers who are comfortable with individuals who have complex health care needs. Families of children and youth with special health care needs are often reluctant to seek adult health care because they may not trust that the adult physician is knowledgeable enough. A few key informants said that physicians are not listening to families of children and youth with special health care needs.

Cross-Cutting or Life Course

The priorities and concerns across the life course include COVID-19, adequate insurance, oral health care, and smoking in households.

COVID-19

On March 30, 2020, Maryland's Governor Larry Hogan, issued a stay-at-home order. Since then, Maryland has experienced 92,426 confirmed cases and 3,402 deaths as of August 5, 2020. Many stakeholders have commented that COVID-19 has affected families and communities. Since April 2020, according to the Department of Labor Claims, 660,142 Maryland residents have applied for unemployment insurance. [25]

Adequate Insurance

According to the National Survey of Children's Health, 73.2% of parents reported that children, ages 0 through 17 years, were adequately insured in 2017-2018, which is consistent with 2016-2017. Maryland remains higher than the national average at 67.5%. There was virtually no racial disparity in access. Non-Hispanic Black children were reported to be adequately insured the most at 75.1%, compared with non-Hispanic White children who were reported as the least adequately insured at 71.9%.

Oral Health Care

According to the Pregnancy Risk Assessment Monitoring System (PRAMS), 52.6% of pregnant women received a preventive dental visit during pregnancy in 2017, higher than the national average of 46.3%. The rate of pregnant women receiving preventive dental visits has remained somewhat consistent, despite the peak rate in 2014, and has increased slightly since 2015.

Likewise, during the 2017-2018 year, 81.5% of children ages 1 through 17 were reported to have had a preventive dental visit in the last year, compared with 79.7% nationally. This percentage represents a slight drop since 2016-2017, where Maryland reported 83.1%[26].

Smoking in Households

According to the National Survey of Children's Health, in 2017-2018, 12.1% of children were reported to live in households where a member smokes, compared with 14.9% nationally. Maryland has remained almost consistent since 2016-2017, where the percentage was slightly more at 12.9%.

Findings from Key Informants

Key informants reported that adequate insurance is hindered mostly due to financial burden and immigration status. Key informants stated that many people and families are underinsured due to the cost of health insurance, which means that

their insurance does not cover the level of care needed. One key informant mentioned a middle-income level gap, where a family may not qualify for Medicaid, but the cost is too high to get adequate coverage. Undocumented residents do not qualify for Medicaid or subsidies through the Health Exchange, leading to health care being prohibitively expensive for many among this population.

A few key informants said that vaping is a problem. One key informant reported that low-income individuals may have a hard time with the affordability of smoking cessation options, while another key informant stated that when it comes to smoking cessation it is a “lack of desire, not a resource issue.”

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[2] https://www.mhanational.org/issues/ranking-states
[3] BRFSS 2018
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[5] Unintentional Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2018, Maryland Department of Health https://bha.health.maryland.gov/Documents/Annual_2018_Drug_Intox_Report.pdf
[6] BRFSS, 2015-2018
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[10] Prevalence of Selected Maternal and Child Health Indicators for Maryland, Pregnancy Risk Assessment Monitoring System (PRAMS), 2016-2017
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[13] https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm
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[16] https://www.marchofdimes.org/complications/low-birthweight.aspx
[17] Maryland Vital Statistics Administration
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[19] Pregnancy Risk Assessment Monitoring System (PRAMS)
[20] National Immunization Survey
[21] Maryland Immunet
[22] National Survey of Children’s Health
[23] 2017 Youth Risk Behavior Surveillance System (YRBSS)
[24] Child and Adolescent Health Measurement, 2017-2018
[25] Department of Labor Claims https://oui.doleta.gov/unemploy/claims.asp
[26] National Survey of Children’s Health

III.D. Financial Narrative

	2018		2019	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$12,774,056	$11,762,222	$11,673,326	$11,673,326
State Funds	$9,712,435	$9,712,435	$8,754,995	$8,754,995
Local Funds	$0	$0	$0	$0
Other Funds	$0	$0	$0	$0
Program Funds	$0	$0	$0	$0
SubTotal	$22,486,491	$21,474,657	$20,428,321	$20,428,321
Other Federal Funds	$126,029,712	$117,178,515	$128,630,107	$128,949,674
Total	$148,516,203	$138,653,172	$149,058,428	$149,377,995

	2020		2021	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$11,673,326	$11,850,506	$11,673,326	
State Funds	$8,754,995	$8,887,880	$8,754,995	
Local Funds	$0	$0	$0	
Other Funds	$0	$0	$0	
Program Funds	$0	$0	$0	
SubTotal	$20,428,321	$20,738,386	$20,428,321	
Other Federal Funds	$117,178,515	$87,533,536	$118,199,750	
Total	$137,606,836	$108,271,922	$138,628,071	

	2022	
	Budgeted	Expended
Federal Allocation	$11,850,506	
State Funds	$8,887,880	
Local Funds	$0	
Other Funds	$0	
Program Funds	$0	
SubTotal	$20,738,386	
Other Federal Funds	$111,489,625	
Total	$132,228,011	

III.D.1. Expenditures

In SFY 2020, the Maryland joint federal-state Title V program expended $20,738,386 for services and activities to promote the health of women, infants, and children including those with special health care needs (Form 2). Federal expenditures amounted to $11,850,506 and included the required 30-30-10 funding obligation to primary and preventive services for children, children with special health care needs, and Title V administrative costs. The 30-30-10 requirement in SFY 2020 was met with 31.9% of federal funds expended for preventive and primary care services for children, 49.2% expended for children with special health care needs. Less than four percent of federal funds were used for Title V administrative costs.

With regards to the MCH pyramid, federal SFY 2020 funds supported direct services ($4,672,948), enabling services ($5,510,797), and public health services and systems ($1,278,619).

The $4,672,948 in direct services represents direct medical care for CYSHCN including medical day care, Children's Medical Services, and genetic services. Additionally, direct services were provided to pregnant people, and people with infants up to one year through local health department reproductive health clinics, and mental health services to elementary school children.

Enabling service expenditures during SFY 2020 included services for families, children, and pregnant people such as :

- Case management and care coordination services to pregnant people, high risk infants, children with elevated blood lead levels, children in the Infants and Toddlers Program, and children and youth with special health care needs;
- Reproductive health services to people of childbearing age;
- Home Visiting services;
- Referrals of adolescents and women of childbearing age to dental care, tobacco cessation, substance use treatment, and/or mental health care; and,
- Health education to parents and families around infant/child health topics including safe sleep, breastfeeding, primary care, developmental screening, oral health, tobacco and substance use, and exposure to secondhand smoke.

Enabling service expenditures also comprised services for CYSHCN including linking families with state and local resources for their children, family navigation and health education through Parents' Place of Maryland, funding to specialty health care institutions to enhance medical home services and to incorporate transition readiness assessments/tools, and care coordination related to newborn screening results.

Public health services and systems expenditures primarily targeted supporting perinatal infrastructure projects such as the Perinatal Support Program, Perinatal Quality Collaborative, Perinatal Transport Services, and public health infrastructure activities such as Child Fatality Review, and Maternal Mortality Review.

Maryland expended $8,887,880 in matching funds in SFY 2020 exceeding its required 1989 Maintenance of Effort match of $8,262,484. Direct services ($4,788,662), enabling services ($1,481,597) and public health services and systems ($2,617,621) comprised the totality of matching fund expenditures.

Direct service expenditures supported gap filling reproductive health services through state funded family planning clinics across the state.

Enabling expenditures included grants to local jurisdictions to provide home visiting for high risk pregnant women and infants as well as asthma and immunization care coordination, state health department staff who provided care coordination for CYSHCN, and reproductive health services to women, adolescents, and others.

Public health services and systems included local oversight of Fetal and Infant Mortality Review and Child Fatality Review activities in each jurisdiction, awards to organizations to implement policy changes to enhance systems of care for pregnant women and infants and state health department staff who provide epidemiology and data support, provide oversight to women's and infant health initiatives (Babies Born Healthy), coordinate specific adolescent health activities, and coordinate CYSHCN activities related to systems development.

III.D.2. Budget

Maryland's Maternal and Child Health Block Grant supports vital programs and services for women, children, including those with special health care needs, and adolescents throughout Maryland. The Title V Program is jointly administered by the Maternal and Child Health Bureau and the Office of Genetics and People with Special Health Care Needs. Funding is also provided to all 24 local health department programs to support MCH populations.

Maryland's projected Title V budget for SFY 2022 is $20,738,386 , including $11,850,506 in federal funds and $8,887,880 in state funds. This match amount exceeds the FY 1989 maintenance of effort requirement of Sec. 505 (a) (4) and represents the required match of $3 of state funds for every $4 of federal funds.

Throughout the funding period (state fiscal year), Title V funds are monitored to ensure that the funding levels adhere to the "30-30-10" Title V requirement. For SFY 2022, it is proposed that federal funding will be distributed accordingly: 31.9% for preventive and primary care for children, 36.9% for CYSHCN, and 3.9% for administration. Remaining funds (27.3%) will support services for pregnant women and mothers with infants up to one year. By level of the MCH pyramid, it is proposed that the projected federal funding level of $11,850,506 will be distributed as follows: approximately $3,100,00 for direct services; approximately $6,900,00 for enabling services; and approximately $1,700,00 for public health services and systems.

For SFY 2022, a total of $4,493,000 in federal funding is budgeted for the 24 local health departments throughout the state to provide services in one of three domains: 1) pregnant women and mothers with infants up to one year; 2) child health services; and 3) children and youth with special health care needs. Allowable services under each domain include:

Title V Health Domains	Allowable Services
Primary and Preventive Child Health Services	• Hearing and Vision Screening • School Based Health Services including screening and referral for mental health and/or substance use • Immunizations • Childhood Asthma Related Programming/Services *(new for FY 2022)*
Primary and Preventive Health Services for Pregnant Women, Mothers, and Infants up to one year	• Home Birth Certification • Home Visiting • Care Coordination for Pregnant or Recently Post-Partum People *(new for FY 2022)*
Children and Youth with Special Health Care Needs	• Care Coordination for CYSHCN • Infants and Toddlers • Lead Case Management

Funded services represent primarily enabling and public health systems services. A change for SFY 2022, the

removal of family planning/reproductive health services as an allowable service, will dramatically reduce the level of direct services provided through the local health departments.

In SFY 2022, a total of $3,790,573 in federal funds is budgeted to support preventive and primary care programs and services for children and adolescents. These funds will support activities that promote and protect the health of Maryland's children and adolescents by assuring that comprehensive, quality preventive and primary services are accessible, and will include school based health services which include both wellness and behavioral health services, hearing and vision screening, immunizations, promotion of child development screenings, asthma programming/services, and promotion of access to a medical home.

In SFY 2022, a total of $4,375,345 in federal funds is budgeted for programs and services to address the needs of CYSHCN. Activities and strategies will include:

- Children's Medical Services Program which provides specialty care and related services for uninsured and underinsured children who meet the medical and financial eligibility criteria;
- Genetic Services which provides funds for a statewide system of clinical genetic services, including infrastructure support for genetics centers, Sickle Cell Disease clinics, and specialized biochemical genetics laboratory services;
- Birth Defects Reporting and Information System (BDRIS) which collects data on birth defects to conduct surveillance for changes in trends that could be related to environmental hazards, and provides families with information and referrals;
- Medical Day Care for CYSHCN which provides Medical day care programs for medically fragile infants and young children;
- Local Health Department Grants that support services for CYSHCN such as gap-filling care coordination, outreach, information/referral, dissemination of resource information, and needs assessment activities;
- Parent Involvement Activities; and,
- CYSHCN Systems-Building Activities including grants to specialty health care systems to support resource liaisons and policy/systems changes.

Total Children's Medical Services (CMS) expenditures for SFY 2020 were significantly greater than projected total expenditures based on extrapolation of FY 2018-2019 data. Current projections of SFY 2021 data suggest the FY 2020 total may be an outlier. Nevertheless, strategies to contain CMS expenditures, all of which are for direct services, received a considerable level of internal discussion during SFY 2021, and these discussions will continue in SFY 2022. At the same time, the COVID-19 pandemic prompted extension of CMS participant eligibility and total enrollment is currently approaching a 20 percent increase from baseline. This and other factors have proven an operational challenge for CMS and addressing this challenge will likely take precedence in SFY 2022.

During FY 2022, the $8,887,880 proposed state match will be used to support direct services, enabling services, and public health services and systems across all three population domains . Matching funds will support the following activities and strategies:

- Surveillance and quality initiative grants in every jurisdiction to support local Child Fatality Review and Fetal and Infant Mortality Review teams working to review and prevent infant and child deaths;
- Babies Born Healthy grants to jurisdictions to reduce infant mortality and eliminate racial disparities in birth outcomes;
- Promotion of infant breastfeeding through hospital support;
- Prenatal support groups through Babies Born Healthy grants;
- Child abuse and neglect education and support for health care providers; and,

- Medical Day Care for CYSHCN which provides funding for medical day care programs for medically fragile infants and young children.
- Additional maternal and child health initiatives through the Statewide Integrated Health Improvement Strategy

III.E. Five-Year State Action Plan

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

State: Maryland

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

The Title V program is administered by the **Maternal and Child Health Bureau** (MCHB)**, Prevention and Health Promotion Administration** (PHPA)**, Public Health Services** at the **Maryland Department of Health** (MDH). Current leadership includes:

Maternal and Child Health Bureau:
Shelly Choo, MD, MPH, Director and Title V State Director
Alena Troxel, MPH, Deputy Director

Prevention and Health Promotion Administration:
Donna Gugel, MHS, Director
Courtney McFadden, MPH, Deputy Director

Public Health Services:
Jinlene Chan, MD, MPH, FAAP, Deputy Secretary

Maryland Department of Health:
Dennis Schrader, Secretary

Title V which is located within the Maternal and Child Health Bureau is managed by Colleen S. Wilburn, MPA.

Within the Maternal and Child Health Bureau, there are five operational units:

The **Office for Genetics and People with Special Health Care Needs (OGPSHCN)** is directed by Jed Miller, MD, MPH. Dr. Miller also serves as the State Title V Children with Special Health Care Needs Director. The OGPSHCN manages the Children's Medical Services Program, the Early Hearing Detection Program, the Newborn Screening Follow-up Program, the Genetics Services Program, and the Systems Development branch. These programs provide comprehensive support to individuals with special health care needs throughout the life course. Stacy Taylor serves as the Deputy Director and is the State Family Leader.

The **Office of the Maryland WIC Program (OMWIC)** is directed by Jennifer Wilson, M.Ed. The OMWIC is the State's supplemental nutrition program for women, infants, and children age 0-5. This federally-funded program provides healthy supplemental foods and nutrition counseling and has served the State of Maryland for more than 40 years. Strong collaboration between WIC and Title V helps to ensure that comprehensive nutrition counseling and services are provided to eligible participants.

The **Office of Quality Initiatives (OQI)** was directed by Maisha DouyonCover, MPH until May of 2021. This office oversees Title V efforts regarding infant mortality, maternal mortality and morbidity, the Maryland Child Abuse Medical Provider Network, Fetal Infant Mortality Review, Child Fatality Review, PRAMS, and other special projects of statewide maternal and child health importance. Additionally, this office contains MCHB Epidemiologists and oversees the SSDI initiative. Such special projects provide support to ensure infrastructure and population based initiatives are targeted to Title V populations throughout the State.

The **Office of Family and Community Health Services (OFCHS)** was directed by Melissa Beasley until July 2021. This office is charged with the management and oversight of the State's Title X Family Planning program as

well as the Maternal, Infant and Early Childhood Home Visiting (MIECHV) program, PREP, and SRAE, along with various other child and adolescent health initiatives. These programs provide both direct, enabling, and population-based services across the state to Title V eligible individuals with access to quality services aimed at improving health outcomes.

The **Office of Operations** is directed by a Chief Operating Officer, which is currently vacant. This office administers grants to the local health departments, federal grants to OFCHS, OQI, and OGPSHCN, and administers contracts and Memorandum of Understandings. The Office of Operations coordinates with the four other offices on Procurements and Inventories.

These five offices work in collaboration to improve the health and well-being of all Marylanders, including those eligible for Title V services through the life course. Using data from the most recent Title V Needs Assessment along with frequent data analysis, program evaluation and feedback from consumers as well as providers across the state, these offices work diligently to improve the health outcomes of women, infants, children, adolescents, and children/youth with special health care needs.

In addition to the MCHB, Title V provides support, outreach, and subject matter expertise on MCH populations and needs across all of PHPA's administrative bureaus: the Environmental Health Bureau, the Cancer and Chronic Disease Bureau, Infectious Disease Epidemiology and Outbreak Response Bureau and the Infectious Disease Prevention and Health Services Bureau. While these respective bureaus have a variety of programs and populations, ongoing collaborations with Title V ensure that their evidence-based and/or evidence-informed programs are well-versed in current maternal and child health care needs and are inclusive in their design and implementation in order to provide strong supports to Title V eligible populations. Examples of programs overseen by these bureaus include, but are not limited to injury prevention, oral health, cancer screening and prevention, tobacco prevention and control, chronic disease prevention, immunizations, human immunodeficiency virus prevention and health services and sexually transmitted infection and prevention.

Title V has a strong presence in all 24 independent jurisdictions across the state. Funding from the Title V Block Grant, either with federal or state funds, are used by local health departments to develop and implement programming that not only meets the needs of the maternal and child health community, but also aligns with the priorities identified by MDH as part of the 2020 Needs Assessment. All of the maternal and child health efforts implemented at the local level are direct service, enabling services or public health system building initiatives. Regular, ongoing communication and technical assistance is available and provided to local health departments and funded entities by the Title V Program Manager.

Title V is well positioned within the state health department to ensure that the funding and the programs are strategically designed and implemented, as well as aligned with other state health initiatives, in order to have the broadest reach and maximum benefit to Title V eligible populations.

III.E.2.b. State MCH Capacity to Advance Effective Public Health Systems

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

In consideration of the number of existing and emerging health care and public health challenges, the MCH field calls for a workforce able to adapt and rise to many transformations in the public health, health care and health financing sectors. An adequately prepared public health workforce is essential to address MCH needs and to provide essential services to improve public health systems, community health care delivery, and ultimately the health of MCH populations.

At the state level, federal Title V funds will support a total of 21.9 FTE positions in the Maternal and Child Health Bureau during SFY 2022. Supported staff include medical doctors, nurses, epidemiologists, public health professionals, public administrators, business administrators, and health educators. At the local health department level, federal Title V funding is expected to support approximately 50 FTE positions in SFY 2022 which includes community health nurses, hearing and vision technicians, community health workers, and administrative assistants implementing programs impacting women, infants, and children, including those with special health care needs.

Key Title V staff attend both national and state conferences and trainings that provide opportunities to acquire new skills and strengthen existing ones as a part of funding requirements. Staff annually attend AMCHP, CityMatCH and required federal grantee meetings. In SFY 2021, Title V organized key workshops during Black Maternal Health Week that were open to Title V staff and partners. These workshops included: Intersectionality and Anti-Racism and Improving Maternal Health with Community Doulas. In addition, Title V state staff have started meeting regularly to further discuss equity, share readings and webinars. Through self-learning, Title V staff developed tools such as meeting ground rules. In addition, in SFY 2021, Title V began to share available webinars regularly through state staff mailing lists so that Title V state staff were aware of training opportunities.

Internal to MDH, Title V staff receive annual training on programmatic and fiscal operations such as contract monitoring, fiscal and budgetary management, and change management. Title V staff training needs are assessed regularly through twice-a year performance evaluations. In addition, Title V senior managers regularly meet with Title V staff to provide coaching. Staff are also encouraged to use the MCH Navigator for training opportunities and resources on Title V, MCH key priorities and emerging issues, social determinants of health, health equity and anti-racism, public health strategies, best practices and evidence-based models and practices.

Maryland's robust health care delivery system, top tier institutions of higher education, and its proximity to Washington, D.C., put it in an unfortunate position when it comes to staff retention within the state's Title V staff as well as staff in the local health departments. Although every effort is made to fill vacancies quickly, the state's hiring processes are an impediment that have been exacerbated due to COVID-19. During the pandemic, there have been hiring freezes, and there is a limit to the number of civil/merit positions that any state agency is allocated. The delay in hiring has further perpetuated the ability to hire as existing staff need to undertake additional duties, further causing fatigue and burnout. In order to address these barriers, vacancy announcements are shared within peer networks and local health departments to assist with attracting qualified candidates. State Title V staff are assessing and exploring opportunities within their control to have a positive interview experience.

Other issues about MCH workforces are the lack of adult clinical providers for adults with special healthcare needs, mental health care providers, and lack of specialty services in rural areas. In addition, there is a need for workforce training in intersectionality, anti-racism, implicit bias, and cultural humility to improve the capability to serve diverse and marginalized populations. Through Maryland House Bill 837 that was passed in 2020, Maryland Perinatal Providers are now required to undergo implicit bias training. Starting in SFY 2021, MDMOM will provide the March of Dimes implicit bias training to hospital based perinatal providers.

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

Much of the Title V program's focus on Family Partnership is addressed through grant funding to external community-based organizations, local health departments, and through internal initiatives.

During SFY 2020, Title V continued to support several grantees focused on family engagement / family professional partnership, including The Parents' Place of Maryland (PPMD), a non-profit, family-directed and staffed center serving parents of CYSHCN, which is also the Maryland Chapter of Family Voices and Family-to-Family Health Information Centers (F2F). The Office for Genetics and People with Special Health Care Needs (OGPSHCN) has taken the lead in these efforts. Among other family-focused initiatives, PPMD coordinated quarterly Community of Care Consortium (CoC) meetings. The CoC is supported with Title V funds. CoC meetings focus on engaging diverse partners in shared planning, implementation, and evaluation of strategies to achieve all six core outcomes for CYSHCN. Consortium partners include families of CYSHCN, representatives from advocacy groups, physicians, other health care providers, health care facilities, academic institutions, government and professional organizations, public payers, MCOs, policy analysts and state governmental agencies. The CoC has proven to be vital in increasing family partnerships and is the best mechanism to achieve the task of integrating components of existing community based services since all stakeholders are involved. In SFY 2020, there were three separate Community of Care Consortia (statewide, Southern Maryland, and Eastern Shore). While the statewide COC was coordinated by PPMD, the Southern Maryland and Eastern Shore COCs were coordinated by local health departments within the applicable geographic region, also supported by Title V funds.

Title V continues to strengthen family partnerships through relationships with professional organizations, academic tertiary/specialty care centers and community based organizations on a state and national level. Title V utilizes these partnerships to identify opportunities and to plan activities to engage families and improve family professional partnerships within the state. Staff have presented and served as faculty representing the "family voice" at a national level, frequently attend professional development opportunities focused on family partnership and engagement, and maintain administrative responsibility for the coordination of several state-wide advisory committees, and serve as members on other committees; all of which mandate some form of lived experience within their member rolls

Through the Title V and OGPSHCN grants program, family partnership activities are an identified focus area and vital criteria for receiving funding. In SFY 2020, Title V in partnership with the State's procurement team assessed the internal process for awarding grants and at the so-called "legacy" grantees that had been recipients of Title V funds for many years. In conjunction with a greater focus on competitive procurement processes for all state agencies from the State overall and an effort to maintain fidelity to MCH Block Grant Program goals, OGPSHCN leadership took a significant portion of the year to analyze and edit the Request for Applications (RFA) for Systems Development grants. This included multiple "brainstorming" meetings with staff at all levels, consultation with the Administration's Office of Procurement and countless drafts and revisions. While the final RFA was not ultimately posted until FY2021 and will be discussed in detail in the next narrative report, the bulk of the work in crafting the RFA took place in SFY 20. In their applications, applicants were required to propose projects ensuring that family members would have a meaningful role in grant-funded activities.

Title V 's Parent Resource Coordinator position that was within the OGPSHCN was staffed from July to mid-December 2019. During that time the Parent Resource Coordinator, who is also a parent of CYSHCN, worked closely with grantees to provide support and training on Family Professional Partnership and incorporating the family's perspective into services and activities. In the absence of dedicated parent resource support, OGPSHCN has taken a broader approach to family partnership, expecting that all staff will engage in and encourage family partnership.

Local Health Departments have worked to develop family and community partnerships. As an example, B'more for Healthy Babies is an initiative to reduce infant mortality in Baltimore City through policy, programs, service improvements, community mobilization, and behavior change. They have developed a community advisory board to work closely with families and community representatives to improve infant health across the city and in neighborhoods most impacted by premature birth, low birth weight, and unsafe infant sleep.

The Maryland Family Planning Program (MFPP) requires Information and Education initiatives in program promotion, community outreach, advisory committees that include family partnerships. Examples of initiatives include engaging with families at health fairs, church fairs, and at farmers markets. However, in SFY 2020, due to COVID-19, many of the MFPP staff were redirected to COVID activities.

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

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

Maryland's MCH epidemiology team is housed in the Office of Quality Initiatives (OQI). The MCH State staff consists of an Epidemiology Program Manager who serves as the Epidemiology supervisor, a high level Epidemiologist III, an Epidemiologist I, and two contractual Epidemiologists who are assigned to the COVID-19 Surveillance for Pregnant Women and Infants project. MCHB is currently in the process of recruiting for the vacant Epidemiologist II position who focuses on the State Systems Development Initiative (SSDI) as well as Sudden Unexpected Infant Deaths (SUID).The majority of the epidemiology activities related to SSDI are performed by the Epidemiologist II, however, all epidemiologists share duties and their work overlaps.

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

Since the mid-1990's, Maryland's State Systems Development Initiative (SSDI) Project has focused on the following: improving epidemiologic and data capacity at the State level, strengthening the State's ability to monitor and report on Title V performance measures and indicators, and improving State and local capacity to assess and prioritize needs, develop annual plans, and monitor program performance.

Maryland has implemented a variety of strategies including recruitment of staff with expertise in epidemiology and database development, identification of data sources and proxy measures for monitoring Title V supported programs, completion of Title V needs assessments, and enhanced collaboration with the Maryland Vital Statistics Administration (VSA) to improve data linkages with surveys and surveillance systems for identification of MCH health disparities and program development.

There have been recent noteworthy developments in achieving the goal of direct, annual access to timely electronic maternal and child health data. First, MDH has continued to use a portion of SSDI funds to support an administrative specialist position at Maryland's VSA to increase data support capacity within the office. This has resulted in the development and approval of data use agreements (DUA) for annual access to de-identified record level birth and death certificate data to be shared with MCHB's Office of Quality Initiatives. Receipt of these data in 2018 led to the production of a comprehensive Perinatal Periods of Risk (PPOR) analysis for the years 2010-2016, and the creation of census tract level risk maps to help coordinate and enhance local program design to improve preconception and maternal health across the state. The PPOR analysis and VSA data were also used to create jurisdiction-level Fetal and Infant Mortality Review (FIMR) profiles which continue to inform about fetal and infant deaths, and areas to focus prevention efforts aimed at reducing rates and addressing disparities.

These data have also been used to produce and subsequently update an MCH Indicators Monitoring System and Trend Analysis that was developed to track Maryland's NOM and NPM data annually by jurisdiction and race. This system and the trend analysis have been shared with MCHB staff to improve awareness and knowledge of progress in these areas. The tracking data system has been presented during the Bureau's program leads as well as for the development of measures for the Statewide Integrated Health Improvement Strategy with Maryland's Total Cost of Care. These data were also linked to Birth Defects Reporting and Information System (BDRIS) data to allow for analysis of maternal preconception and prenatal health factors as they relate to birth defects.
The addition of an epidemiologist with SSDI funds supports the analysis of each of these data sources in addition to the Child Fatality Review (CFR) and Maternal Mortality Review (MMR) case review data to further support Title V needs assessment and performance measure reporting. The SSDI epidemiologist also provides data support for the state's CDC SUID (Sudden Unexplained Infant Death) Case Registry grant, which aims to strengthen public health surveillance of SUID in Maryland through the efforts of the State CFR team.

Planned areas for continued development for the Epidemiology team include: assessing the disparities within the maternal and child health population through data analysis and geographic information system (GIS) mapping; measuring the impact of health conditions and respond to data requests by agency executives, legislators, federal and local partners, and the public; and staying current on best practices through participating in Associations Maternal and Child Health Programs (AMCHP) and CityMatCH events.

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

MCH epidemiologists are involved in a number of other projects in addition to the SSDI funded efforts. MDH continues to support the assessment and evaluation of immediate postpartum use of long acting reversible contraceptives (IPP LARC) in Maryland. HSCRC delivery discharge data is used to examine IPP LARC trends by delivery hospital and insurance status based on ICD-9 and ICD-10 coding. These findings are shared with internal stakeholders, particularly Medicaid, to begin a discussion about how to better implement IPP LARCs during a delivery hospitalization. In SFY 2020, Title V worked collaboratively with Maryland Medicaid to better understand billing practices and best practices for implementing guidelines for IPP LARC insertions and with Johns Hopkins Bayview Hospital to promote an IPP LARC Toolkit and training modules for hospitals to improve utilization.

Access to provisional hospital discharge data has been instrumental in tracking neonatal abstinence syndrome (NAS), severe maternal morbidity (SMM), and various other child and adolescent health outcomes (i.e., asthma, injuries, near-miss suicide attempts). This data is provided on a quarterly basis which keeps analyses up to date. The SMM and childhood asthma data were used to inform Maryland's Statewide Integrated Health Improvement Strategy proposal in December of 2020.

MCH epidemiologists also collaborate with Maryland Medicaid to determine WIC Eligibility. Data from Medicaid among those who participate in a Medicaid coverage group that is paid for with Title XIX funding is provided and adjustment factors are applied using USDA methods to determine the number of WIC eligible infants, children, and postpartum mothers.

MCH epidemiologists are continuing to support the assessment and evaluation of neonatal abstinence syndrome (NAS) and substance exposed newborns (SEN) data in Maryland. Using Health Services Cost Review Commission (HSCRC) newborn discharge data we have examined NAS and SEN trends based on ICD-9 coding but have noticed significant changes in the codes used to identify NAS and SEN under ICD-10. These findings are frequently shared with internal and external stakeholders to begin a discussion about how to better measure and track NAS and SEN. This data was used in partnership with the Office of Genetics and People with Special Health Care Needs.

In July 2020, MDH relaunched the Maryland Perinatal-Neonatal Quality Collaborative which is being led by Health Quality Innovators (HQI).The collaborative engages all 32 delivery hospitals in Maryland. The previous collaborative focused on improving the care and treatment of infants with NAS and reducing low-risk cesarean deliveries. Hospitalization claims data from the HSCRC are used to determine the number of prenatal and delivery hospitalizations among pregnant women with abuse or dependence of substance (i.e., alcohol, cocaine, opioids, cannabis, or other/unspecified
substances). This data is being used to develop a comprehensive NAS surveillance plan in collaboration with the Office of Genetics and People with Special Health Care Needs which oversees newborn screening and birth defects surveillance in the department. Leveraging our previous work and current MCHB activities, collaborative members and stakeholders will establish priorities for the coming year aimed at improving outcomes for Maryland mothers and babies.

In September 2019, Maryland was granted a funding opportunity through the Health Resources and Services Administration (HRSA), and MDH convened the Maryland Maternal Health Improvement Program Task Force. This collaboration between Johns Hopkins University, Maryland Department of Health, Maryland Patient Safety Center and the University of Maryland, Baltimore County will address the needs of pregnant and postpartum women in Maryland, through coordinated innovation in the areas of data, resource availability, and hospital and community care. MCH Epidemiologists support the work of the task force to provide state maternal health data, and perinatal health data. The current work of the team is to support data related to severe maternal morbidity to create a

surveillance and review process of maternal data using HSCRC data. Participation in this workgroup will continue the duration of the grant.

Additionally, MCHB participates in the CDC's Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) COVID-19 Surveillance for Pregnant Women and Infants project to better understand the epidemiology of COVID-19 among pregnant women and infants and inform clinical guidance in obstetric and infant settings. The project aims to enhance COVID-19 case investigation, improve existing surveillance of COVID-19 in pregnancy, and strengthen connections with public health and healthcare providers to advance the health of impacted pregnant women, infants, and children.

MCH epidemiologists are also continuing the collection, analysis, and reporting of Maryland-specific data on maternal behaviors and experiences before, during, and after pregnancy using Pregnancy Risk Assessment Monitoring System (PRAMS) in order to focus on equity, develop measures that can track improvements for equity, be further incorporated into the various State's programs to provide strategic epidemiological, monitoring, and evaluation leadership to the various Maternal and Child Health Programs. Data from PRAMS has been used for multiple focus briefs, including in-depth statistical analyses of intimate partner violence, pre-pregnancy obesity, maternal opiate use, and maternal hypertension, and their effects on pregnancy and birth outcomes. Additionally, future analyses of maternal disabilities and the impact of COVID-19 on pregnancy and prenatal care are planned.

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

The Maryland Emergency Management Agency (MEMA) conducts statewide emergency planning in Maryland. MEMA oversees development of four Operations Plans, including Prevention/Protection, Response, Disaster Recovery, and Mitigations plans. These plans are part of a hierarchy that also includes a Training and Exercise Plan and an All-Hazards Mitigation Plan, which together comprise the Maryland Emergency Preparedness Program that serves as Maryland’s strategic plan for emergency preparedness. Publicly-accessible planning materials are available from as late as 2019-2020. While those materials do not specifically address the needs of at-risk and medically vulnerable women, infants, and children, or MCH populations more generally, the toolkits are available for planning for people with disabilities and others with access and functional needs, which indicates attention to vulnerable populations.

Currently, Maryland's Title V leadership is not a direct part of Maryland's incident management structure and has not been involved in statewide plan development or other emergency preparedness planning activities. However, the Title V program has indirect access through a line of communication with the MDH Office of Preparedness and Response, which is housed in a different MDH division than that which houses the Title V program.

Emergency preparedness planning needs for MCH populations have been recognized through lessons learned from experience in prior disasters or other emergencies. In 2018, the Office of Preparedness and Response partnered with the Maryland Chapter of the American Academy of Pediatrics to conduct a preparedness survey of pediatricians on the Eastern Shore of Maryland. This served as a starting point for pediatric preparedness discussions in 2019 between Title V, the Office of Preparedness and Response, and a small group of stakeholders from academic clinical centers. The Title V program has not participated in preparedness training and planning to date, but the 2019 discussions provide a foundation for further planning in SFY 22 around pediatric disaster preparedness and, in turn, maternal and child health more generally.

Discussions of the need for dedicated pediatric emergency preparedness planning developed from an existing relationship between Title V staff and staff in the MDH Office of Preparedness and Response. The Office of Preparedness and Response partnered with in 2018 Maryland's Title V program is embedded within the MDH Maternal and Child Health Bureau, which houses key statewide public health programs, including newborn screening follow up, critical congenital heart defect screening compliance, newborn hearing screening, home visiting, WIC, access to specialty care for uninsured children, and family planning. While no formal preparedness planning has been undertaken within these programs, Title V is inherently positioned to lead such planning and access the expertise of the Office of Preparedness and Response. Maryland's immunization program is housed within a sister bureau at MDH, and the COVID-19 pandemic has afforded opportunities to develop and strengthen Title V’s partnership with the immunization program.

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

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

Public and Private Partnerships:

Maryland Title V collaborates with federal and state partners to ensure access to health care and other social services. Maryland Title V leads various collaboratives and committees. For a full list, please see Supplement Attachment: Partnerships, Collaboration, and Coordination

Key collaborations include:

- Maryland Perinatal Neonatal Quality Collaborative: Title V works with Maryland birthing hospitals to strengthen the maternal and neonatal healthcare system by implementing the Alliance for Innovation on Maternal Health (AIM) bundles.
- Maternal Health Improvement Program Task Force: Title V chairs the Task Force. Members develop and implement a strategic plan to improve the health of birthing people in Maryland.
- Morbidity, Mortality, and Quality Review Committee (MMQRC): Title V chairs the multi-disciplinary committee that monitors compliance with the Maryland Perinatal Standards of care for Level I and II hospitals. Title V staff also participate in compliance with Level III and IV Perinatal Standards of Care.
- Perinatal Clinical Advisory Committee: Title V chairs the multi-disciplinary committee of other state agencies, clinical leaders, and professional organizations that determine the standards of care for Maryland Birthing Hospitals using the national American Academy of Pediatrics and American College of Obstetrics guidelines.
- Statewide Integrated Health Improvement Strategy: The strategy is part of Maryland’s Total Cost of Care Model and designed to engage State agencies and private sector partners to collaborate and invest in improving health, addressing disparities, and reducing costs for Marylanders. Title V staff lead the maternal and child health portion of the Statewide Integrated Health Improvement Strategy. Partners including payers, Health Information Exchange, professional societies, hospitals, and more.

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

Title V MCH-Title XIX Medicaid Inter-Agency Agreement:

Program Outreach and Enrollment

Title V has continued to collaborate with the Medicaid Program to improve access to health care services for women and children. As a Medicaid Expansion state, Maryland has decreased the numbers of uninsured individuals over the past 6 years. Maryland's uninsured rate declined from 10.1% in 2012 to 6.0% in 2018 and is lower than the national rate of 8.9%. Since 2015, the uninsured rate in Maryland decreased for all races and ethnicities but remained highest for Hispanic individuals (22.3% in 2018, a slight increase from 22.0% percent in 2017). The uninsured rate decreased for most age groups since 2015 but increased slightly for those ages 45 to 54 years of age (6.1% in 2015 to 7.2% in 2018). The uninsured rate remains highest among those aged 25 to 34 years. In 2021, birthing people's coverage will increase from two months to 12 months postpartum.

As more eligible residents have received Medicaid coverage to enable them to access health care, Title V has shifted its structure from a direct and gap filling model to more of a population and infrastructure based model. Direct, gap filling services are largely provided by the Children's Medical Services (CMS) Program to children with special health care needs who are ineligible for Medicaid services. Over the past several years, the demand for direct, gap filling services for the CMS Program have increased.

Health Care Financing

Maryland Managed Care Organizations (MCOs) provide services to Medicaid recipients by contracting with a network of licensed/certified healthcare providers. All MCOs are responsible to provide or arrange for a wide array of healthcare services. There are nine managed care organizations in Maryland: Aetna Better Health, Amerigroup Community Care, Carefirst Blue Cross Blue Shield Community Health Plan, Jai Medical Systems, Kaiser Permanente, Maryland Physicians Care, MedStar Family Choice, Priority Partners, and United HealthCare. As of June 2021, nearly 87% of Medicaid participants were enrolled in managed care.

Maryland Medicaid does not participate in a Primary Care Case Management (PCCM) program as PCCM is considered an alternative to manage care.

Through the Total Cost of Care All-Payer Model contract the State of Maryland has entered with the Federal Government, the Maryland Primary Care Program (MDPCP) has been developed. A separate office within MDH's Public Health Services works with interested primary care offices to coordinate care for patients across both hospital and non-hospital settings, improve health outcomes, and constrain the growth of health care costs in Maryland. MDPCP is a voluntary program open to all qualifying Maryland primary care providers that provides funding and support for the delivery of advanced primary care throughout the state.

Waivers or State Plan Amendments

There are two main examples that influence healthcare delivery for the MCH population: the Home Visiting Services Pilot and the Asthma Home Visiting Program.

Medicaid has operated a Home Visiting Services (HVS) pilot since 2017 through its §1115 waiver, which has enabled an expansion of evidence-based home visiting services to Medicaid eligible high-risk pregnant individuals and children up to age two. The HVS pilot program is aligned with two evidence-based models focused on the health of pregnant individuals. The Nurse Family Partnership (NFP) model is designed to reinforce maternal behaviors that encourage positive parent-child relationships and maternal, child and family accomplishments. The Healthy Families America (HFA) model targets parents facing issues such as single parenthood, low income, childhood history of abuse, substance use disorder, mental health issues or domestic violence. The current financing structure of the HVS

pilot, which requires local lead government entities to provide a local match through an intergovernmental transfer, has garnered limited participation from additional lead entities because of the requirement to produce the required match from non-federal 10 funding sources.

In 2017, the Maryland Department of Health submitted a successful application to the Centers for Medicare and Medicaid Services (CMS) for a Health Services Initiative (HSI) under the Children's Health Insurance Program (CHIP). The new program, approved as a State Plan Amendment (SPA), allowed MDH to create a $3 million home visiting program for children who are enrolled in or eligible for Medicaid (including CHIP), based on diagnosis of either moderate to severe asthma or lead poisoning. The program operates in nine jurisdictions: Baltimore City and Baltimore, Charles, Dorchester, Frederick, Harford, Prince George's, St. Mary's, and Wicomico Counties. These are sites with some of the highest burden of asthma ED visits. Once they are deemed eligible and enrolled in the program, the children's families are eligible for up to six home visits to receive education and training around home environmental factors that trigger asthma, durable goods that can reduce or eliminate home triggers, and improved care coordination with providers through asthma action plans. The program similarly provides home visiting for eligible children who have been lead poisoned and is one of the first such programs in the country. The home visiting program is built on evidence-based models that emphasize remediation of environmental factors, including the provision of education and training for parents, and provision of durable cleaning supplies and other equipment to assist families in reducing environmental factors including dust mites, insect and pet allergens, and other common allergens.

For SFY 2022, Medicaid staff will be working on reimbursement for birth workers/doulas, Centering Pregnancy, Healthy Steps, and the Maternal Opioid Misuse Model as part of the Statewide Integrated Health Improvement Strategy. Doulas acts as advocates during and after pregnancy, including labor and delivery. These services will help increase access to care and lead to fewer low birth weight babies, birth complications, and C-sections. Centering Pregnancy is a program that offers group prenatal care for low-risk pregnancies, including screenings for sexually transmitted infections and HIV. Healthy Steps promotes positive parenting and healthy development for babies and toddlers. The program aims to decrease postpartum depression and emergency department usage for care, as well as to increase child vaccination rates and well-child visits. The MOM model provides extra support for pregnant and postpartum individuals with opioid use disorder, including screenings for needs related to social determinants of health and maternal anxiety and depression.

Joint Policy Level Decision Making

The current IAA with Maryland Medicaid outlines agreements and guidelines on administration and policy, systems coordination, outreach and referral activities and data sharing.

Title V staff at the local health departments work with and coordinate with the Administration Care Coordination Unit (ACCU) to identify and enroll eligible pregnant people and children in the Medicaid program. ACCU serves as the central link between the beneficiary, managed care organization (MCO), healthcare provider and the Department of Health.

Title V is partnering with Medicaid to improve referrals through the Prenatal Risk Assessment and the Postpartum Infant Maternal Referral Form to the local health departments. These referral forms assist in identifying social, economic, and medical needs for birthing people.

In addition, Title V staff is working with Medicaid to achieve the goals for the Statewide Integrated Health Improvement Strategy (SIHIS). Specifically, Title V staff is collaborating with Medicaid and Environmental Health to expand asthma home visiting and maternal, infant, and early childhood home visiting.

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

State Action Plan Introduction

Needs Assessment and State Action Plan

Title V completed an updated Needs Assessment and State Action plan in FY 2020. Through a ten month process that included both primary and secondary data collection and analysis, nine National Performance Measures were identified. These nine NPMs represented the needs of the MCH population in Maryland and included:

National Performance Measure		Population Domain
NPM 3	Risk-Appropriate Perinatal Care	Perinatal/Infant Health (PIH)
NPM 4	Breastfeeding	PIH
NPM 5	Safe Sleep	PIH
NPM 6	Developmental Screening	Child Health (CH)
NPM 10	Adolescent Well-Visit	Adolescent Health (AH)
NPM 11	Medical Home	Children with Special HealthCare Needs (CSHCN), CH
NPM 12	Transition	CSHCN, AH
NPM 13.1	Preventive Dental Visit - Pregnancy	Women's/Maternal Health (WMH)
NPM 14.1	Smoking - Pregnancy	WMH

During the past year, Title V has also identified the need for State Performance Measures to align with statewide health improvement plans.

Table 2

State Performance Measure		Population Domain
SPM 1	Number of overdose mortalities for women, ages 15-49 in Maryland per 100,000 population	WMH
SPM 2	The excess rate between the Black Non-Hispanic Severe Maternal Morbidity (SMM) events to White Non-Hispanic SMM events per 10,000 delivery hospitalizations	WMH
SPM 3	Receipt of primary care during early childhood (Percent of children enrolled in Medicaid who reached age 15 months who had 5 or more well care visits in their first 15 months of life)	CH
SPM 4	Number of Asthma ED visits per 1,000 for ages 2-17	CH, AH

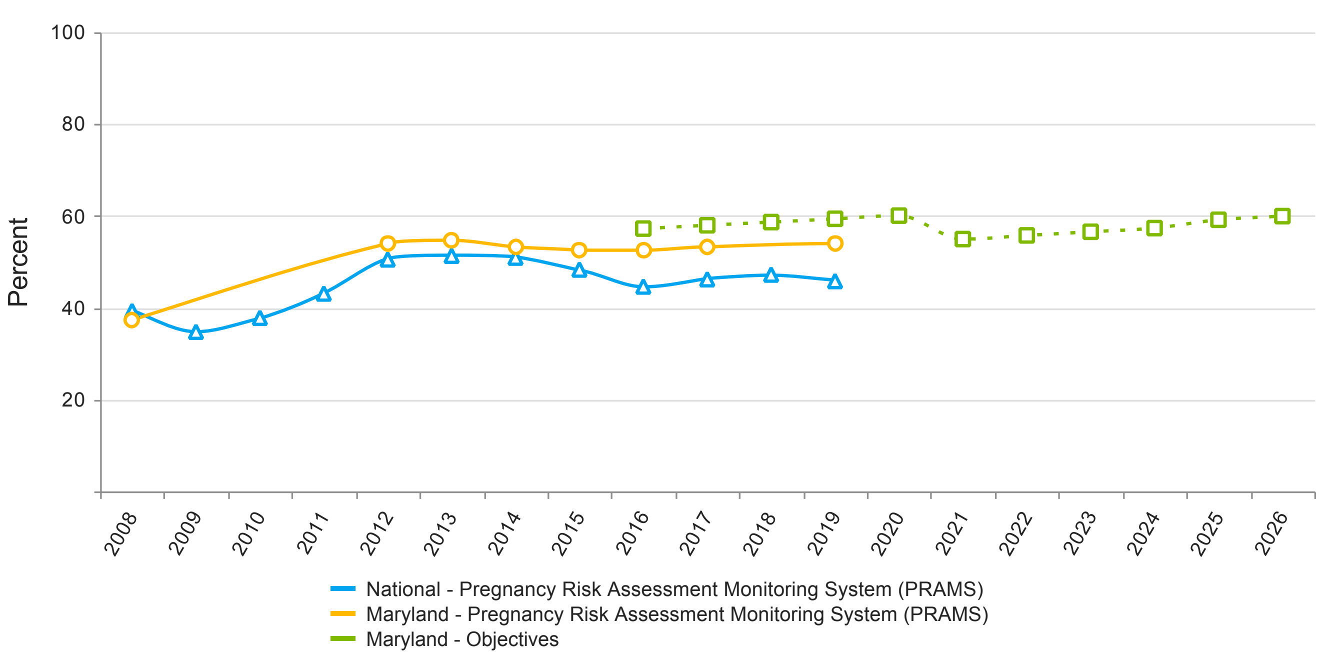
Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2018	82.9	NPM 2 NPM 14.1
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2015_2019	17.5	NPM 2 NPM 14.1
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2019	8.7 %	NPM 14.1
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2019	10.3 %	NPM 14.1
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2019	27.3 %	NPM 14.1
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.2	NPM 14.1
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.0	NPM 14.1
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.1	NPM 14.1
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	1.9	NPM 14.1
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	270.1	NPM 14.1
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	97.1	NPM 14.1
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2018_2019	10.6 %	NPM 13.1
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	18.8 %	NPM 13.1
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	93.5 %	NPM 13.1 NPM 14.1

National Performance Measures

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



Federally Available Data

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

	2016	2017	2018	2019	2020
Annual Objective	57.2	57.9	58.6	59.3	60
Annual Indicator	53.3	52.6	53.3	53.3	54.1
Numerator	35,180	34,237	33,752	33,752	33,888
Denominator	65,996	65,122	63,361	63,361	62,695
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2014	2015	2017	2017	2019

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	54.9	55.7	56.5	57.3	59.1	59.9

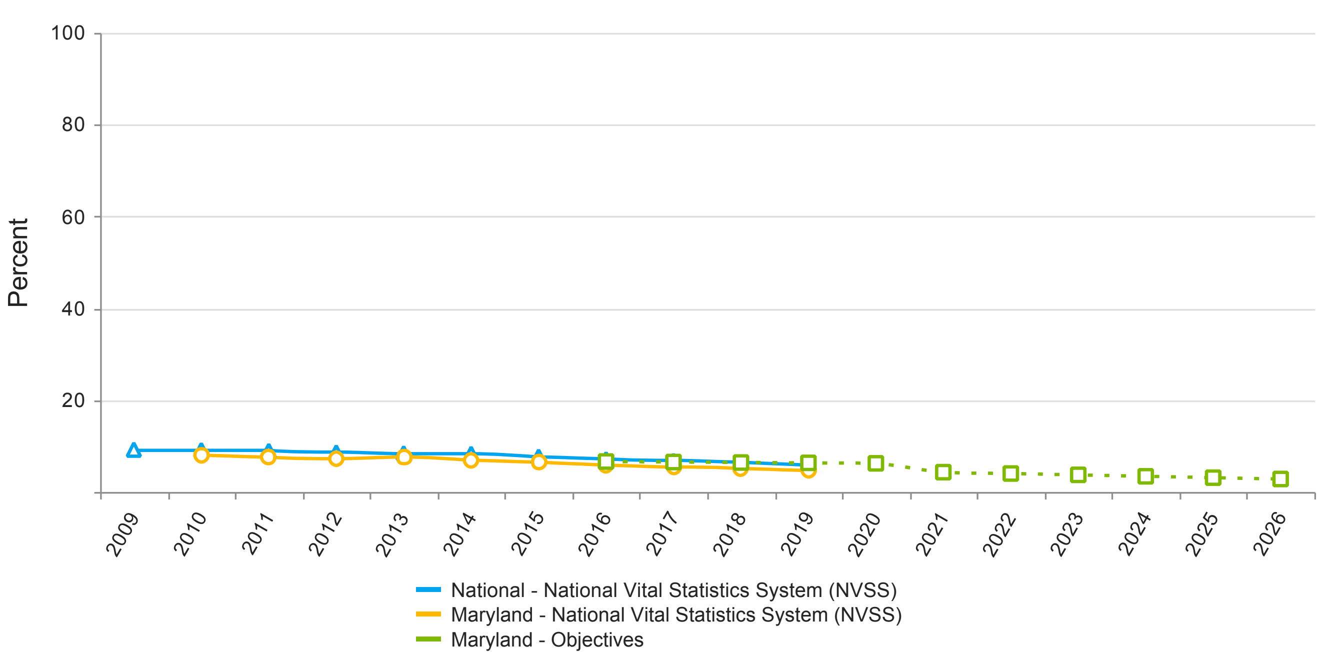
Evidence-Based or –Informed Strategy Measures

ESM 13.1.1 - Percentage of pregnant individuals who receive a preventive dental visit

Measure Status:	Active

State Provided Data		
	2019	**2020**
Annual Objective		
Annual Indicator	28.2	28.8
Numerator	7,979	8,346
Denominator	28,259	28,939
Data Source	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report
Data Source Year	CY 2018	CY 2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	28.4	29.9	31.4	32.5	34.0	35.5



Federally Available Data					
Data Source: National Vital Statistics System (NVSS)					
	2016	2017	2018	2019	2020
Annual Objective	6.7	6.6	6.5	6.4	6.3
Annual Indicator	6.5	5.9	5.5	5.3	4.7
Numerator	4,758	4,299	3,932	3,719	3,281
Denominator	73,116	72,838	71,324	70,599	69,782
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2015	2016	2017	2018	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	4.4	4.1	3.8	3.5	3.2	2.9

Evidence-Based or –Informed Strategy Measures

ESM 14.1.1 - Number of pregnant individuals who use the statewide tobacco QuitLine

Measure Status:	Active

State Provided Data

	2016	2017	2018	2019	2020
Annual Objective		167	136	137	139
Annual Indicator	165	135	131	99	86
Numerator					
Denominator					
Data Source	MDH CTPC Quitline Data	MDH CTPC Quitline Data	MDH CTPC Quitline Data	MDH CTPC Quitline Data	Quit Line Data
Data Source Year	FY16	FY17	FY 18	FY 19	FY 2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	140.0	142.0	143.0	143.0	143.0	143.0

State Performance Measures

SPM 1 - Rate of overdose mortality for women ages 15-49

Measure Status:	Active

State Provided Data	
	2020
Annual Objective	
Annual Indicator	24.1
Numerator	334
Denominator	1,385,375
Data Source	VSA
Data Source Year	2019
Provisional or Final ?	Final

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	23.9	23.7	23.5	23.3	23.0

SPM 2 - Excess rate between Black Non-Hispanic Severe Maternal Morbidity (SMM) events to White Non-Hispanic SMM events per 10,000 delivery hospitalizations

Measure Status:	Active

State Provided Data	
	2020
Annual Objective	
Annual Indicator	328.5
Numerator	640
Denominator	19,481
Data Source	Health Services Cost Review Commission
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	312.1	295.7	279.3	262.8	246.5

State Action Plan Table

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

Priority Need

Ensure that all birthing people are in optimal health before, during, and after pregnancy

NPM

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

Objectives

Increase the number of people receiving preventive dental visits from a baseline of 28% to 36% by 2025.

Strategies

1. Distribute the Maryland Oral Health Guide 2020 through local health departments and other strategic partners. 2. Support the Office of Oral Health in providing education to prenatal providers on the importance of oral health during pregnancy. 3. Link pregnant people who are referred to the Maternal and Child Health Care Coordination at the Local Health Department to Oral Health resources.

ESMs	Status
ESM 13.1.1 - Percentage of pregnant individuals who receive a preventive dental visit	Active

NOMs

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

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

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

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

Priority Need

Ensure that all birthing people are in optimal health before, during, and after pregnancy

NPM

NPM 14.1 - Percent of women who smoke during pregnancy

Objectives

To increase the number of women who abstain from smoking tobacco during pregnancy from a baseline of 95.3% to 96.3% or more by 2025.

Strategies

1. Local health departments will continue to refer pregnant people who smoke to the Maryland Tobacco Quitline and other smoking cessation programs. 2. The Maryland Family Planning Program will implement SBIRT (Screening, Brief Intervention, Referral to Treatment) with their subrecipient sites.

ESMs	Status
ESM 14.1.1 - Number of pregnant individuals who use the statewide tobacco QuitLine	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 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births
- NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health

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

Priority Need

Ensure that all birthing people are in optimal health before, during, and after pregnancy

SPM

SPM 1 - Rate of overdose mortality for women ages 15-49

Objectives

To decrease the overdose mortality rate for women, age 15-49 from 24.1 per 100,000 to 22.9 per 100,000 by 2025.

Strategies

1. Improve linkages to care for substance use disorder treatment through implementing the electronic prenatal Risk Assessment with State Medicaid, Overdose Data to Action partners and updating the postpartum infant maternal referral form (PIMR) 2. Partner with Medicaid to improve lnkages with the Managed Care Organizations through the Maternal Opioid Misuse Model. 3. Develop appendices of a Linkages to Care toolkit for providers of birthing people. 4. Monitor and understand opioid use trends through PRAMS Surveillance

State Action Plan Table (Maryland) - Women/Maternal Health - Entry 4

Priority Need

Address the racial disparities in Severe Maternal Morbidity rates among Black NH and White NH

SPM

SPM 2 - Excess rate between Black Non-Hispanic Severe Maternal Morbidity (SMM) events to White Non-Hispanic SMM events per 10,000 delivery hospitalizations

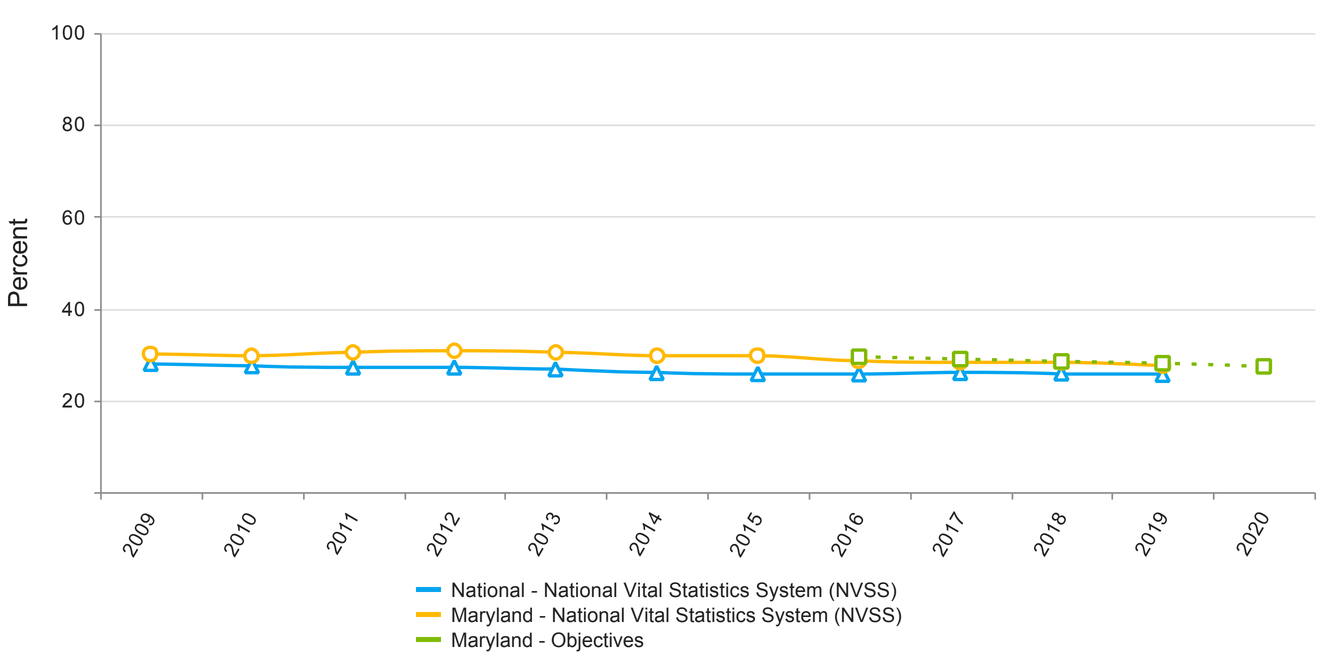
Objectives

Decrease the excess rate of Black NH Severe Maternal Morbidity rate to White NH Severe Maternal Morbidity rate by 25% by 2026.

Strategies

1. Implement expansion of programs that improve maternal health through the Statewide Integrated Health Improvement Strategy. 2. Implement the severe maternal hypertension bundle developed by the Alliance for Innovation on Maternal Health (AIM) in the Maryland Perinatal Neonatal Quality Collaborative (MDPQC). 3. Develop and implement a maternal health strategic plan by the Maternal Health Improvement Taskforce as part of the Maternal Health Innovation Program (MDMOM) 4. Ensure access to the Maryland Family Planning Program. 5. Ensure access to Maternal, Infant, and Early Childhood Home Visiting. 6. Provide accessible patient centered family planning services through the Maryland Family Planning Program.

2016-2020: National Performance Measures



Federally Available Data					
Data Source: National Vital Statistics System (NVSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	29.5	29	28.5	28.1	27.4
Annual Indicator	29.9	28.5	28.2	28.2	27.6
Numerator	7,249	6,935	6,652	6,574	6,417
Denominator	24,240	24,363	23,551	23,331	23,216
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2015	2016	2017	2018	2019

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

2016-2020: ESM 2.1 - Hospital Technical Assistance on Low-risk Cesarean Delivery Reduction

Measure Status:				**Active**	
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		31	31	31	31
Annual Indicator	31	31	31	31	31
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	MCHB Data	MCHB Data	MCHB
Data Source Year	2016	2017	2018	2019	2020 (CY)
Provisional or Final ?	Final	Final	Final	Final	Final

2016-2020: State Performance Measures

2016-2020: SPM 6 - Hospital Policy Changes to Reduce Low-risk Cesarean Deliveries

Measure Status:			**Active**	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective	71.2	100	100	100
Annual Indicator	100	100	100	100
Numerator	31	31	31	31
Denominator	31	31	31	31
Data Source	AIM Data	AIM Data	AIM Data	AIM Data
Data Source Year	CY 2017	CY 2018	CY 2019	CY 2020
Provisional or Final ?	Final	Final	Final	Final

2016-2020: SPM 8 - Barriers and Facilitators to Dental Care During Pregnancy

Measure Status:			**Active**	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective	85	50	50	0
Annual Indicator	85	16	0	0
Numerator				
Denominator				
Data Source	MCHB	OOH	OOH	OOH
Data Source Year	FY2017	FY 2018	FY 2019	FY 2020
Provisional or Final ?	Final	Final	Final	Final

Women/Maternal Health - Annual Report

Maryland's priority needs for the women's/maternal health domain is "to ensure that birthing people are in optimal health before, during, and after pregnancy," and "addressing the racial disparities in Severe Maternal Morbidity rates among Black NH and White NH." Maryland Title V provides preventive and primary care through direct, enabling, and public health infrastructure services to a variety of women's/maternal health needs in SFY 2020.

Progress towards improved oral health during pregnancy is measured by the National Performance Measure (NPM 13.1) of percent of women who had a preventive dental visit during pregnancy. Progress towards the areas of substance use prevention and linkage to care and reducing rates of maternal mortality and morbidity are measured by the NPM of percent of women who smoke during pregnancy (NPM 14.1) and the State Performance Measure (SPM 1) of Overdose Mortality Rate for women, ages 15-49.

NPM 13.1: Percent of women who had a dental visit during pregnancy: In Maryland in 2019, 63.4% of mothers had a cleaning during pregnancy, compared with 65.4% in 2018 (PRAMS). The percentage of mothers receiving oral health care during pregnancy increased among non-Hispanic Asian mothers, from 53.0% to 69.7%, and among non-Hispanic White mothers, from 72.7% to 72.9%. Hispanic and non-Hispanic Black mothers both showed slight declines from 57.1% and 57.4% in 2018 to 56.5% and 48.8% in 2019, respectively. Among mothers with 13 or more years of education, 68.4% had their teeth cleaned during pregnancy in 2019, a slight decline from 71.3% in 2018, while among mothers with 12 years of education or less, 48.2% had their teeth cleaned during pregnancy in 2019, up from 47.9% in 2018. The percentage of mothers who received a teeth cleaning during pregnancy increased among mothers ages 19 or younger (59.3% in 2018 to 70.0% in 2019), ages 20 to 24 (54.6% in 2018 to 56.4% in 2019), and ages 25 to 29 (58.3% in 2018 to 61.4% in 2019) and decreased among mothers ages 30 to 34 (70.5% in 2018 to 64.7% in 2019) and ages 35 and older (70.0% in 2018 to 66.7% in 2019).

Preventive Dental Visit-Pregnancy

In May 2020, the OOH submitted a proposal to collaborate with Maryland's Title V program to continue to provide education to prenatal providers on the importance of oral health during pregnancy by coordinating a 5-year outreach initiative that includes:

1. The promotion of "Smiles for Life: A National Oral Health Curriculum"
2. The dissemination of "Oral Health Care During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers" (MDH Document)
3. Oral Health During Pregnancy – Health Literacy/Social Marketing Campaign

This initiative will include updating both online training modules and curriculum for dissemination to Obstetrics and Gynecology providers throughout the state and will begin in SFY 2022. Challenges include efforts focusing on addressing the COVID-19 pandemic as well as staffing challenges within the Maternal and Child Health Bureau and the Office of Oral Health.

In SFY 2020, Title V funds also supported programming to pregnant people at local health departments throughout the state. A total of 627 pregnant people were referred to dental care by local health departments in SFY 2020. The number of pregnant people linked with dental care in SFY 2020 was a dramatic decrease from the 2,300 that were referred in SFY 2019 due to local health department closures related to the COVID-19 Pandemic.

NPM 14.1: Smoking during pregnancy: In 2019, Maryland was slightly below the national average for women who smoked during pregnancy, with 4.7% of Maryland women who smoked during pregnancy, compared to 6.0% nationally (Maryland Vital Statistics Administration, National Vital Statistics System). Maryland has seen a downward trend in the percentage of women who smoke during pregnancy since 2010 (8.9%), while the national trend reached its peak in 2014 (7.9%) and has started decreasing since 2015. The percentage of Maryland women who smoked

during pregnancy in 2019 was highest among non-Hispanic White women (7.4%), followed by non-Hispanic Black women (4.2%), and Hispanic women (0.8%).

During SFY 2020, Title V continued the partnership with MDH's Center for Tobacco Control and Prevention, which provides enhanced counseling services that motivate pregnant women to quit smoking. Counseling interventions provide motivation to quit and support to increase problem solving skills. Counseling interventions may include motivational interviewing, cognitive behavior therapy (CBT), other psychotherapies, problem-solving and other approaches. Pregnant people are more likely to quit when cessation counseling is combined with motivational interviewing and is provided by a trained educator.

The QuitLine, which is funded by MDH's Center for Tobacco Control and Prevention is a free service to all Maryland residents age 13 and older. The program for pregnant people consists of one initial and nine proactive follow-up coaching calls. Participants may call in for additional support at any time. The timing of proactive calls is relapse-sensitive, and the focus of the follow-up coaching calls is relapse prevention. Medication use is monitored to assure use compliance, assess, and problem-solve potential side effects. The Quit Coach assesses the participant's status and progress, builds upon information previously gathered, identifies barriers, and reinforces successes. Coaches have degrees in counseling or addiction treatment.

Title V funds local health departments to routinely screen women for tobacco use and offer referrals to the state's QuitLine. Staff who screened were from home visiting, home birth certification, early intervention, and family planning clinics. In SFY 2020, a total of 892 prenatal/postpartum people were referred to tobacco cessation programs. Due to closures related to the COVID-19 pandemic, local health departments were unable to provide services through the various women's/maternal health programs from March-June of 2020.

SPM 1: Number of Overdose Mortalities for Women, ages 15-49 in Maryland per 100,000 population: While overdose mortality rate for women of reproductive age was not a state performance measure during 2016-2020, efforts to prevent overdose deaths from SFY 2020 are added below to reflect the urgent need to address overdose deaths.

In 2018, overdose accounted for 31.6% of all pregnancy-associated deaths, making it the leading cause of pregnancy-associated deaths in 2019 (Maryland Maternal Mortality Review). The rate of overdose deaths for women ages 15-49 was 24.1 deaths per 100,000 population in 2019 (Maryland Vital Statistics Administration). It is estimated that 74.7% of pregnant people with opioid use disorder received opioid maintenance treatment in 2019 (Maryland Behavioral Health Administration).

Opioid Use Disorder

Identification and linkages to treatment with the Maryland Medicaid Maternal Opioid Misuse Model: With over 21,000 individuals of childbearing age diagnosed with Opioid Use Disorder in Maryland, substance use is a leading cause of maternal death and has a significant impact on the approximately 1,500 infants born to Medicaid beneficiaries with OUD in Maryland per year. State Medicaid launched its Maternal Opioid Misuse (MOM) model in January 2020, with funding from the Center for Medicare and Medicaid Innovation (CMMI) and in collaboration with the Centers for Medicare and Medicaid Services (CMS). The model is a five-year, multi-pronged approach to combating the nation's opioid crisis by addressing fragmentation in the care of pregnant and postpartum Medicaid beneficiaries with opioid use disorder (OUD).

The MOM model focuses on improving clinical resources and enhancing care coordination to Medicaid beneficiaries with OUD during and after their pregnancies. Due to COVID, the launch of the model was delayed to July 2021, and the focus will be in one jurisdiction in St. Mary's County. However, the development of the program includes consent

and development of core elements of a care plan.

Title V Program has been partnering with Medicaid, and specifically the Maternal Opioid Misuse Model team to expand referrals to the Local Health Departments and Managed Care Organizations through the Prenatal Risk Assessments (PRA). Under COMAR 10.09.68.05 the PRA should be completed for Medicaid participants at the first prenatal care visit. Specifically, Title V Program has emphasized the importance of the PRA during the local health department surveillance quality initiatives.

Screening, Brief Intervention, and Referral to Treatment

Given the importance to identify substance misuse and the need to link to treatment, the Maryland Family Planning Program planned to implement SBIRT (Screening, Brief Intervention, Referral, and Treatment) during SFY 2020 with their subrecipient sites. Maryland Family Planning Program has 62 sites across the State. The Maryland Family Planning Program identified a partner, Planned Parenthood, to provide SBIRT training.

As part of the Maryland SBIRT initiative, the Behavioral Health Administration of Maryland Department of Health has implemented SBIRT and Peer Recovery Specialists in birthing hospitals. These hospitals include Anne Arundel Medical Center, Greater Baltimore Medical Center, MedStar Franklin Square, MedStar Harbor, Mercy, Meritus, LifeBridge Sinai, Saint Agnes, University of Medical Center, and the University of Maryland Upper Chesapeake.

Babies Born Healthy

During SFY 2020, nine sites across eight local jurisdictions implemented state funded Babies Born Healthy (BBH) programs, which directed resources to engage women and communities in an effort to provide supportive coordinated care and address disparities in infant mortality rates in Maryland. A total of 1,047 women accessed BBH services, and there was a total of 360 births among program participants and 9 fetal/neonatal deaths. These jurisdictions were selected to receive funding after they had been identified by the Perinatal Periods of Risk Assessment (PPOR) was conducted and concluded that these jurisdictions were key to effectively curbing disparities and rates of infant mortality. Services provided were focused on the promotion of prenatal care, reduction of substance use, tobacco cessation, long acting reversible contraception, accessing health insurance, and other strategies driven by site-specific data to promote healthy maternal and infant outcomes. Specific activities included home visiting strategies, nurse and paraprofessional case management services for high-risk women and infants, family planning services, screening and referrals for mental health and substance use.

During SFY 2020, COVID-19 presented barriers to both families and staff. Many staff are public health nurses in local health departments, as such they were pulled into Maryland's COVID-19 response which left BBH sites with very limited capacity at times. Families faced numerous challenges including job loss and eviction, difficulty in accessing food, loss of childcare, lack of transportation, domestic violence, technology limitations, issues in accessing necessary baby supplies, and others. Many BBH sites responded by doing emergency supply drop-offs to their participants and were a crucial lifeline at the height of the pandemic.

Reduce rates and eliminate disparities in maternal mortality and morbidity

This priority need is tied to the State Performance Measure of reducing overdose mortality rate for women of reproductive age (15-49) in Maryland. In addition, the priority need is tied to the new State Performance Measure (SPM 2) that aims to reduce Black NH to White NH SMM gaps and is linked to the national outcome measure (NOM 2) of Severe Maternal Morbidity. In SFY 2021, Centers for Medicare, and Medicaid Innovation (CMMI) approved the State's proposal to focus on Severe Maternal Morbidity and asthma as part of the Statewide Integrated Health Improvement Strategy and the State's Healthcare finance model with the Total Cost of Care.

In 2019, the State's Severe Maternal Morbidity (SMM) rate was 235.1 events per 10,000 delivery hospitalizations

(Health Services Cost Review Commission). SMM rates were highest among non-Hispanic Black women (316.5 per 10,000) and women ages 40 and over (353.1 per 10,000).

Sexual and Reproductive Health through Maryland Family Planning

The Maryland Family Planning Program improves maternal health by ensuring access to breast and cervical cancer screening, prevention and treatment of sexually transmitted infections, HIV testing and prevention education, infertility and preconception services, health education and counseling and referrals to community resources. State Match Title V dollars were used to support the Maryland Family Planning program in SFY 2020. In May 2019, Maryland became the first state to formally withdraw from Title X federal funding for family planning services in the setting of new restrictions. Therefore, Title V partnered with the Maryland Family Planning Program.

The mission of the Maryland Family Planning Program (MFPP) is to reduce unintended pregnancies and to improve pregnancy outcomes by ensuring access to quality, comprehensive family planning services for those individuals with incomes below 250% Federal Poverty Level (FPL). Services include: a broad range of family planning methods, breast and cervical cancer screening, prevention and treatment of sexually transmitted infections, HIV testing and prevention education, infertility and preconception services, and health education/counseling and referrals to community resources. There are 62 family planning sites.

In State Fiscal Year 2021 (July 1, 2020- June 30, 2021*)*, there were a total of 49,440 clients and 67,425 visits. Overall, there was a 18% decrease in the number of clients, and nearly 20.9% decrease in visits compared to SFY 2020. Of the unduplicated clients seen this reporting period, 32,559 were new clients and 16,881 were continuing clients. This was a slight decrease from FY2020 with 38,428 (↓ 15.3%) new clients and 21,799 (↓ 22.6%) continuing. The decrease is thought to be due to COVID.

In SFY 2021, MFPP served 5,991 people who were less than 20 years old. Nearly seventy percent of the clients seen at Maryland Family Planning Clinics were at 100% or below the poverty line.

The racial and ethnic breakdown for clients served by the Maryland Family Planning include: 40.6% Black, 34.3% White, 2.3% Asian, American Indian, 0.2%, 16.7% Hispanic origin.

During SFY 2020 and 2021, many of the MFPP had to adapt their services for COVID-19. Specifically, they embraced telehealth/telemedicine as well as new administrative guidelines. Family Planning providers linked clients to community partners, when necessary, proactively called scheduled patients to best assess their needs, and even provided birth control by mail.

State Maternal Health Innovation Program

In September 2019, the Health Resources Service Administration awarded Johns Hopkins University (JHU) $2,134,389 as part of a nationwide State Maternal Health Innovation Program. The Hopkins-led initiative, MDMOM, is for a 5-year period of performance to assist in addressing disparities in maternal health and improving maternal health outcomes, with a particular emphasis on preventing and reducing maternal mortality and severe maternal morbidity (SMM). JHU has partnered with the Department, Baltimore Healthy Start, and hospital centers to address SMM.

Title V has participated with MDMOM and in June 2020, Title V started to staff the Maternal Health Improvement Task Force, a task force with over 30 different organizations comprising other state agencies, medical professional societies, healthcare partners, and community based organizations. The Maternal Health Improvement Task Force began to develop a statewide Maternal Health Improvement Strategic Plan.

Maryland Perinatal-Neonatal Quality Collaborative
Maryland's Perinatal-Neonatal Quality Care Collaborative (MDPQC) is a network of perinatal care providers and public health professionals working to improve health outcomes for women and newborns through continuous quality improvement. The Collaborative provides participating birthing hospitals with educational resources, technical assistance and a platform for communication and sharing best practices.

State Fiscal Year 2020 activities focused on transition and re-launching the Maryland Perinatal-Neonatal Quality Collaborative (MDPQC). Following a competitive bid, Health Quality Innovators was selected to lead the MDPNQC, beginning May 18, 2020. Health Quality Innovators created a website (www.mdpqc.org), designed a logo, and began creating website content. A listserv was initiated, with contacts from every birthing hospital in the state included, and a letter was drafted to MD birthing hospitals announcing the transition of the Collaborative. A Steering Committee was formed, re-engaging many former steering committee members from the previous iteration of the MDPQC. The Steering Committee includes physicians, nurses, and nurse midwives from hospitals across the state, as well as public health stakeholders.

Maternal Mortality Review Program
The Maternal Mortality Review Program reviews all pregnancy-associated (PA) deaths (deaths during or within one year after pregnancy from any cause). While the report for cases reviewed in FY2020 are still being finalized due to delays related to COVID, preliminary data demonstrate that there were 38 pregnancy-associated deaths in 2018. Twelve of the 38 total deaths (32 percent) resulted from substance use and unintentional overdose deaths. In nine of the 12 cases, two or more drugs were found by postmortem toxicology testing. From 2010 to 2018 of opioid identified postmortem, pregnancy-associated unintentional overdose deaths in Maryland, Fentanyl or fentanyl analogs have been the most frequently detected opioid. Fentanyl was not detected in any overdose deaths prior to 2014 but has been contributing to these deaths each year.

Preliminary data also show that from 2018 of the 38 pregnancy-associated deaths, 18 were determined to be pregnancy-related. Of the 18 pregnancy-related deaths occurring in 2018, six cases (33 percent) involved non-Hispanic White women, ten cases (56 percent) involved non-Hispanic Black women, and two cases (11 percent) involved Asian/Pacific Islander women. Among the 20 non-pregnancy-related deaths, 11 cases (55 percent) involved non-Hispanic White women, seven cases (35 percent) involved non-Hispanic Black women, one case involved a Hispanic woman, and one case involved a non-Hispanic woman whose race was identified as other.

The rate of non-pregnancy-related deaths is similar between non-Hispanic White and non-Hispanic Black women. However, the rate of pregnancy-related deaths in non-Hispanic Black women was 2.2 times higher than that of non-Hispanic White women, illustrating that the preponderance of pregnancy-related deaths is occurring among non-Hispanic Black women.

The Maryland Maternal Mortality Review Program has focused increased attention on disparities in pregnancy-related deaths. In 2018, the Maryland General Assembly enacted legislation to establish a Maternal Mortality Stakeholder Group composed of the Maryland Office of Minority Health and Health Disparities, the Maryland Patient Safety Center, the Maryland Healthy Start Program, women's health advocacy groups, community organizations, local health departments, health care providers serving minority women, and families that have experienced a maternal death. This Stakeholder Group is tasked with reviewing the findings and recommendations in the annual Maternal Mortality Review Report, examining issues resulting in disparities, and identifying new recommendations with a focus on disparities in maternal deaths. In 2020, the Stakeholder group met several times to discuss the need to focus on upstream factors such as preconception health, implicit bias and congruent care training for perinatal providers, and warm handoffs between providers and improving communications between healthcare providers.
Cesarean delivery

For 2016-2020, National Performance Measure (NPM) 2: Low-Risk Cesarean Delivery measured progress towards ensuring that birthing people are in optimal health before, during, and after pregnancy. Perinatal regionalization and home visiting initiatives highlighted progress towards performance goals in FY2020.

In Maryland births by cesarean delivery (CD) overall have fallen slightly, and the rate of cesarean delivery in nulliparous, term, singleton, vertex (NTSV) pregnancies has fallen as well over the past five years in Maryland, which is a positive indicator of the slow decrease in the state primary cesarean section rate. According to Maryland Vital Statistics Administration data, in 2019 (most recent data), 32.9% of all births to Maryland residents occurred by cesarean delivery, a decrease from the rate of 34.9% in 2015. But the larger decrease has been in NTSV cesarean deliveries from 30.0% in 2015 to 27.8% in 2019, a decrease of 7.3% over four years.

Initiatives to decrease the NTSV cesarean delivery rate, started in SFY 2017 through the Maryland Perinatal-Neonatal Quality Collaborative and the Alliance for Innovation on Maternal Health (AIM) patient safety bundle on Safe Reduction of Primary Cesarean Birth, and continued through FY 18. At the end of SFY 2018, the Collaborative found a 6% overall reduction in low-risk cesarean deliveries among the participating hospitals. Individual hospital data showed that 20 of 31 participating hospitals decreased their NTSV cesarean rate, with eight hospitals achieving a 10-25% reduction and 3 hospitals with a > 25% reduction. That rate continued to fall almost six percent statewide in 2019.

Women/Maternal Health - Application Year

Maryland Title V identifies the priority needs for women's/maternal health as "ensuring that all birthing people are in optimal health before, during, and after pregnancy," and "addressing the racial disparities in Severe Maternal Morbidity rates among Black NH and White NH."

To this end, in SFY 2022, Title V will employ the following strategies to improve maternal health outcomes statewide:

Preventive Dental Visit-Pregnancy
During State Fiscal Year (SFY 2022), the Office of Oral Health (OOH) will leverage its established partnership with the Maryland section of the American Congress of Obstetricians and Gynecologists (ACOG) to disseminate *Oral Health During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers* through local health departments and other providers. The practice guidance contains essential information on oral health during pregnancy, including background on oral conditions during pregnancy, myths, and facts about the safety of oral health care for pregnant women, pharmacological considerations for dental care for pregnant women, and detailed practice guidance for prenatal providers. The document also includes a variety of associated resources for use in practices and for patients. In addition, the OOH will also provide detailed information on how to apply the document's guidance in their practices. The Office of Oral Health team will conduct outreach to providers to assist them in establishing local referral networks for their pregnant patients, with the goal of increasing access to oral health care for this population.

Maternal and child health care coordination at the local health department will continue linking pregnant people who are referred through the Maryland Prenatal Risk Assessment (PRA) to oral health providers as part of their care coordination.

Smoking During Pregnancy
For SFY 2022, Title V will continue and strengthen the partnership with MDH's Center for Tobacco Control and Prevention. Specifically, Title V will work with local health departments for care coordination and connect individuals who smoke tobacco to the QuitLine or local health department tobacco cessation programs. QuitLine Coaches use cognitive behavioral coaching and practical skill-building to reinforce effective coping strategies, help the participant manage stress, and build self-efficacy. The QuitLine is a free service to all Maryland residents age 13 and older. Title V will also collaborate with the Center for Tobacco Control and Prevention to update a tobacco cessation toolkit for OB/GYN providers.

Overdose Mortality for Women ages 15-49
In SFY 2022, the Maryland Family Planning Program will focus on expanding SBIRT (Screening, Brief Interventions, and Referrals to Treatment) throughout their 62 service sites across Maryland. In addition, the program will focus on improving partnerships between substance use disorder clinics and family planning clinics particularly in Western and Northern Maryland.

Title V will continue to partner with Medicaid and the Overdose Data to Action (OD2A) funded under Centers for Disease Control and Prevention to improve linkages to care, specifically implementing an electronic version of the Prenatal Risk Assessment (e-PRA). During SFY 2022, Title V will work with Baltimore City, Baltimore County, and Anne Arundel County to increase the number of prenatal clinics referring clients to local health departments for care coordination. The Baltimore Metro region was chosen as an initial site to leverage existing efforts of clinics using the e-PRA. In addition, Title V will partner with OD2A to update the postpartum infant maternal referral form (PIMR), that is used to link birthing people and infants to care coordination at local health departments as well as partner with the

State's Health Information Exchange (HIE), called CRISP.

In addition, Title V and OD2A will partner together to develop a toolkit for substance use prevention and linkage to treatment targeted towards public health professionals. The toolkit, developed in partnership with The Association of State and Territorial State Officials (ASTHO), will include information such as sample linkage to care workflows, Maryland program highlights, and links to existing resources, such as previously developed toolkits and existing provider services. The toolkit is currently in a draft phase and is slated for dissemination by the Fall of 2021. Additional appendices that target the care needs of specific populations (such as the maternal and child health population) will also be developed during SFY 2022.

Finally, Title V will understand opioid use through PRAMS by analyzing the supplemental questions on opioid use that will be used for further public health action.

Severe Maternal Morbidity

Maryland has a unique health care finance structure by agreement with the Centers for Medicare and Medicaid Innovation (CMMI), called the Total Cost of Care. By agreement with CMMI, the State has adopted a Statewide Integrated Health Improvement Strategy (SIHIS) to advance hospital quality, care transformation across the health care system, and population health. The last goal, total population health, has three domains: diabetes, opioids, and maternal and child health. The maternal and child health goal has two specific outcomes of interest: severe maternal morbidity and childhood asthma. CMMI approved the State's strategy proposal on March 17, 2021.

As maternal and child health was identified as the third domain within population health, the Health Service Cost Review Commission approved an additional $40 million dollars over four years to meet the SIHIS Maternal and Child Health goals. The majority (80%) of the funds will go towards Medicaid to increase linkages to care for birthing people with opioid use disorder, reimburse for doula/birth worker support services, and expand group based prenatal care and maternal and infant home visiting. The remaining funds will go towards public health services to expand asthma home visiting, promising practice and evidence based home visiting, as well as expanding group prenatal care for birthing people, regardless of payor. During SFY 2022, the Title V program and Maternal and Child Health staff will be working to expand the programs identified through SIHIS.

Maryland Perinatal-Neonatal Quality Collaborative

The Maryland Perinatal-Neonatal Quality Collaborative (MDPQC) is focused on addressing maternal hypertension. For SFY 2022, the MDPQC will focus on sustained implementation of quality improvement initiatives, which will include identifying barriers, assisting low performers, and continuing regular check-in calls, learning events, and data reporting. An in-person learning event will be organized to provide updates and invite high performers to share best practices and lessons learned. The effectiveness of the collaborative will also be assessed at the midpoint of each initiative, with the Steering Committee and participating hospitals providing feedback, and a root-cause analysis will be conducted for any under-performing measures, as needed. The MDPQC will continue to heavily focus on health disparities and will push out data-driven improvement activities and resources to promote health equity.

Maternal Health Innovation Program

In SFY 2022, the Title V Program will continue to work with the Maternal Health Innovation Program, also called "MDMOM," by Johns Hopkins University, and specifically finalizing the statewide maternal health improvement strategic plan. The maternal health improvement strategic plan will focus on five goals: 1) promote equity and mobilize against racism in maternal health, 2) achieve maternal health (preconception, prenatal and birth, postpartum and inter-partum periods) using the life course models to support Maryland mothers through advocacy and implementation of policies, 3) improve resiliency for birthing people, families and communities that acknowledge the importance of relationships social determinants of health for an optimal quality of life, 4) improve access to and

utilization of data to make informed decisions, and 5) develop a maternal health workforce that will be available, accessible, and culturally relevant and based on principles of racial equity and justice.

In SFY 2021,Title V through MDMOMs held a competitive bid for an Equity Advisor. For SFY 2022,Title V will continue to work with the Equity Advisor to ensure the strategic plan incorporates equity principles and provide recommendations on analysis and contextualization of data to demonstrate the impact of racism, determinants of equity, and determinants of health. This data and information will be used to develop Title V local health department grant applications with an equity focus. Additionally, the Equity Advisor will work with the Title V Manager to outreach and develop partnerships with community-based organizations.

Finally, Title V will partner with the Maternal Health Innovation Program (MDMOM) core leadership team to scale up the severe maternal morbidity review process, continue implicit bias training for perinatal providers, and implement the maternal health warning signs for home visitors.

Maternal Mortality Review Committee

During SFY 2022, the Maternal Mortality Review Committee will continue to conduct de-identified, confidential case reviews for all pregnancy-associated deaths to identify clinical and non-clinical factors and systems issues contributing to these deaths. There will be additional focus on streamlining medical records requests as there were challenges in obtaining records during COVID-19 pandemic. More attention will be focused on understanding the broader context of the cases and environments by reviewing the social determinants of health (e.g., poverty level of the area, high food priority area), maternal and child health services (e.g., home visiting, WIC, administration care coordination unit) in addition to the medical records. A competitive bid process will be conducted for the administration of the Maternal Mortality Review Program during SFY 2022 to expand the scope of work of the coordination activities.

The Maternal Mortality Stakeholder Group will continue to review the findings and recommendations in the annual Maternal Mortality Review Report, examining issues resulting in disparities, and identifying new recommendations with a focus on disparities in maternal deaths. These findings will inform the Maternal Health Improvement Program Task Force as the implementers of the Maryland Strategic Plan.

Maryland Family Planning Program

The Maryland Family Planning Program will continue to promote optimal health outcomes for men, women, and families through ensuring access to breast and cervical cancer screening, prevention and treatment of sexually transmitted infections, HIV testing and prevention education, infertility and preconception services, health education and counseling and referrals to community resources. This program provides access to affordable, broad range of family planning methods, including Fertility Awareness-Based to assist individuals with their reproductive life plan, which includes postponing, preventing, achieving and the spacing of their pregnancies. In SFY 22, the Maryland Family Planning Program will focus on expanding SBIRT (Screening, Brief Interventions, and Referrals to Treatment) throughout their 62 service sites across Maryland. In addition, the program will focus on improving partnerships between substance use disorder clinics and family planning clinics particularly in Western and Northern Maryland. In SFY 2022, the Maryland Family Planning Program remains committed to providing support to subrecipients as they continue their innovative telehealth practices, as well as assist with strategic efforts to return to safe practices while clinics reopen post-Covid.

Merck For Mothers Safer Childbirth Cities

Through funding to the Baltimore City Health Department and B’more for Healthy Babies (BHB), a city wide initiative to improve maternal and infant health, Title V funds Baltimore Healthy Start through the Baltimore City Health Department. Baltimore Healthy Start, and therefore, Baltimore City is a recipient of the Merck for Mothers Safer Childbirth Cities Initiative, which aims to support community-based organizations in US cities with a high burden of

maternal mortality and morbidity to implement evidence-based interventions and innovative approaches to reverse the country's maternal health trends and directly confront racial inequities in maternal health outcomes.

For SFY 2022, Baltimore Healthy Start and its partners are working with the Baltimore City Health Department and B'more for Healthy Babies to implement the local Maternal Mortality Review process. In addition, Baltimore Healthy Start will partner with additional Baltimore Hospitals for Patients as Partners series, an initiative that bring the knowledge and experience of maternity patients to bear on hospital and health system quality improvement process, implement a maternal health monitoring intervention of prenatal and postpartum home-based assessments for Baltimore Healthy Start clients, with immediate medical referral if needed, provide postpartum care services, delivered by certified registered nurse practitioners, co-located and co-scheduled in Federally Qualified Health Center (FQHC) pediatric clinics at 2-week, 4-week, 2-month, 4- month, 6-month, and 12-month infant well-child visits.

Perinatal/Infant Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.2	NPM 3
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.0	NPM 3 NPM 4 NPM 5
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.1	NPM 3
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	1.9	NPM 4 NPM 5
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	270.1	NPM 3
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	97.1	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)
Indicators and Annual Objectives

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

State Provided Data

	2019	2020
Annual Objective		
Annual Indicator	79.2	93.4
Numerator	954	891
Denominator	1,205	954
Data Source	VSA	VSA
Data Source Year	2018	2019
Provisional or Final ?	Final	Final

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	93.7	94.0	94.3	94.6	95.0	95.3

Evidence-Based or –Informed Strategy Measures

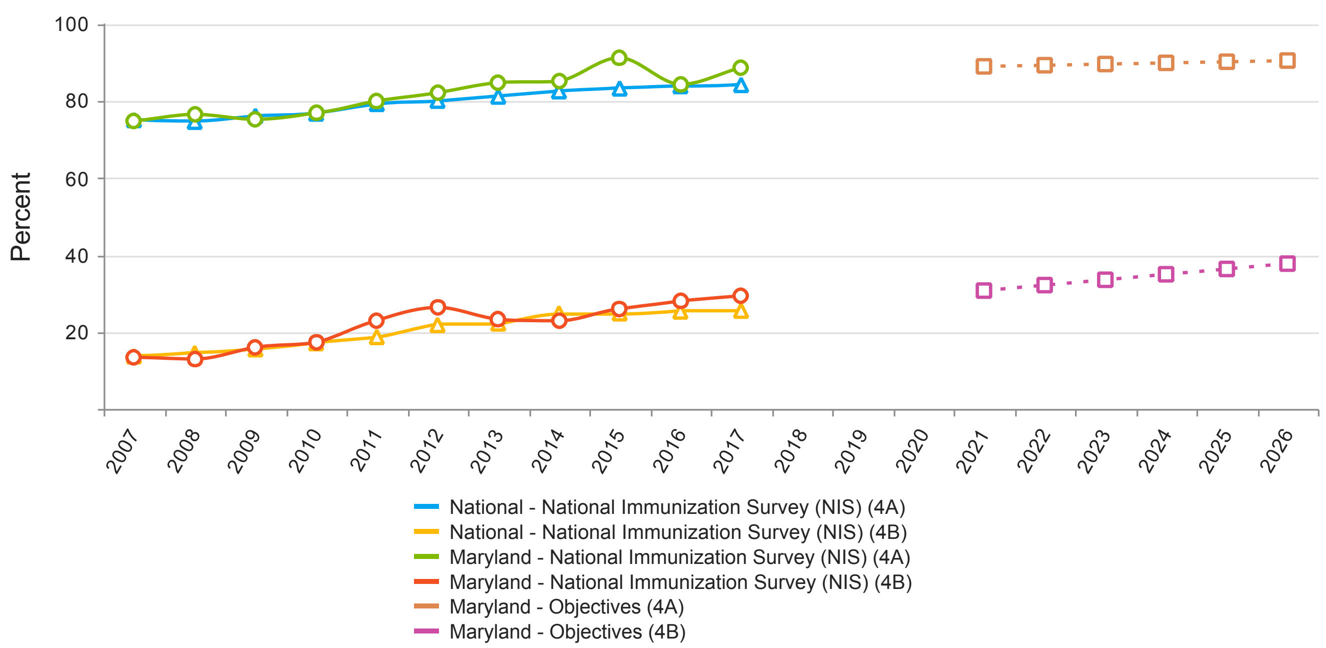
ESM 3.1 - Percentage of very low birth weight infants delivered at appropriate level hospitals

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	79.2	93.4
Numerator	954	891
Denominator	1,205	954
Data Source	VSA	VSA
Data Source Year	2018	2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	93.7	94.0	94.3	94.6	95.0	95.3

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



NPM 4A - Percent of infants who are ever breastfed

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2019	**2020**
Annual Objective		
Annual Indicator	84.1	88.6
Numerator	51,263	55,833
Denominator	60,967	63,040
Data Source	NIS	NIS
Data Source Year	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	88.9	89.2	89.5	89.8	90.1	90.4

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

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2019	**2020**
Annual Objective		
Annual Indicator	28.0	29.4
Numerator	16,851	17,961
Denominator	60,103	61,137
Data Source	NIS	NIS
Data Source Year	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	30.8	32.2	33.6	35.0	36.4	37.8

Evidence-Based or –Informed Strategy Measures

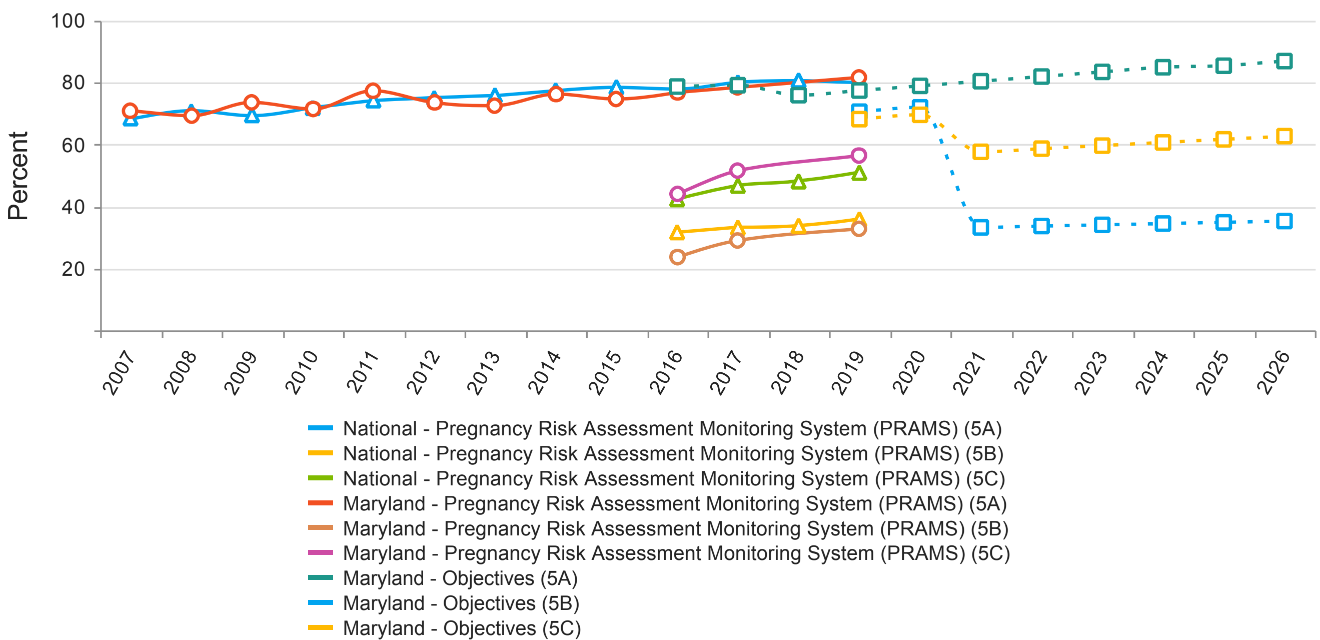
ESM 4.1 - Number of birthing hospitals designated as breastfeeding friendly

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		10
Numerator		
Denominator		
Data Source		MDH Breastfeeding Policy Committe
Data Source Year		FY 2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	10.0	11.0	12.0	13.0	15.0	17.0

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



National - Pregnancy Risk Assessment Monitoring System (PRAMS) (5A)
National - Pregnancy Risk Assessment Monitoring System (PRAMS) (5B)
National - Pregnancy Risk Assessment Monitoring System (PRAMS) (5C)
Maryland - Pregnancy Risk Assessment Monitoring System (PRAMS) (5A)
Maryland - Pregnancy Risk Assessment Monitoring System (PRAMS) (5B)
Maryland - Pregnancy Risk Assessment Monitoring System (PRAMS) (5C)
Maryland - Objectives (5A)
Maryland - Objectives (5B)
Maryland - Objectives (5C)

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	78.6	79	75.8	77.3	78.8
Annual Indicator	76.0	74.6	78.2	78.2	81.6
Numerator	49,042	47,705	48,293	48,293	50,368
Denominator	64,531	63,975	61,753	61,753	61,754
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2014	2015	2017	2017	2019

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	80.3	81.8	83.3	84.8	85.3	86.8

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

Federally Available Data			
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)			
	2018	**2019**	**2020**
Annual Objective		70.5	71.9
Annual Indicator	29.0	29.0	32.9
Numerator	16,948	16,948	19,188
Denominator	58,441	58,441	58,412
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019

State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			70.5	71.9
Annual Indicator	69.1			
Numerator	45,750			
Denominator	66,226			
Data Source	PRAMS			
Data Source Year	2015			
Provisional or Final ?	Final			

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	33.3	33.7	34.1	34.5	34.9	35.3

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

Federally Available Data			
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)			
	2018	2019	2020
Annual Objective		68.1	69.5
Annual Indicator	51.7	51.6	56.6
Numerator	30,441	30,441	32,851
Denominator	58,942	58,942	58,015
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019

State Provided Data				
	2017	2018	2019	2020
Annual Objective			68.1	69.5
Annual Indicator	66.8			
Numerator	44,268			
Denominator	66,226			
Data Source	PRAMS			
Data Source Year	2015			
Provisional or Final ?	Final			

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	57.6	58.6	59.6	60.6	61.6	62.6

Evidence-Based or –Informed Strategy Measures

ESM 5.1 - Percentage of infants less than 6 months who are placed on their backs to sleep

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	78.2	81.6
Numerator	48,293	50,368
Denominator	61,753	61,754
Data Source	PRAMS	PRAMS
Data Source Year	2017	2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	80.3	81.8	83.3	84.8	86.3	86.8

State Action Plan Table

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

Priority Need

Ensure that all babies are born healthy and propser in their first year

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

Increase the percentage of very low birth weight babies delivered at an appropriate level hospital from 93.4% to greater than 95% by 2025.

Strategies

1. Continue with oversight of standardizing definitions for birthing hospitals levels of care through the Maryland Perinatal Standards of Care and with site visits for Level I, II, III, and IV birthing hospitals. 2. Provide maternal fetal medicine support and technical assistance through the Maryland Perinatal Support Program. 3. Continue to implement the maternal hypertension bundle and the neonatal antibiotic stewardship through the Maryland Perinatal-Neonatal Quality Collaborative. 4. Continue with The Maryland Health Innovation Program and Task Force to address maternal and perinatal health through data, policy, quality initiatives, training and telemedicine. 5. Continue with Surveillance Quality Initiatives such as Child Fatality Review and Fetal and Infant Mortality Review to identify systemic preventive factors.

ESMs	Status
ESM 3.1 - Percentage of very low birth weight infants delivered at appropriate level hospitals	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 (Maryland) - Perinatal/Infant Health - Entry 2

Priority Need

Ensure that all babies are born healthy and propser in their first year

NPM

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

Objectives

Increase the number of infants who are ever breastfed from a baseline of 88.6% to 90% by 2025

Strategies

1.Provide training for providers and encourage hospitals to adopt policies that are conducive to breastfeeding. 2. Provide breastfeeding education through home visiting, care coordination, and Babies Born Healthy.

ESMs	Status
ESM 4.1 - Number of birthing hospitals designated as breastfeeding friendly	Active

NOMs

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

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

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

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

Priority Need

Ensure that all babies are born healthy and propser in their first year

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

Increase the number of babies who are placed on their back to sleep as reported by PRAMS from 81.6% to 88.9% by 2025.

Strategies

1. Assess the feasability of implementing a Safe Sleep Communication Plan developed from Morgan State University's previous research, 2. Provide infant safe sleep eductation through Local Health Departments and Babies Born Healthy Sites. 3. Continue to support the Surveillance and Quality Improvement Program to gather information from mothers who had a fetal or infant loss through Fetal and Infant Mortality Review.

ESMs	Status
ESM 5.1 - Percentage of infants less than 6 months who are placed on their backs to 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 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

Maryland’s priority needs for Perinatal Health is “to ensure that all babies are born healthy and prosper in their first year of life.” Title V conducted and supported activities to address NPM 5: Percent of infants placed on their back to sleep.

Promoting infant safe sleep continued to be a priority for Maryland in SFY 2020. PRAMS data for 2017 births indicated that 83.2% of new mothers placed their babies on their backs to sleep, up from 77% in 2012. This exceeds the Healthy People 2020 target of 75%. The prevalence was highest among NH white mothers (88%) and mothers over 35 (88%), but lowest among NH Black mothers (76%) and mothers under the age of 20 (68%).

In SFY 2020, infant safe sleep education was provided to 2,433 families through Title V funded local health department home visiting services. In addition, through Title V, 1,292 families received information on second hand/environmental smoke exposure. CFR teams continued to review all sleep-related infant deaths and a detailed analysis and review was provided in the annual CFR legislative report.

As part of SFY 2020 Surveillance and Quality Initiatives (SQI) efforts, local CFR and FIMR teams prioritized dissemination of information and education on sleep-related infant death and Safe Sleep best practices. Teams reported distribution of safe sleep materials, pack-n-plays, and sleep sacks, as well as ongoing community-based safe sleep education training conducted throughout the state. Between Babies Born Healthy (BBH) and SQI grantees a total of 687 portable cribs were distributed across the state during SFY 2020.

Title V continued with an Interagency Agreement (IA) with Morgan State University (a historically black university/college) to better understand why safe sleep practices are not adopted by some new parents, and specifically to use qualitative research methods to identify causes of the persistent racial disparities in sleep related deaths. During SFY 2020, Morgan State University (MSU) conducted a literature review to identify infant safe sleep interventions that are effective among Black Non-Hispanic parents and caregivers. A few studies demonstrated that multiple interventions such as free portable cribs and infant safe sleep education improved infant safe sleep practices. However, given the limited number of published articles focused on infant safe sleep education within Black communities, more research was needed. Morgan State researchers also recognized that environmental barriers resulting from a legacy of disparities in the social determinants of health limited adoption of infant safe sleep practices. These findings led to a publication.[1] Ultimately, the partnership with MSU will lead to a communications strategy and recommendations that includes culturally sensitive and relevant safe sleep messaging.

Home Visiting

During SFY 2020, six local health departments used Title V funds through Core Public Health funding, Child Health Systems Improvement funding, and High Risk Infants funding to support home visiting services to at-risk women and infants. These programs link pregnant and post-partum individuals to needed community resources such as WIC, provide education on safe sleep, breastfeeding, tobacco cessation, and child development, and ensure parents and infants have a medical home. Nearly 2,300 women and infants received home visiting services through a local health department in SFY 2020. The decline in the number served from past years was directly related to COVID-19 closures and restrictions.

Infant Mortality

Infant mortality is a significant indicator of the overall health of a population. Infant mortality reflects the broader community health status, poverty and other social determinants of health, and the availability and quality of health

services. In 2019, the Maryland infant mortality rate was 5.9 deaths per 1,000 live births, a decrease of three percent from the 2018 rate of 6.1 deaths per 1,000 live births and reflecting a 10% overall decrease from the average rate of 6.6/1,000 from 2010-2014 . The non-Hispanic (NH) White infant mortality rate stayed constant, at 4.1 deaths per 1,000 live births, while the Hispanic infant mortality rate increased by 34%, from 3.8 to 5.1 deaths per 1,000 births, and the NH Black rate decreased for the second year in a row, from 10.2 to 9.3. for a 9% total decrease. The neonatal mortality rate (deaths under 28 days of age) decreased by 7% from 4.2 in 2018 to 3.9 in 2019, with the rate decreasing by 7% among NH Black infants, from 6.9 to 6.4, and increasing 14% from 2.9 to 3.3. among Hispanic neonates and increasing 4% from 2.6 to 2.7 among NH white infants. The statewide post-neonatal mortality (deaths from 28 days through 11 months of age) rate increased by 5%, from 1.9 in 2018 to 2.0 in 2019. The rate decreased by 12% among NH Black infants (from 3.3. to 2.9) and also decreased among NH white infants, by 7%. However, the postneonatal mortality rate increased 111% from 0.9 to 1.9 from 2018 to 2019 among Hispanic infants. The leading causes of infant death in 2019 were disorders related to short gestation and low birth weight (LBW) account for 23% of losses , congenital abnormalities (18%), sudden unexpected infant death (SUID) including Sudden Infant Death Syndrome (SIDS) (9%), and maternal complications of pregnancy (9%). SUID . There was a total of 44 Sudden Unexpected Infant Deaths in 2019, with an annual rate of SUID of 62.7 per 100,000 live births.

Comparing two five-year periods over the last decade (2010-2014 and 2015-2019), the overall infant mortality rate in Maryland has declined by six percent. The average rate for NH Black infants decreased significantly by nine percent. The average rate among Hispanic infants increased 13 percent between these two time periods. The post-neonatal mortality rate was stable over the 10-year period among NH Black infants but increased by 17% among NH White and Hispanic infants. The largest declines in infant mortality over the past ten years were seen in the Baltimore metropolitan area, especially in Baltimore City and Anne Arundel, which had statistically significant decreases, with 15.2 percent and 19.2 percent reduction, respectively, as well as in the National Capital Area, with Prince George's County seeing a 6.7 percent decrease in infant mortality rates. Rates of infant mortality increased in the Northwest, Southern, and Eastern Shore regions, with increases in Somerset (82.8%), Dorchester (48.4%), Washington County (41.6%), and Charles counties (26.1%).

Fetal and Infant Mortality Review (FIMR)

Title V funds support Fetal and Infant Mortality Review (FIMR) activities through the required state match. FIMR is an important quality improvement strategy to improve maternal and child health. FIMR not only provides important insight into opportunities for systems improvement, but they also serve as a mechanism for local and regional communication, coordination, and collaboration on other MCH issues. In SFY 2020, FIMR programs operated in eight of the 24 jurisdictions experiencing the highest number of fetal and infant deaths.

During SFY 2020, FIMR process improvements identified in SFY 2018 and SFY 2019 through the Quality Improvement Council continued. The process improvements included quarterly calls with all local coordinators to allow for cross-jurisdictional collaboration and data sharing. In addition, during SFY 2020, the Annual meeting included an overview of Infant Mortality Profiles created by MCHB Epidemiology program staff, an overview of the Postpartum Infant and Maternal Referral (PIMR) FIMR review of congenital syphilis cases, along with Title V Safe Sleep updates. additional training from the National Center for Fatality Review and Prevention (NCFRP) on case identification, maternal interviews, and translation recommendations into action. Efforts to address ongoing data sharing challenges with the Vital Statistics Administration (VSA) and the Office of the Chief Medical Examiner (OCME) continued.

Child Fatality Review (CFR)

During SFY 2020 MCHB provided Surveillance and Quality Initiatives (SQI) grants to every jurisdiction to support ongoing Child Fatality Review (CFR) Activities. Multidisciplinary case review teams (CRT) conduct confidential, de-identified reviews of fetal and infant deaths within the jurisdiction to identify non-clinical factors and systems issues

contributing to poor pregnancy outcome and deaths. The teams develop prevention strategies to address health care delivery systems and identify community resource needs, in order to reduce fetal and infant mortality and address racial disparities in pregnancy outcomes.

Community Action Teams (CAT) review the findings of the CRT and are charged with advocating for creating large-scale systems change to benefit all pregnant or postpartum women, with particular emphasis on those identified as being most at-risk and vulnerable to poor pregnancy outcomes. Membership of Community Action Teams consists of those with the political will and fiscal resources to create systems changes. These members are able to develop a community perspective on how to best create the desired changes within the community. In 2020, Community Action Teams provided recommendations and developed a distribution plan for Safe Sleep, Kick Count resources, developed patient empowerment campaigns to encourage pregnant people to "Speak Up" about their pregnancy concerns to care providers, addressed care collaboration and continuity of care starting with preconception health, provided public presentations to local government officials on Infant Mortality and racial disparities in their jurisdiction, and continued to participate in local Substance Exposed Newborn (SEN) workgroups with the Department of Social Services (DSS) to implement the START (Sobriety Treatment and Recovery Teams) model within the jurisdiction, among many other activities executed.

Additionally, CFR became an active participant in the Department of Human Services Social Services Administration's Substance Use Disorder Workgroup to collaborate on interagency efforts to reduce the risk of harm for substance exposed newborns and their families during SFY 2020.

In September 2020, Montgomery County Health Department was featured in a podcast, "What's Happening MOCO?" to discuss Maternal and Infant Health and SIDS prevention. In the podcast, Angeline Bell, RN discussed the importance of the ABCs (Alone, Back, Crib) of safe sleep and how the local health departments engage in safe sleep.

During 2020, both FIMR and CFR teams had to adapt to the COVID-19 Pandemic. Local health department staff were deployed to assist with the pandemic efforts. In addition, teams no longer met in-person and adjusted to secure virtual meetings.

Risk Appropriate Perinatal Care

Although NPM 3: Risk Appropriate Perinatal Care was not a selected performance measure for FY 2016- FY 2020, additional information is provided here as perinatal regionalization, breastfeeding, fatality reviews, infant mortality, safe sleep, and home visiting initiatives highlighted progress towards increasing Risk Appropriate Perinatal Care in SFY 2020.

For NPM 3 the number of VLBW (very low birth weights, < 1,500g) births at all Maryland hospitals decreased slightly from 2018 to 2019, from 1,050 VLBW deliveries in 2018 to 954 VLBW births in 2019 across all hospital levels. A total of 17,652 babies were born at Level I and Level II delivering hospitals in 2019, with 63 of these babies (6.6% of all VLBW births) born at weights less than or equal to 1500g. There were 44,801 births at Maryland Level III/IV delivering hospitals in 2019, of which 891 were VLBW, making up 93.4% of all VLBW births, keeping ahead of the Healthy People 2020 goal of 83.7% of VLBW births occurring at Level III or Level IV facilities. This is also an increase from 2017 at 88.1% and 2019 at 90.9%.

Maryland Perinatal System Standards

The Maryland Perinatal System Standards was developed in the mid-1990s by a Maryland Department of Health advisory committee as a set of voluntary standards for Maryland hospitals providing obstetric and neonatal services.

Level III and Level IV hospitals are designated perinatal referral centers that have both specialized care for pregnant women, as well as the baby. The Standards have since been incorporated into the regulations for designation of perinatal referral centers by the Maryland Institute for Emergency Medical Services Systems (MIEMSS), as well as the Maryland Health Care Commission's State Plan regulations for obstetrical units and neonatal intensive care units. MIEMSS regulates Level III and Level IV Hospitals. Level I and Level II are voluntary designations as delivering hospitals but do not have the specialized care as Level III and Level IV hospitals.

The Maternal Child Health Bureau (MCHB) convenes and leads the Perinatal Clinical Advisory Committee that develops, reviews, and updates the Maryland Perinatal System Standards for all levels of obstetric and neonatal care. The Perinatal Standards were updated in April 2019 to be consistent with the most recent edition of the *Guidelines for Perinatal Care*, a joint manual of the American Academy of Pediatrics (AAP) and the American College of Obstetrics and Gynecology (ACOG). All Level III and Level IV perinatal referral hospitals were notified of this update, and MIEMSS (Maryland Institute for Emergency Medical Services Systems) Regulation Compliance Verification packages were sent to these hospitals in order to verify compliance with the Standards. Of the 32 delivery hospitals in Maryland, six (6) are Level I, 11 are Level II, 13 are Level III, and two (2) are Level IV. The most recent Standards are incorporated in regulations governing the Level III and IV hospitals, and compliance with the Standards is required for designation at these levels. In SFY 20, MCHB continued to work with the Maryland Institute for Emergency Medical Services Systems in the compliance reviews of Level III and IV hospital centers.

The Standards specify that very low birth weight (VLBW) births should occur at Level III and IV hospitals which have the necessary subspecialty obstetric care and neonatal intensive care. VLBW infants, who weigh 1500g or less at birth, are the most fragile newborns. They are more likely to survive and thrive when born in a facility with a Level III or IV neonatal intensive care unit (NICU). MCHB and Vital Statistics monitor the number of VLBW births born in Maryland, and track where these infants were born. Each Maryland delivering hospital receives a report showing VLBW births and neonatal mortality rates by hospital of delivery and level of care.

One role of the MCHB Morbidity, Mortality, and Quality Review Committee is to monitor voluntary compliance of Level I and Level II hospitals with the Standards. During site visits conducted every four to five years, Level I and Level II hospitals are asked to review all VLBW births at their site and to determine if any could have been avoided by transfer of the mother to a higher level of care prior to delivery. During Fiscal Year 2020, the MMQRC reviewed the VLBW data from 2018, and started planning to resume Level I and II site visits. Four sites were identified to prioritize site visits as these sites had higher VLBW than the average Level I and Level II sites. Due to the Covid-19 pandemic, the MMQRC and MDH team updated the self-assessment and case review forms in preparation for the site visits.

Maryland Perinatal-Neonatal Quality Collaborative (MDPQC)

Perinatal Collaboratives are networks of perinatal care providers and public health professionals working to improve health outcomes for women and newborns through continuous quality improvement (QI). The Collaborative provides participating birthing hospitals with educational resources, technical assistance, and a platform for communication and sharing best practices.

In SFY 2020 the Maryland Perinatal-Neonatal Quality Collaborative (MDPQC) activities focused on transition and re-launching the MDPQC. Following a competitive bid, Health Quality Innovators (HQI) was selected to lead the MDPQC, beginning May 18, 2020. Health Quality Innovators created a website (www.mdpqc.org), designed a logo, and began creating website content. A listserv was initiated, with contacts from every birthing hospital in the state included, and a letter was drafted to MD hospitals announcing the transition of the Collaborative. A Steering Committee was formed, re-engaging many former steering committee members from the previous iteration of the MDPQC. The Steering Committee includes physicians, nurses, and nurse midwives from hospitals across the state, as well as public health stakeholders.

Neonatal Abstinence Syndrome (NAS)

The rate of neonatal abstinence syndrome (NAS) among Maryland resident newborns born in Maryland hospitals has decreased 10.5%, from 14.3 per 1,000 newborn discharges in 2015, to 12.8 per 1,000 newborn discharges in 2019 (Case-mix data, Health Services Cost Review Commission). Initially, Maryland had the State Performance Measure (SPM) on Hospital Policy change to improve quality of care for infants with neonatal Abstinence Syndrome.

The Department of Human Services recently updated their Substance Exposed Newborn Policy to reduce the number of SEN out-of-home placements and to improve the quality and effectiveness of services for SEN and families impacted by substance use disorder. In an effort to address the need for cross-system coordination of services and providers, MCHB program staff participated in statewide training for DHS staff to increase knowledge of community resources for families with a substance exposed newborn. Any newborn displaying effects of withdrawal from a controlled substance exposure as determined by medical personnel will trigger a SEN notification to DHS. MCHB Program staff provided training on the Postpartum Infant and Maternal referral form (PIMR), which allows hospital staff to refer families to their local health department for resources to address the child and family needs. Local DSS staff were encouraged to support delivery hospitals in utilizing the PIMR form for any SEN notification, and information about the PIMR was included in supplemental resources available for those who completed the SEN policy training.

Perinatal Support Program

The purpose of the Maryland Perinatal Support Program (MPSP) is to support and improve the perinatal system of care in Maryland. Specifically, MPSP brings maternal-fetal medicine consultation, education, and technical assistance, as well as obstetric nursing outreach and education, to Level I and II birthing hospitals in the State. Maternal-fetal medicine specialists can provide unique support in the evaluation and management of pregnant and postpartum patients with pre-existing medical conditions, pregnancy complications, or known/suspected fetal anomalies.

During SFY 2020, providers from Johns Hopkins Hospital conducted 68 physician and advanced practitioner outreach events and 11 nurse outreach visits. The providers continued to provide technical assistance, education, and case reviews for conditions such as gestational diabetes, antiphospholipid syndrome, substance use disorders. Due to COVID, many of the outreach visits were limited to remote and telephone meetings. The providers answered questions related to COVID and its effects on pregnant people and their fetuses.

Babies Born Healthy

In SFY 2020, nine sites across eight local jurisdictions implemented state funded Babies Born Healthy (BBH) programs, which directed resources to engage women and communities in an effort to provide supportive coordinated care and address disparities in infant mortality rates in Maryland. A total of 1,047 birthing people accessed BBH services, and there was a total of 360 births among program participants and 9 fetal/neonatal deaths. These jurisdictions were selected to receive funding after they had been identified by the Perinatal Periods of Risk Assessment (PPOR) was conducted and concluded that these jurisdictions were key to effectively curbing disparities and rates of infant mortality.

Services provided were geared towards the promotion of prenatal care, reduction of substance use, tobacco cessation, infant safe sleep education, long acting reversible contraception, accessing health insurance, and other strategies driven by site-specific data to promote healthy maternal and infant outcomes. Specific activities included home visiting strategies, nurse and paraprofessional case management services for high-risk women and infants, family planning services, screening and referrals for mental health and substance use. Also, in SFY 2020, sites began to utilize prenatal care groups following research pointing towards their effectiveness in promoting prenatal

health and birth outcomes.

COVID-19 presented barriers to both families and staff. Many staff are public health nurses in local health departments, and as such they were pulled into Maryland’s COVID-19 response which left BBH sites with very limited capacity. Families faced numerous challenges including job loss and eviction, difficulty in accessing food, loss of childcare, lack of transportation, domestic violence, technology limitations, issues in accessing necessary baby supplies, and others. Many BBH sites responded by doing emergency supply drop-offs to their participants and were a crucial lifeline at the height of the pandemic.

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[1] Malliga Jambulingam, Ariel Hunt, Margaret Alston, David Thomas, Yvonne Bronner. Infant Safe Sleep Interventions in African American Communities. *American Journal of Public Health Research*. Vol. 8, No. 5, 2020, pp 147-153. http://pubs.sciepub.com/ajphr/8/5/3

Perinatal/Infant Health - Application Year

Maryland's priority need for Perinatal Health is "to ensure that all babies are born healthy and prosper in their first year of life." As a result of the 2021-2025 Needs Assessment, Maryland has identified all three perinatal/infant health performance measures as priorities over the next five years. These include NPM 3: Percent of very low birth weight babies that are born at Level III+ hospitals, NPM 4: Percent of babies that are breastfed, and NPM 5: Percent of babies that are put on their backs to sleep.

Objective 1: Increase the percentage of very low birth weight babies delivered at an appropriate level hospital from 93.4% (Baseline 2019) to greater than 95% by 2025.

NPM 3: Risk Appropriate Perinatal Care

The strategy selected for this NPM is to continue with the oversight of standardizing definitions for birthing hospital levels of care. Maryland has had a systematic approach focused on improving the perinatal care system and reducing infant mortality for over ten years. Since the mid-1990s, Maryland has had a systematic approach to improving the perinatal system of care and assuring delivery of very low birthweight (VLBW) infants at hospitals with the appropriate level of care.

The Maryland Perinatal Standards of Care defines hospital levels of neonatal care and levels of maternal care using American Academy of Pediatrics (AAP) and American College of Obstetrics and Gynecology (ACOG)/ Society of Maternal Fetal Medicine (SMFM) guidelines. The standardized classification system includes basic care (level I), specialty care (level II), subspecialty care (level III) and regional perinatal health care centers (level IV)[1].

The Maryland's Perinatal Clinical Advisory Committee reconvened in 2018 to revise the Standards in order to be consistent with the 8th edition of the Guidelines for Perinatal Care, issued in 2017 jointly by AAP and ACOG.

Standards are incorporated into the regulations for designation of perinatal referral centers (Level III and Level IV hospitals) by the Maryland Institute for Emergency Medical Services Systems (MIEMSS), as well as the Maryland Health Care Commission's State Plan regulations for obstetrical units and neonatal intensive care units.

For SFY 2022, MIEMSS will continue with the Level III and IV Perinatal Referral Center re-designation with eight site reviews. In addition, the MIEMSS Perinatal Advisory Committee will meet quarterly.

For SFY2022, the Morbidity, Mortality, and Quality Review Committee (MMQRC)will continue to monitor voluntary compliance of Level I and Level II hospitals with the Standards with four site reviews. The MMQRC will continue to meet quarterly.

Maryland Perinatal Support Program

The purpose of the Maryland Perinatal Support Program (MPSP) is to support and improve the perinatal system of care in Maryland. While Level III and Level IV perinatal hospitals (as defined in the Maryland Perinatal System Standards and designated by MIEMSS) are required to have maternal-fetal medicine physicians on staff, the Level I and II hospitals, community health clinics, and obstetric care providers often do not have access to such specialists. Maternal-fetal medicine specialists can provide unique support in the evaluation and management of pregnant and postpartum patients with pre-existing medical conditions, pregnancy complications, or known/suspected fetal anomalies. Support provided by a maternal-fetal medicine specialist through consultation, education, and technical assistance to obstetric providers may allow a woman to continue care within her community. Such support may also assist an obstetric provider in determining whether a pregnant patient would need to transfer her prenatal care to a

specialty center. MPSP brings maternal-fetal medicine consultation, education, and technical assistance, as well as obstetric nursing outreach and education, to providers in all regions of the State. Consultation and other technical assistance are provided virtually via secure internet hosts, through scheduled webinars and online meetings, and also onsite (e.g., at the hospitals, clinics, or offices), as needed. These services are provided without charge to the hospital or obstetric provider.

The three goals of the Maryland Perinatal Support Program are 1.) to assist in providing risk appropriate perinatal care, 2.) to assist providers with determining if a prenatal patient will need to transfer her care to a specialty center, and 3.) provide evidence based guidelines for obstetrical care.

Following a competitive bid, University of Maryland was selected to lead the Maryland Perinatal Support Program. During SFY 2022, University of Maryland will conduct a needs assessment of Level I and II hospitals, Federally Qualified Health Centers (FQHCs), and obstetric care provider practices across the state to understand the needs of specialized perinatal care in Maryland. In addition, University of Maryland will provide maternal-fetal medicine consultation, education, and technical assistance to community obstetric providers and other individual groups, or organizations. They will establish and maintain a website about the Perinatal Support Program and will also coordinate with other state initiatives such as Maryland Maternal Health Innovation Program, and the Morbidity, Mortality, Quality Review Committee.

Maryland Perinatal- Neonatal Quality Collaborative (MDPQC)

Fiscal Year 2022 will mark the midpoint of the two-year maternal (hypertension) and neonatal (antibiotic stewardship) initiatives selected by the MDPQC Steering Committee. Steering Committee members consist of providers, public health officials, payors, patient representatives, and representatives of professional societies. The MDPQC will focus on sustained implementation of quality improvement initiatives, which will include identifying barriers, assisting low performers, and continuing regular check-in calls, learning events, and data reporting. An in-person learning event will be organized to provide updates and invite high performers to share best practices and lessons learned. The effectiveness of the collaborative will also be assessed at the midpoint of each initiative, with the Steering Committee and participating hospitals providing feedback, and a root-cause analysis will be conducted for any under-performing measures, as needed. The MDPQC will continue to heavily focus on health disparities and will push out data-driven improvement activities and resources to promote health equity.

Maryland Maternal Health Innovation Program (MDMOM)

MDMOM, the Maryland Health Innovation Program, is a five-year HRSA funded initiative to improve maternal health across the state. MDMOM is a collaboration between Johns Hopkins University, Maryland Department of Health, Maryland Patient Safety Center and the University of Maryland, Baltimore County who work together to coordinate innovation in the areas of data, resource availability and hospital and community care.

The Maryland Maternal Health Improvement Task Force was convened by MDH to address the needs of pregnant and postpartum people in Maryland. The Task Force is chaired by the Title V Manager and brings a diverse group of key stakeholders together. Task Force members are assigned to workgroups, which are formed around important focus areas in the 5-year Strategic Plan to improve maternal health in Maryland, including: 1.) maternal health data, 2.) telemedicine, 3.) quality improvement, 4.) training innovation, and 5.) policy. Title V Manager, Colleen Wilburn, MPA, currently serves as the Project Coordinator for MDH and Chair of the Task Force. The purpose of the Task Force is to advise and make recommendations to the Maryland Department of Health on policies to improve maternal health throughout the state.

Surveillance Quality Initiatives (SQI)

In SFY 2022, Surveillance Quality Initiatives such as Child Fatality Review and Fetal and Infant Mortality review will

continue to identify systemic preventive factors to improve perinatal health in Maryland. The goal of the SQI funding to local jurisdictions is to develop, implement, and align recommendations aimed at improving rates of infant and child fatalities. For SFY 2022, jurisdictions will continue to address the following priorities as part of their funding:

- Prevention of underlying causes of prematurity, and prevention/control of chronic disease in pregnant women;
- Dissemination of information and education on sleep-related infant death and Safe Sleep
- Practices, particularly among communities at highest risk of sleep-related infant death;
- Conduct screening, provide referrals to reduce incidence of substance use disorder in pregnancy
- Increasing social supports for women during the perinatal and postpartum periods

As part of their funding, local jurisdictions provide an updated needs assessment that describe the current activities that prevent infant and child death and address disparities in their jurisdictions as well as how they will use their data to action.

Fetal/Infant Mortality Review (FIMR)

The Maternal and Child Health Bureau, housed within the Maryland Department of Health, serves as the lead agency for Maryland's Fetal Infant Mortality Review (FIMR) Program. Funded by Title V, the FIMR program works with program staff in jurisdictions with the highest rates of fetal and infant mortality. Infant and child mortality are two of the most critical indicators of the overall health of a population, and Maryland has made significant strides to improve infant and child health. In 2019, the infant mortality rate in Maryland was 5.9/1,000, representing a 3% decrease from the 2018 rates, and a 10% overall decrease from the average of 6.6/1,000 from 2010-2014. While infant and child mortality rates in Maryland have declined, significant disparities persist and work remains to be done, and while there was a 9% decrease in the non-Hispanic Black infant mortality rate, from 2018 to 2019, the non-Hispanic Black infant mortality rate (9.3/1,000) is significantly higher than that of non-Hispanic White infants (4.1/1,000). There was also an increase in the rate of infant mortality for Hispanic infants for the first time in several years, increasing from 3.8/1,000 to 5.1/1000.

There are currently 8 funded FIMR projects in Maryland, operating in the jurisdictions identified via the PPOR analysis as having the highest rates of infant mortality in the state. They include Anne Arundel, Charles, Prince George's, Montgomery, Caroline, Wicomico, Baltimore Counties and Baltimore City. The Fetal Infant Mortality Review was designed to be a community-owned, action-oriented process to improve service systems, and works to examine the medical, non-medical and systems related factors contributing to fetal and infant death at the community level. Each local team works with their Community Action Teams (CAT) to develop program and policy recommendations to improve maternal and fetal outcomes. Leveraging the recommendations of the CAT teams, health departments will now be required to implement interventions aimed at addressing factors contributing to preventable maternal and infant deaths in Maryland.

In SFY 2022, FIMR CAT teams are asked to identify current gaps in existing infant mortality reduction efforts and maternal health services, and expand interventions to reduce infant mortality, with specific focus on improving maternal health and decreasing rates of premature birth; reducing sleep related infant deaths; and addressing substance use disorder in pregnancy.

Furthermore, FIMR teams will select cases for review based on the categories of fetal and infant death where the largest disparities are present within their jurisdictions. Teams are also expected to conduct case reviews with one or more of the following risk factors present: substance use during pregnancy; birth defects or fetal anomalies; significant maternal health conditions (hypertension, gestational diabetes); maternal history of fetal loss; or SARS-CoV-2 infection during pregnancy. Teams will work to identify various findings, recommendations, and action steps for improving systems of care for pregnant women and infants. Recent recommendations include developing educational materials for providers and patients on the importance of early prenatal care and "counting kicks",

improving access to family planning, bereavement and other mental health services and substance abuse services. A significant part of the review process is incorporating the voices of mothers who experience a fetal loss in addition to reviewing the medical aspects of the case. In SFY 22, FIMR teams will focus on maternal interviews as a strategy area for quality improvement.

Objective 2: Increase the number of infants who are breastfed from a baseline of 88.6% to 90% (National Immunization Survey).

NPM 4: Breastfeeding

The strategy selected for this NPM is to provide all postpartum mothers with breastfeeding information and providing appropriate referrals to lactation consultant services before discharge. This strategy entails informing pregnant women and new mothers about lactation consultant services and ensuring that lactation consultants have access to new mothers after birth. As part of this strategy, Title V may consider utilizing doulas/birth workers in a similar role as lactation consultant to promote breastfeeding.

This strategy is considered to have moderate evidence, where "dedicated lactation specialists may play a role in providing education and support to pregnant women and new mothers wishing to breastfeed and to continue breastfeeding to improve breastfeeding outcomes" was shown in various systematic literature reviews[2].

MDH Hospital Breastfeeding Policy Committee

The Maryland Department of Health (MDH) formed an 11-member committee, which includes the Title V Manager, to develop breastfeeding policy recommendations that will strengthen and improve current maternity care practices. The first finalized policy recommendations were completed in September 2012. These policy recommendations, based on WHO/UNICEF Ten Steps to Successful Breastfeeding, include evidence-based hospital practices to increase rates of breastfeeding initiation, duration, and exclusivity for healthy, fully term infants whose mothers have chosen to breastfeed. The committee currently meets biannually and provides provider training and hospital policies for Baby-Friendly hospitals.

In 2012, MDH launched a statewide initiative to help hospitals improve the support that hospitals give to breastfeeding mothers. All 32 birthing hospitals committed to this quality improvement process. In 2016, almost 85% of the birthing hospitals reaffirmed their commitments. Hospitals are encouraged to sign a letter of intent to become designated as Baby-Friendly through the Baby-Friendly Hospital initiative, or to follow the Maryland Hospital Breastfeeding Policy Recommendations. As of 2020, 10 hospitals reaffirmed their commitments, representing approximately 31% of birthing hospitals.

Maternity Staff Training

Under the guidance of the Hospital Breastfeeding Policy Committee, and in a collaboration between International Board Certified Lactation Consultants (IBCLCs) at the Maryland Department of Health and the University of Maryland Upper Chesapeake Medical Center, a series of 15 maternity staff training modules were developed. The modules provide education and expertise needed to meet both the Maryland Hospital Breastfeeding Policy Recommendations and the Baby Friendly Hospital Initiative.

Technical Assistance Calls

The Maryland Hospital Breastfeeding Policy Committee offers technical assistance conference calls three to four times a year, on average, to help hospitals with implementation of the Maryland Breastfeeding Policy Recommendations and Baby Friendly Ten Steps. These calls include practical steps and information from IBCLCs, staff nurses, administrators, and policy committee members from across Maryland. The experts on the call, professionals from hospitals achieving the topic at hand, lead the conversation about best-practices and ideas on

how to best implement the topic being discussed. Past recordings on Auditing and Quality Improvement, Skin-to-Skin and Breastfeeding Training Resource Webinar are still available for listening.

Physician Webinar Series

In 2016, the Maryland Hospital Breastfeeding Policy Committee coordinated a six-lecture series of free webinars about breastfeeding-related topics[3]. These webinars provided continuing medical education (CME) credits, as well training sessions help fulfill the Baby Friendly USA and the Maryland Hospital Breastfeeding Policy Recommendations. CME credits were available at no cost until June 2019.

Maryland WIC Program

The Maryland WIC Program is committed to helping families have positive, successful breastfeeding experiences. WIC provides resources, such as a FAQ sheet, handouts, and a breastfeeding checklist available in both English and Spanish, as well as videos that provide information on various breastfeeding-related topics. Maryland WIC employs 31 breastfeeding peer counselors who provide ongoing one on one support to pregnant and breastfeeding participants. Maryland WIC staff provided breastfeeding education and support to parents and caregivers of 29,205 (unduplicated) infants during SFY 2020 (July 2019-June 2020.)

Objective 3: Increase the number of babies who are placed on their back to sleep as reported by PRAMS from 81.6% to the Healthy People 2030 target of 88.9%

NPM 5: Safe Sleep

The strategy selected for this NPM is to build on infant safe sleep campaigns by engaging Title V programs and community partners. This strategy entails a professional training made available to Home Visitors, Healthy Start providers and other direct service providers in the community who work directly with expecting and new mothers and families to emphasize a nuanced approach to take family needs, beliefs and context into account when talking about safe sleep.

This strategy is a new approach and is supported by the "Building on Campaigns with Conversations" series of modules developed by the National Center for Education in Maternal and Child Health (NCEMCH). The modules received extensive input from the National Action Partnership to Promote Safe Sleep (NAPPSS) coalition of more than 70 national organizations. Furthermore, this approach is based on Ajzen's Theory of Planned Behavior and follows current American Academy for Pediatrics (AAP) recommendations for safe sleep.

Morgan State University (MSU) Infant Safe Sleep Project

The Morgan State University (MSU) Infant Safe Sleep Project is funded by MCH with Title V funds. The Project was started in 2019 and aims to provide safe sleep messaging in African-American communities through the development of a social marketing campaign. Focus groups were conducted in two Baltimore City communities to understand why African American communities are not using safe sleep practices. Currently, the Program is working on a video that speaks to myths about safe sleep practices in communities of color. This video will be distributed to local health departments and home visiting programs throughout the state. In SFY 2022, MDH will assess the feasibility of implementing a statewide Infant Safe Sleep Campaign based on MSU's research and the communication strategy developed from the findings.

Local Health Departments

Local Health Departments through Babies Born Healthy (BBH) and Care Coordination Units will continue to provide information to Infant Safe Sleep. In addition, sites with portable crib programs will continue to provide portable cribs for families in need.

Babies Born Healthy (BBH)

The goal of Babies Born Healthy (BBH) is to identify and link pregnant people to essential services that have been associated with improved birth outcomes. To achieve the Healthy People 2030 Objective of 5.0 infant deaths per 1,000 live births the objectives of BBH are to: (1) Reducing overall infant mortality rates in Maryland by 10% (2) Eliminate disparities in infant mortality in Maryland by reducing infant mortality rates by 59% among Black non-Hispanic infants.

In SFY 2022, there will be stronger guidelines on how programs should plan and execute their care coordination services, specifically following best practice guidelines and framework utilized by Maryland Medicaid. Babies Born Healthy has also been brought into closer alignment with Surveillance and Quality Initiative (SQI) efforts and FIMR/CFR programming in order to synergize reports and incidents of deaths and the jurisdictional response to address the causes.

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[1] https://www.acog.org/clinical/clinical-guidance/obstetric-care-consensus/articles/2019/08/levels-of-maternal-care

[2] https://www.mchevidence.org/documents/NPM-Webinar-3-04-22-20.pdf

[3] https://phpa.health.maryland.gov/mch/Pages/Hospital_Breastfeeding_Physician_Training.aspx

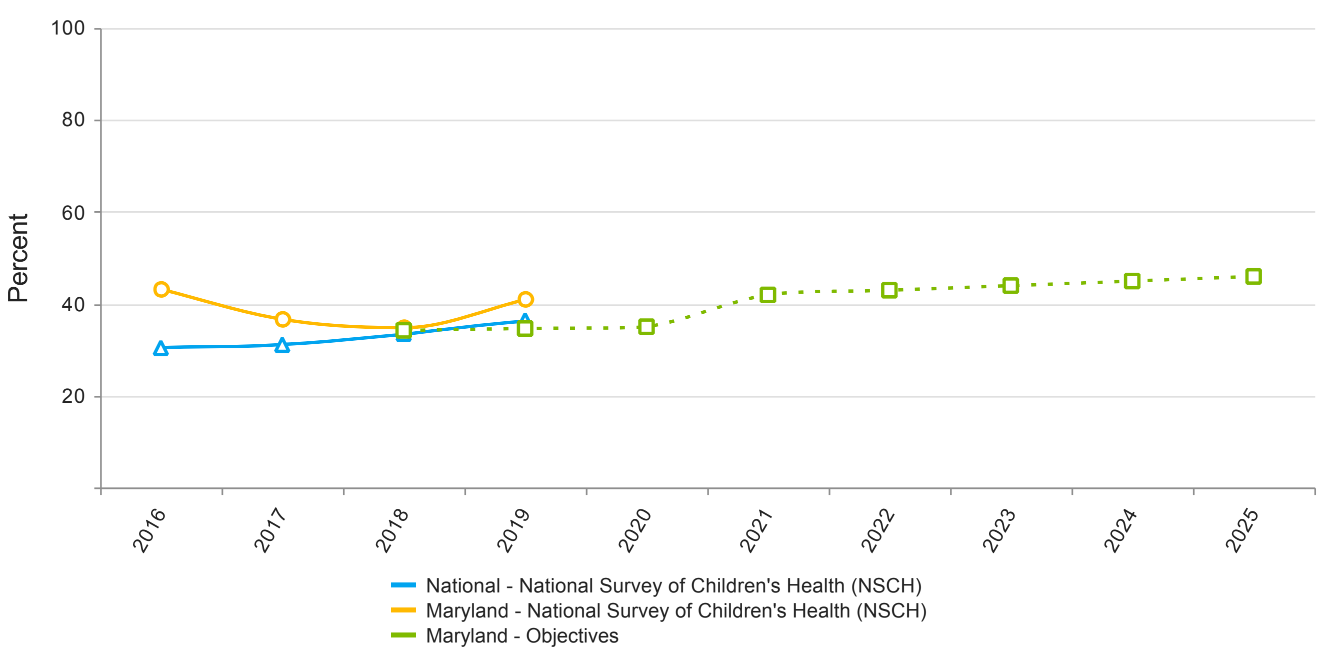
Child Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2018	82.9	NPM 14.2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2015_2019	17.5	NPM 14.2
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2019	8.7 %	NPM 14.2
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2019	10.3 %	NPM 14.2
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2019	27.3 %	NPM 14.2
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.2	NPM 14.2
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.0	NPM 14.2
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.1	NPM 14.2
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	1.9	NPM 14.2
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	270.1	NPM 14.2
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	97.1	NPM 14.2
NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)	NSCH	Data Not Available or Not Reportable	NPM 6
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2018_2019	10.6 %	NPM 13.2
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	18.8 %	NPM 13.2
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	93.5 %	NPM 6 NPM 13.2 NPM 14.2

National Performance Measures

NPM 6 - Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year
Indicators and Annual Objectives



Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			34.2	34.6	35
Annual Indicator		43.1	36.6	34.7	40.9
Numerator		60,201	49,586	47,097	55,907
Denominator		139,848	135,327	135,685	136,579
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	41.9	42.9	43.9	44.9	45.9	46.9

Evidence-Based or –Informed Strategy Measures

ESM 6.1 - Number of parents who receive information/education on the importance of developmental screenings

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		2,832	1,181	1,201	1,220
Annual Indicator	2,785	1,162	1,035	1,022	749
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	MCHB Data	MCHB	MCHB Data
Data Source Year	2016	2017	2018	2019	FY 2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	1,239.0	1,259.0	1,278.0	1,278.0	1,300.0	1,400.0

State Performance Measures

SPM 3 - Receipt of Primary Care During Early Childhood

Measure Status:	Active

State Provided Data

	2016	2017	2018	2019	2020
Annual Objective		67.4	64.6	65.8	67.1
Annual Indicator	66.3	63.5	65.9	67.1	67
Numerator	27,004	25,389	30,621	25,794	24,969
Denominator	40,723	39,994	46,466	38,455	37,253
Data Source	Medicaid	Medicaid	Medicaid	Medicaid	Medicaid
Data Source Year	2016 (CY)	2017 (CY)	2018 (CY)	2019 (CY)	2020 (CY)
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	68.2	69.4	70.6	71.8	73.0	74.2

SPM 4 - Number of Asthma Emergency Room Visits per 1,000 for Children age 2-17 with a primary diagnosis of asthma

Measure Status:	Active

State Provided Data	
	2020
Annual Objective	
Annual Indicator	9.2
Numerator	10,974
Denominator	1,195,993
Data Source	Health Services Cost Review Commission
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	8.5	7.2	6.7	6.2	5.3

State Action Plan Table

State Action Plan Table (Maryland) - Child Health - Entry 1	
Priority Need	
Ensure that all children have an opportunity to develop and reach their full potential	
NPM	
NPM 6 - Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year	
Objectives	
Increase the percentage of children who receive a developmental screen from 40.9% to 46% by 2025.	
Strategies	
1. Local health departments will educate parents on the importance of developmental screenings. 2. Track and monitor Medicaid data regarding developmental screenings.	
ESMs	**Status**
ESM 6.1 - Number of parents who receive information/education on the importance of developmental screenings	Active
NOMs	
NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)	
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	

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

Priority Need

Ensure that all children have an opportunity to develop and reach their full potential

SPM

SPM 3 - Receipt of Primary Care During Early Childhood

Objectives

Increase the percentage of children receiving at least five well visits by fifteen months from 67% to 73% by 2025.

Strategies

1. Continue to monitor and track receipt of primary care in early childhood through Medicaid data. 2. Coordinate with local health departments to provide primary care services such as childhood vaccinations, and vision and hearing screenings. 3. Home visiting programs will continue to promote primary care. 4. Support school based health centers to deliver primary care to children.

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

Priority Need

Ensure children with asthma and their families have the tools and supports necessary to manage their condition so that it does not impede their daily activities

SPM

SPM 4 - Number of Asthma Emergency Room Visits per 1,000 for Children age 2-17 with a primary diagnosis of asthma

Objectives

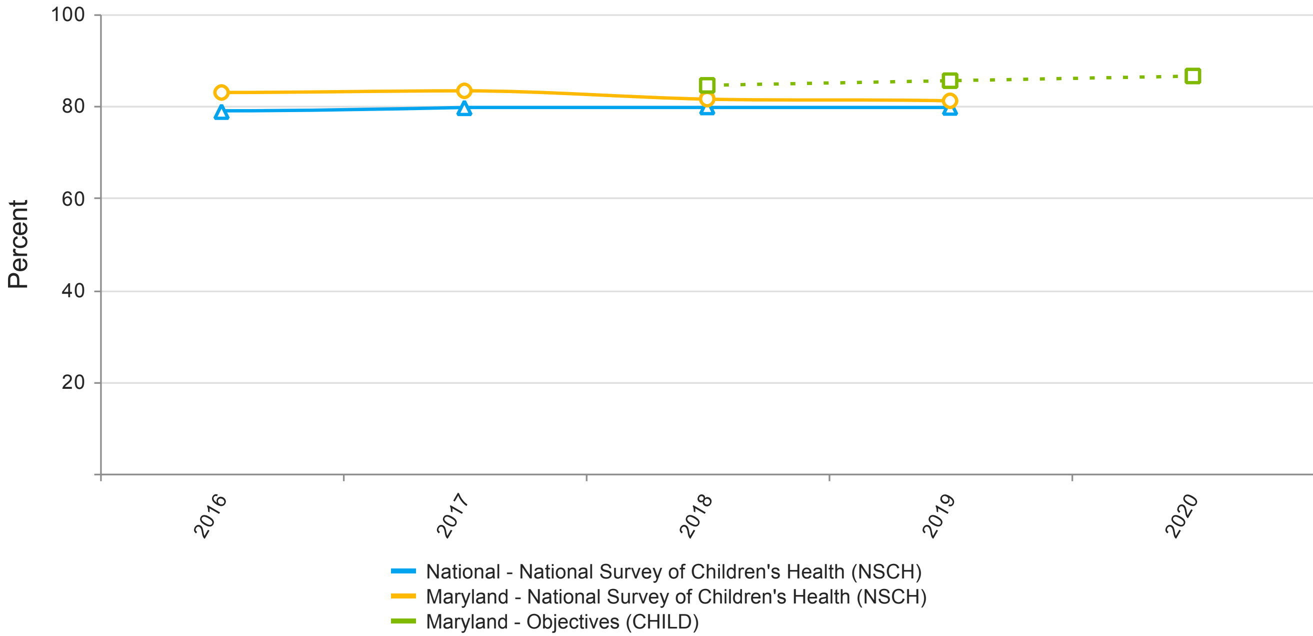
Decrease the number of asthma ED visits per 1,000 for ages, 2-17 from 9.2 to 5.3 by 2026.

Strategies

1. Support asthma home visiting through the local health departments and in collaboration with the Environmental Health Bureau. 2. Support School Based Health Centers (transfer to MDH in 2022) 3. Support regional asthma collaborations to coordinate asthma related activities. 4. Partner with CRISP (HIE) to strengthen linkages amongst pediatric care teams including school health providers, EDs, primary care, and specialists.

2016-2020: National Performance Measures

2016-2020: NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year Indicators and Annual Objectives



2016-2020: NPM 13.2 - Child Health

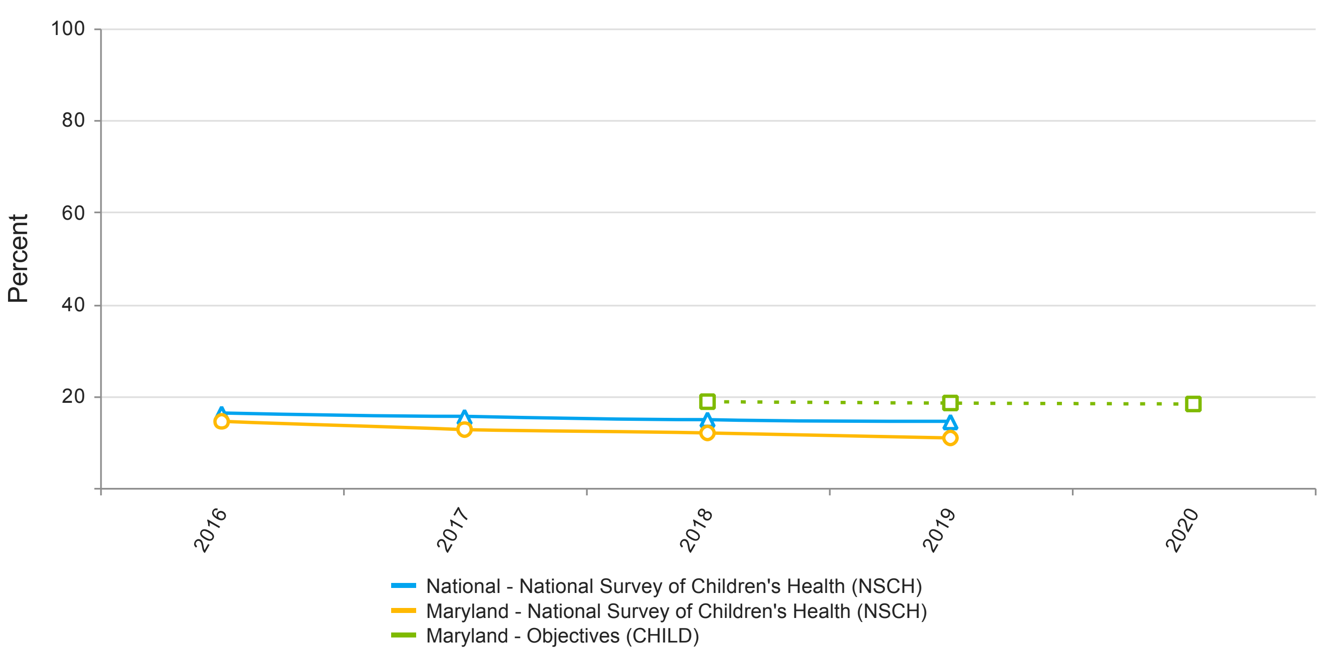
Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			84.4	85.4	86.4
Annual Indicator		82.8	83.1	81.5	81.1
Numerator		1,048,242	1,042,901	1,027,878	1,036,093
Denominator		1,266,026	1,254,794	1,260,632	1,277,497
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

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

2016-2020: ESM 13.2.1 - Oral Health Provider Training

Measure Status:					**Active**
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		0	1,000	1,000	1,000
Annual Indicator	0	1,000	0	0	0
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	OOH Data	OOH	OOH
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final



2016-2020: NPM 14.2 - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			18.8	18.5	18.3
Annual Indicator		14.4	12.9	12.1	10.9
Numerator		191,487	171,018	159,811	141,251
Denominator		1,325,743	1,323,530	1,316,517	1,297,373
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

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

2016-2020: ESM 14.2.1 - Smoking Cessation

Measure Status:			**Active**	
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			136	138
Annual Indicator			99	86
Numerator				
Denominator				
Data Source			Quitline Data	Quit Line Data
Data Source Year			FY 2019	FY 2020
Provisional or Final ?			Final	Final

Child Health - Annual Report

Maryland's Priority Need for the child health domain is " ensuring that all children have the opportunity to develop and reach their full potential." Maryland Title V provided preventive and primary care through direct, enabling, and public health infrastructure services to a variety of child health needs in SFY 2020. Services and activities focus on the needs of children across the Title V pyramid as outlined by the State Action Plan. Child health activities for which Title V provides state leadership includes local child fatality reviews, access to developmental screenings and medical homes, school based health services such as hearing and vision screening and referral, immunizations, behavioral health screening and intervention, and early intervention services.

NPM 6 Developmental Screen: According to the National Survey of Children's Health 2019 data, 40.9% of children ages 9 through 35 months received a developmental screening using a parent-completed screening tool in the past year.

SPM 3 Receipt of Primary Care During Early Childhood (receiving at least 5 well visits by 15 months): Maryland state Medicaid data reported that in 2020, 67.0% of children enrolled in Medicaid who reached age 15 months received five or more well-care visits in their first 15 months of life.

Local Health Departments

Local health departments serve as Title V's primary delivery mode for preventive and primary care services for children. Each of the 24 local health departments receives federal Title V funding through a state core funding process to support direct, enabling, and population based services. In SFY 2020, thirteen local health departments used Title V core funding to support child health services including services such as immunizations, hearing and vision screening (in collaboration with local public and private school systems); and school based health services including wellness care and behavioral health screening.

Title V requires local health departments that provide child health services to submit performance measure data quarterly to demonstrate how their activities align with the Title V State Action Plan. This includes activities such as providing linkages to medical homes, providing information on developmental screenings and subsequent linkages to early intervention or specialty care when indicated, linkages to behavioral health treatment, and education on secondhand smoke exposure. In FY 20S20, a total of 136,135 children received child health services from a local health department.

Type of Service	Number of Children Served
Immunizations	16,199
Hearing Screen	51,073
Vision Screen	46,948
School Based Well Visits	20,943
School Based Behavioral Health/Substance Use Screening and Referral (Elementary and Middle School)	972
Total	136,135

In March 2020, Maryland Governor Larry Hogan issued a stay at home order due to the COVID-19 Pandemic, which led to school closures for the remainder of the academic year and closed local health department clinics responsible for administering immunizations. The result was fewer children able to access needed services.

Medicaid continues to be a significant Title V partner. The current MOU outlines agreements and guidelines on administration and policy, systems coordination, outreach and referral activities, and data sharing. Local health department Title V funded staff work with the Medicaid Administrative Care Coordination Units (ACCU) within their health department to identify and enroll eligible children in the Medicaid Program and other child health services.

Child Fatality Review (CFR)

A critical activity of the Maternal Child Health Bureau and Title V is the prevention of child and adolescent deaths through Child Fatality Review (CFR). CFR was established by Maryland statute in 1999. Maryland CFR program's mission is to develop plans, implement change and advise on policy and practice to prevent child deaths in every jurisdiction in the state. Maryland CFR comprises 24 local teams and the state team. Local CFR programs review all unexpected deaths of children under the age of 18, in order to understand the cause and incidence of child deaths and make community level recommendations for the prevention of child deaths. The State CFR Team, in turn, reviews statewide child fatality data to make state-agency level recommendations, implement recommended changes within the agencies represented on the State CFR team, and to advise State leadership on preventing child deaths. Title V supports the 24-member State CFR Team, which meets quarterly, as well as each of the 24 local CFR teams.

The State CFR Team oversees the efforts of local CFR teams that operate in each jurisdiction. Each month the local CFR teams receive notice from the Office of the Chief Medical Examiner (OCME) of unexpected resident child (under age 18) deaths and are required to review each of these deaths. Local teams meet at least quarterly to review cases and make recommendations for local level systems changes in statute, policy, or practice to prevent future child deaths, and work to implement these recommendations.

State CFR efforts to reduce the number of preventable child deaths continued as mandated by the Maryland Legislature. In SFY 2020, CFR received 158 referrals from the Office of the Chief Medical Examiner (OCME), and teams reviewed 150 deaths, 95% of all cases referred. This reflected a continued decrease in child fatalities from 2019.

In SFY 2020 MCHB and the CFR program continued their collaborative effort with the Maryland Department of Human Resources through State Council on Child Abuse and Neglect (SCCAN) to conduct reviews of all 2015 child deaths under age 5 in Maryland for possible evidence of child abuse or neglect. A report of findings has been developed and includes recommendations for a more standardized approach to considering child abuse and neglect in fatality reviews for local CFR teams.

Child Fatality Review continued collaborating with the Department of Human Services (DHS) Preventing Child Maltreatment and Reducing Fatalities Subgroup in SFY 2020. Efforts focused on the development of a plan to implement a trauma-informed, comprehensive, and centralized review process for child fatalities that are due to maltreatment. Together with other subgroup partners, the CFR Supervisor assisted in determining what data exists for tracking near fatalities, Critical Incidents, Serious Physical Injury; and identify any data gaps and to allow the Social Services Administration to understand the volume and characteristics (age, gender, race/ethnicity, child welfare involvement, etc.) of child fatalities to develop a centralized system for DSS to review fatalities due to maltreatment or suspected maltreatment.

The CFR program continues to participate in the ongoing efforts of the CDC SUID Case Registry, and local teams

and coordinators received training and technical assistance on the utilization of the SUID Categorization Algorithm, which was utilized in all SUID reviews that occurred during FY2020. Teams continued to work towards meeting the timeliness goals set by the CDC (270 days from date of death to case cleaning by CFR epidemiologist) with 26 cases entered in the SUID case registry during FY2020, with 38% of cases meeting desired timeliness benchmarks, and over 80% cleaned within 120 days of data entry.

The COVID-19 pandemic proved incredibly challenging to local CFR programs, with teams being unable to meet in person for several months after the start of pandemic and delays in development in protocols in each jurisdiction to allow for remote reviews. Additionally, CFR coordinators were partially or fully detailed to pandemic related duties for several months.

Child Abuse Medical Providers (CHAMP) Initiative
Chapter 334 of the Acts of 2005 (SB 782) charged the Secretary of the Maryland Department of Health (the Department) to establish the Child Abuse and Neglect Centers of Excellence Initiative and to appoint and convene the Child Abuse and Neglect Expert Panel. In 2008, pursuant to Maryland Annotated Code Health-General Art., §13-2201, the Child Abuse and Neglect Centers of Excellence Initiative was renamed Maryland Child Abuse Medical Providers (CHAMP). The CHAMP initiative was developed to provide expert consultation and training to local multidisciplinary teams (MDTs) and child advocacy centers in the diagnosis and treatment of child abuse.

According to the Maryland Department of Human Services' Child Protective Services, in SFY 2020, there were 53,680 cases of alleged child abuse and neglect in Maryland. This represents nearly a 10% decrease in cases of alleged child abuse and neglect in SFY 2019 but is likely an artifact of the decreased reporting by school staff during school closures due to the COVID-19 pandemic and does not reflect actual decreases in child abuse and neglect.

Multidisciplinary teams (MDTs) comprised of medical professionals, Child Protective Services staff, law enforcement, mental health providers, forensic interviewers, State's Attorneys, and victim advocates are used to enhance and improve investigations and responses for children and families. These teams are required due to the complex nature of child abuse and neglect investigations. These MDTs staff child advocacy centers (CACs), which are child-friendly facilities where children and families engaged in child abuse investigations can access services. In Maryland, 24 local CACs respond to over 5,000 children each year for allegations of sexual abuse, sexual assault, and other maltreatment of children. The CHAMP initiative was developed to provide training and ongoing support to local providers, and expert consultation to local or regional CACs in the diagnosis and treatment of child physical abuse, sexual abuse, and neglect.

During SFY 2020 the Department's Maternal and Child Health Bureau administered the CHAMP initiative through staff support of five CHAMP faculty members contracted to provide ongoing training, consultation, and case review to local providers.

CHAMP Activities
The CHAMP initiative was administered through individual contracts with the University of Maryland School of Medicine, Johns Hopkins University School of Medicine, Frederick Memorial Hospital, Sinai Hospital of Baltimore, Chesapeake Health Education Program Inc., and XIFIN Inc. In SFY 2020, the CHAMP initiative maintained a faculty of five child abuse medical experts. The faculty met quarterly to discuss future educational activities, recruitment of network providers, and child maltreatment prevention efforts. The CHAMP faculty provided educational and case review support in the diagnosis and treatment of child maltreatment to local health care providers, and expert consultation to State agencies involved in child abuse and neglect investigations, such as Child Protective Services

and law enforcement. CHAMP faculty provide case review to local providers via a secure, HIPAA-compliant online program called XIFIN. Local providers can upload case information and images to the secure website, which is accessible only to CHAMP faculty for review.

In SFY 2020, CHAMP held three half-day continuing education events for health care providers to review a variety of child maltreatment topics, including the Child Welfare System, Toxic Stress, Trauma Informed Care, and Challenging Issues for the Medical Provider in Cases of Suspected Child Sex Abuse. Each educational event also included a case review session, where providers presented cases and participated in a discussion of the cases and their evaluations. The case review sessions were led by a faculty member and were an opportunity for providers to review and discuss suspected incidents of child abuse and neglect. The case review sessions were informative particularly for providers in low-volume jurisdictions and may not have opportunities to assess less common findings in a clinical setting. The Forensic Nurse Examiner Faculty member conducted two adult and two pediatric forensic nurse examiner trainings.

CHAMP faculty members also provided quarterly reports on the number of cases reviewed through XIFIN (Telecam). CHAMP faculty members also provided quarterly reports on the number of cases reviewed through XIFIN. In SFY 2020, a total of 187 cases were reviewed by CHAMP Faculty using this platform. Additional peer review was conducted via phone call.

Furthermore, MCHB and the CHAMP program continued a collaborative effort with the Maryland Department of Human Resources through the State Council on Child Abuse and Neglect (SCCAN)) to conduct reviews of all 2015 child deaths under age 5 in Maryland for possible evidence of child abuse or neglect. A CHAMP Faculty member chaired this effort. A report of findings has been developed and includes recommendations for a more standardized approach to considering child abuse and neglect in fatality reviews for local CFR teams.

In SFY 2019, the Department partnered with the Maryland Children's Alliance to conduct a statewide assessment of each Child Advocacy Centers (CAC) resources for helping assess and address child maltreatment. Maryland Children's Alliance is a private nonprofit organization accredited by the National Children's Alliance as a State Chapter to serve as a convener of CACs across Maryland. The Maryland Children's Alliance plays a vital role in providing accreditation support and professional development for local member centers.

The statewide assessment, which was completed in FY 2020, included the following items:

(a) CAC sources for funding and training medical providers
(b) Number of children served per CAC
(c) Number of exams performed per CAC
(d) Number of medical provider hours each CAC needs
(e) CAC training needs for staff and medical providers

A total of 23 interviews were conducted during the first quarter of FY 2020 with CACs across Maryland. The needs assessment identified several areas of concern for the CHAMP Initiative in meeting the standards set by NCA, including medical evaluation capacity, training and standards, and the accreditation process.

Of the 23 CACs operating at the time of the needs assessment, 15 were accredited by NCA and 8 were on the path to accreditation. Along with MCA, CHAMP Faculty have committed to ensure medical providers at the currently unaccredited CACs have access to the required training and advanced medical consultation needed to meet the medical evaluation standards for NCA accreditation.

At the close of SFY 2020, the Department released a Request for Applications to solicit applications from hospitals,

academic centers, and other organizations with expertise in child abuse and neglect to administer the Maryland CHAMP initiative statewide and to ensure that all CACs in Maryland have access to medical evaluation providers and expert advice and support. The current individual contracts between the Department and the four hospitals where CHAMP faculty work was extended as a stop-gap measure until the grant was awarded in SFY 2021.

Under the new funding agreement, CHAMP faculty will be maintained, and the initiative will continue to recruit and train healthcare professionals as CHAMP providers. The initiative will also continue to provide educational activities, consultation, and case review support to local providers, and to explore opportunities for child maltreatment prevention efforts. Additionally, the CHAMP faculty will develop a new training curriculum based on the findings of the 2019 CAC needs assessment. The CHAMP Faculty have added an additional forensic nurse examiner trainer to the Initiative and are working to expand forensic nurse examiner training options in underserved areas of the State.

The Department intends to assist the CHAMP initiative in engaging other key stakeholders who work with children and child maltreatment. The CAC needs assessment provided the Department with a starting point in bridging gaps in the continuum of care. Recommendations in the needs assessment included providing more training opportunities for school nurses on child maltreatment, as well as a recommendation that all Maryland medical staff who see children should screen for Adverse Childhood Experiences at their well visits. The Department intends to work more closely with the Maryland Children's Alliance, CACs, and the CHAMP Faculty to increase collaboration and reduce gaps in the identification and evaluation of victims of child abuse and maltreatment.

Child Health - Application Year

The state of Maryland identifies the priority needs for child health as "ensuring all children have the opportunity to develop and reach their full potential," and "ensuring children with asthma and their families have the tools and supports necessary to manage their condition so that it does not impede their daily activities." To this end, in SFY 2022, Title V will employ the following strategies to improve child health outcomes statewide:

Local Health Departments

In SFY 2022, Title V will continue to provide federal core public health funding to all 24 of the state's local health departments. Local health departments have the opportunity to focus their efforts in one or any of a combination of the three Title V domains: child health, maternal health, and/or children and youth with special health care needs. Local health departments choose their domain of focus based on alignment with the Title V State Action Plan and with local needs assessments. Allowable services within the child health services domain will include hearing and vision screening, school based health services including well visits, screening, and referral for behavioral health, and immunizations. In SFY 2021, there were 10 out of the 24 local health departments that focused on child health services.

Asthma

Beginning in SFY 2022, local health departments will also be permitted to use Title V funding for the new State Performance Measure related to childhood asthma programming. Addition of this measure/service is to align with the Statewide Integrated Health Improvement Strategy (SIHIS).

In 2019, the State of Maryland collaborated with the Center for Medicare and Medicaid Innovation (CMMI) to establish the domains of healthcare quality and delivery that the State could impact under the Total Cost of Care (TCOC) Model. The State entered into a Memorandum of Understanding (MOU) that required Maryland to provide a proposal for the Statewide Integrated Health Improvement Strategy (SIHIS) to CMMI by December 31, 2020. The SIHIS aligns statewide efforts across three domains that are interrelated and, if addressed successfully, have the potential to make significant improvement in not just Maryland's healthcare system, but in the health outcomes of Marylanders.

- Domain 1: Hospital Quality
- Domain 2: Care Transformation Across the System
- Domain 3: Total Population Health

Asthma (along with Severe Maternal Morbidity referenced in Women's Health) is included within Domain 3: Total Population Health. The strategy identifies a goal of reducing the number of asthma related Emergency Room visits for children age 2-17 and decreasing the disparities between Black, Non-Hispanic to White Non-Hispanic rates by 30% by 2026.

In SFY 2022, local health departments may use Title V funding on asthma related programming/services including asthma home visiting or asthma school based management programs (in collaboration with PHPA's Environmental Health Bureau); provide health care education opportunities on asthma management; developing asthma regional collaboratives to coordinate asthma related activities within the region; or partnering with CRISP (the designated Health Information Exchange (HIE) for Maryland) to strengthen linkages among pediatric care teams including school health providers, Emergency Departments, primary care and specialists.

Child Fatality Review

In SFY 2022, all 24 jurisdictions in the state will continue to review all OCME-referred unexpected child deaths.

Beginning in SFY 2022, CFR, FIMR, and Babies Born Healthy programs will complete a joint planning process to ensure that all efforts related to infant, child and maternal health at local health departments are aligned. Teams are asked to align their goals and objectives with recommendations from the 2019 Legislative Report of the State Child Fatality Review Team, specifically: reduce sleep related infant deaths, enhance data quality for SUID cases through continued participation in the CDC SUID Case Registry, and develop recommendations to address racial disparities in child deaths. All jurisdictions are required to track their progress towards meeting identified performance measures through quarterly reporting. Child Fatality Review teams will continue to work towards data quality improvement for Sleep-related SUID deaths through our work with the CDC SUID case registry, with a focus on decreasing the number of days between review and entry into the NCDR-CRS for SUID case and decreasing the number and percent of missing and unknown priority variables for all SUID cases. To this end, the Office of the Chief Medical Examiner has provided Doll Scene Reenactment training to their entire Forensic Investigation staff, as well as revised their Infant Death Scene Investigation form to align with the CDC SUID IRF document. Beginning in July 2021, all infant deaths will have a completed doll scene reenactment performed by a forensic investigator and include scene reenactment photography to ensure that teams are better able to categorize these deaths using the CDC Categorization algorithm.

The State CFR Team will begin an Advanced Review process for selected CFR cases, upon request of local teams. The Advanced Review team will review cases that were deemed to have an undetermined cause of death; where there was disagreement about the preventability of the death; when the death was directly related to the COVID-19 pandemic; or upon special request of the local team.

Local teams will continue to provide letters to birthing hospitals upon review of an infant-sleep related death of a child delivered at that hospital, to ensure that there is ongoing engagement around safe-sleep education from delivering hospitals.

School-Based Health Centers

In SFY 2022, the Maternal and Child Health Bureau will begin its planning year for the transfer of oversight for school-based health centers from the Maryland State Department of Education in SFY 2023. Maryland's school-based centers represent an essential strategy toward improving the lives of Maryland's children and their families and optimizing their ability to reach adulthood. School-based health care addresses the unique needs of children and youth and increases access to medical, mental, dental and/or other health related services. As of SFY 21, there are 85 SBHC program locations in 14 of the 24 Maryland jurisdictions. Title V will be an integral partner in aligning performance measures for school-based health centers with the State Action Plan and to ensure that services complement the school-based child health services funded with Title V.

Child Abuse Medical Provider Network (CHAMP)

In SFY 2022, the Child Abuse Medical Provider Network (CHAMP) will be maintained under the new grant agreement with LifeBridge Health. Our six CHAMP faculty and two network providers will continue to provide training and support to Child Advocacy Centers' (CAC) multidisciplinary teams, in addition to providing peer review via Telecam, a HIPAA-compliant chart review platform that allows medical providers to upload exam documentation for advanced review by a member of the CHAMP faculty. Due to recent updates to the National Children's Alliance Standards for medical providers at accredited Child Advocacy Centers, the CHAMP Faculty will take a more proactive role in ensuring that all accredited CACs in Maryland are utilizing the Telecam system for peer review to ensure that 50% of all findings deemed abnormal or diagnostic of trauma from sexual abuse have undergone expert review by an advanced medical consultant.

The initiative will also continue to provide educational activities, consultation, and case review support to local providers, and to explore opportunities for child maltreatment prevention efforts. Additionally, the CHAMP faculty will

finalize development of a new training curriculum based on the findings of the 2019 CAC needs assessment. The CHAMP Faculty have added an additional forensic nurse examiner trainer to the Initiative and are working to expand forensic nurse examiner training options, as well as training for Pediatricians, in underserved areas of the State.

Adolescent Health

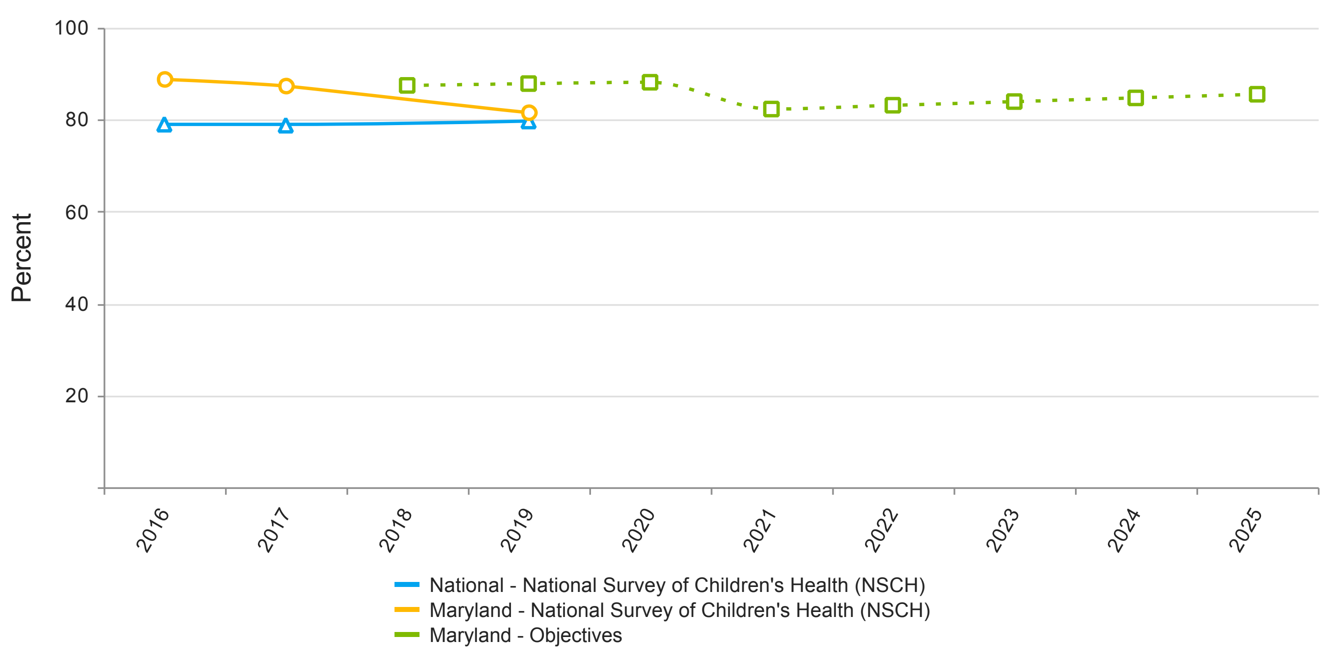
Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2018	82.9	NPM 14.2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2015_2019	17.5	NPM 14.2
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2019	8.7 %	NPM 14.2
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2019	10.3 %	NPM 14.2
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2019	27.3 %	NPM 14.2
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2018	6.2	NPM 14.2
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2018	6.0	NPM 14.2
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2018	4.1	NPM 14.2
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2018	1.9	NPM 14.2
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2018	270.1	NPM 14.2
NOM 9.5 - Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2018	97.1	NPM 14.2
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH-2018_2019	10.6 %	NPM 13.2
NOM 16.1 - Adolescent mortality rate ages 10 through 19, per 100,000	NVSS-2019	31.3	NPM 10
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19, per 100,000	NVSS-2017_2019	7.9	NPM 10
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2017_2019	7.8	NPM 10
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	18.8 %	NPM 10 NPM 13.2

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2018_2019	51.8 %	NPM 10
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	93.5 %	NPM 10 NPM 13.2 NPM 14.2
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	NSCH-2018_2019	17.6 %	NPM 10
NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)	WIC-2018	16.4 %	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-2019	12.8 %	NPM 10
NOM 22.2 - Percent of children, ages 6 months through 17 years, who are vaccinated annually against seasonal influenza	NIS-2019_2020	74.8 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NIS-2019	78.9 %	NPM 10
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2019	91.6 %	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-2019	94.9 %	NPM 10
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2019	13.9	NPM 10

National Performance Measures

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



Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			87.3	87.7	88
Annual Indicator		88.7	87.1	87.1	81.4
Numerator		393,976	386,469	386,469	359,586
Denominator		444,207	443,800	443,800	441,589
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017	2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	82.2	83.0	83.8	84.6	85.4	86.2

Evidence-Based or –Informed Strategy Measures

ESM 10.1 - Number of adolescent (12-17) who receive well visits through school based health centers

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		37,578
Numerator		
Denominator		
Data Source		MCHB Data
Data Source Year		FY 2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	45,000.0	60,000.0	75,000.0	90,000.0	110,000.0	125,000.0

State Performance Measures

SPM 4 - Number of Asthma Emergency Room Visits per 1,000 for Children age 2-17 with a primary diagnosis of asthma

Measure Status:	Active

State Provided Data	
	2020
Annual Objective	
Annual Indicator	9.2
Numerator	10,974
Denominator	1,195,993
Data Source	Health Services Cost Review Commission
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	8.5	7.2	6.7	6.2	5.3

State Action Plan Table

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

Priority Need

Ensure that adolescents age 12-17 receive comprehensive well visits that address physical, reproductive, and behavioral health needs.

NPM

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

Objectives

Increase the percentage of adolescents (12-17) who receive a preventive medical visit from a baseline of 81.4% to 85% by 2025.

Strategies

1. Continue the Healthy Kids Program under the EPSDT Program to enhance the quality of health services delivered by Medicaid providers. 2. Continue the Sexual Risk Avoidance Education grant program to promote sexual risk avoidance. 3. Continue the Personal Responsibility and Education Program to promote positive youth development. 4. Implement the Maryland Optimal Adolescent Health Program to reduce teen pregnancy. 5. Continue to support local health departments school based health services. 6. Support the network of school based health centers across the state.

ESMs	Status
ESM 10.1 - Number of adolescent (12-17) who receive well visits through school based health centers	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

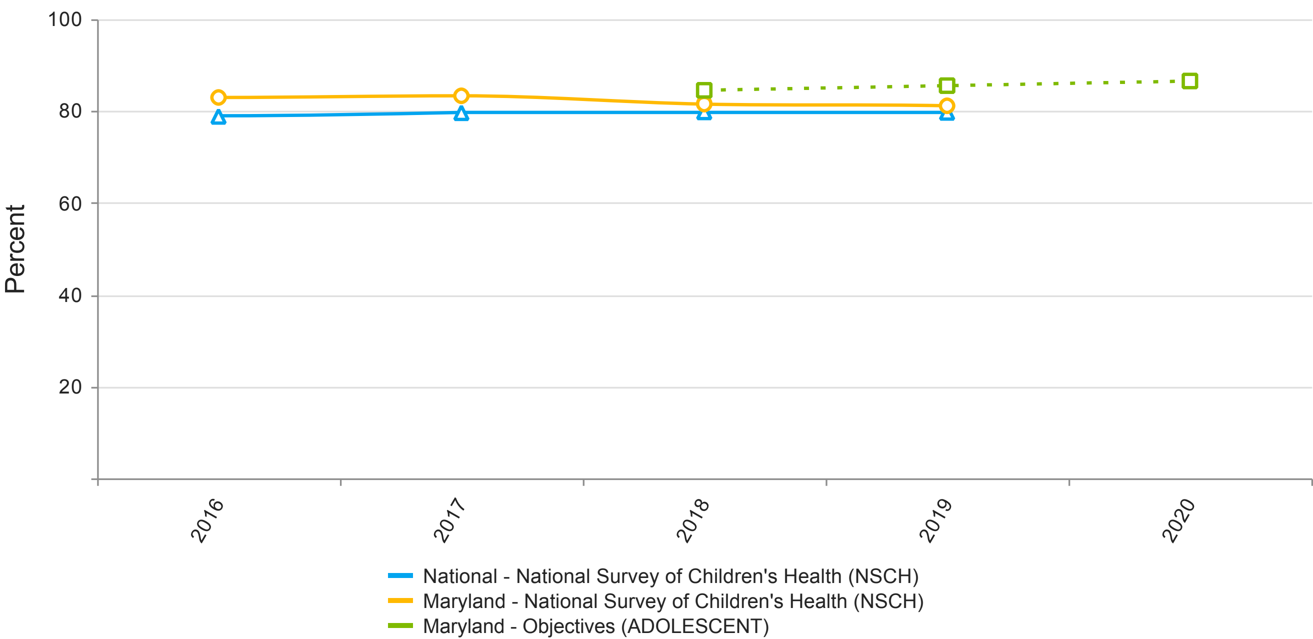
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine

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

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

2016-2020: National Performance Measures

2016-2020: NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year Indicators and Annual Objectives



2016-2020: NPM 13.2 - Adolescent Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			84.4	85.4	86.4
Annual Indicator		82.8	83.1	81.5	81.1
Numerator		1,048,242	1,042,901	1,027,878	1,036,093
Denominator		1,266,026	1,254,794	1,260,632	1,277,497
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

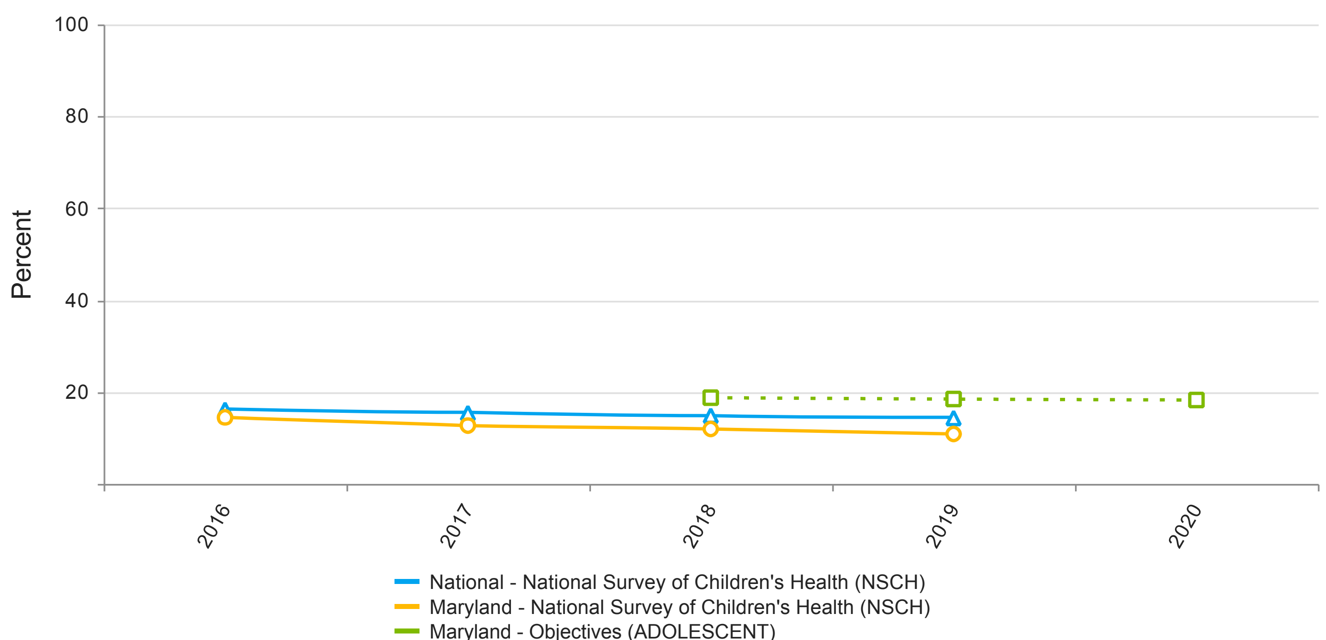
Historical NSCH data that was pre-populated under the 2016 Annual Report Year is no longer displayed, since it cannot be compared to the new NSCH survey data under the 2017 Annual Report Year.

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

2016-2020: ESM 13.2.1 - Oral Health Provider Training

Measure Status:					**Active**
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		0	1,000	1,000	1,000
Annual Indicator	0	1,000	0	0	0
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	OOH Data	OOH	OOH
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

2016-2020: NPM 14.2 - Percent of children, ages 0 through 17, who live in households where someone smokes Indicators and Annual Objectives



2016-2020: NPM 14.2 - Adolescent Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			18.8	18.5	18.3
Annual Indicator		14.4	12.9	12.1	10.9
Numerator		191,487	171,018	159,811	141,251
Denominator		1,325,743	1,323,530	1,316,517	1,297,373
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

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

2016-2020: ESM 14.2.1 - Smoking Cessation

Measure Status:				**Active**
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			136	138
Annual Indicator			99	86
Numerator				
Denominator				
Data Source			Quitline Data	Quit Line Data
Data Source Year			FY 2019	FY 2020
Provisional or Final ?			Final	Final

2016-2020: State Performance Measures

2016-2020: SPM 4 - Identification of Mental and Behavioral Health Needs in Adolescents

Measure Status:					**Active**
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		0	69.2	70.6	72
Annual Indicator	68	68.1	67.7	68.8	60.9
Numerator	161,592	170,027	175,803	182,799	164,342
Denominator	237,690	249,788	259,681	265,842	269,866
Data Source	Medicaid (ages 11-18 years)	Medicaid (ages 11-18 years)	Medicaid (ages 11-18)	Medicaid (ages 11-18)	Medicaid
Data Source Year	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020
Provisional or Final ?	Final	Final	Final	Final	Final

Adolescent Health - Annual Report

Maryland's identified Priority Need for adolescent health is to "ensure that adolescents age 12-17 receive comprehensive well visits that address physical, reproductive, and behavioral health needs."

In SFY 2020, Maryland Title V provided funding to local health departments to address adolescent health needs. Additionally, MCHB's Office of Family and Community Health administered the Personal Responsibility Education Program (PREP), the Sexual Risk Avoidance Education Program (SRAE), and the Maryland Optimal Adolescent Health (MOAHP), grants focused on adolescent reproductive health/wellness.

NPM 10 Adolescent Well Visit: According to the National Survey of Children's Health 2019 data, 81.4% of adolescents ages 12 to 17 received a preventive medical visit in the past year.

Local Health Departments

Title V funding directly supported four local health departments efforts to provide school based health services to middle and high school aged youth. School based health services included comprehensive wellness visits, mental/behavioral health screenings and care plans, and referrals to substance use disorder treatment. In SFY 2020, 37,578 middle and high school aged youth received a comprehensive school based wellness visit and 1,108 had a mental/behavioral health care plan. Another 165 high school students were referred to substance use treatment after a positive screening.

Additionally, many of the school based health programs have initiated social and traditional media campaigns to message adolescents about health and wellness. In SFY 2020, an estimated 84,000 adolescents were reached by these campaigns.

Title V also supported family planning/reproductive health clinics at the local health departments. During SFY 2020, 3,839 adolescents received a comprehensive reproductive health exam. Additionally, 1,165 adolescents received a brief screen for behavioral health and substance use. Through Title V funds and through Title V matching funds, the Maryland Family Planning Program provided services to 7,750 individuals who were less than 20 years old. This represented 15.71% of the total clients served by the Maryland Family Planning Program.

In March 2020, Maryland Governor Larry Hogan issued a stay-at-home order due to the COVID-19 pandemic, which led to school closures for the remainder of the academic year. This resulted in fewer adolescents being able to access needed services through school-based health clinics and local health departments.

PREP and SRAE

Title V federal funds are also used to support the salaries of two state-level staff to coordinate efforts related to adolescent health through the Personal Responsibility Education Program (PREP) and the Sexual Risk Avoidance Education Program (SRAE). During the past year, adolescent and young adult health coordinators have focused their efforts on strengthening collaborative relationships within the state health department as well as with the Maryland State Department of Education (MSDE) in addressing adolescent health priorities including behavioral health, sexuality education, substance use, and sexually transmitted infections.

PREP program implementation occurred in seven jurisdictions within the state, including Baltimore City, and Anne Arundel, Allegany, Prince George's, Washington, Wicomico, Worcester counties. The seventeen PREP sub-grantees provided services to approximately 1552 youth through various evidence-based curriculum, outreach, and supportive programming in community-based and faith-based organizations, as well as local health departments. PREP also funded Project KISS (Keeping It Safe Sexually), a college-based peer educator training model through

the collaboration of the MDH, University of Maryland Eastern Shore, and Salisbury University. In its third year, Project KISS provided training to twenty-three peer educators. This equips the peer educators with the skills required to provide reproductive health education to fellow students on campus. In SFY 2020 approximately 625 students were seen between the two campuses. One-hundred fifty students received HIV testing from local health departments.

The SRAE program is implemented by statewide grantees including seven local health departments in Baltimore City, Caroline County, Garrett County, Somerset County, Washington County, Wicomico County, and Worcester County as well as community-based organization grants which are selected through a Request for Application (RFA) process. The program approach is guided by a Positive Youth Development Framework which teaches middle and high school students self-regulation, healthy relationship skills, goal setting, and risk reduction related to sexual coercion, dating violence, illicit drug use, and underage drinking. In SFY 2020, the SRAE program was impacted by the global pandemic and was unable to reach as many students. The annual number of students reached is just over 1,000 students across Maryland.

Maryland Optimal Adolescent Health (MOAHP)
In July 2020, the Maternal and Child Health Bureau, Office of Family and Community Health Services (OFCHS) was awarded a three-year federal teen pregnancy prevention grant. The Maryland Optimal Adolescent Health Program (MOAHP), (newly-branded as True You Maryland), is a collaborative effort between Healthy Teen Network, Johns Hopkins University Center for Adolescent Health, local health departments, school, and community-based programs in six rural jurisdictions. All grantees will offer sexual education programming to teens aged 14-19 living in areas of the state with high rates of teen birth and sexually transmitted infections.

The teen pregnancy prevention initiative promotes equity in reaching optimal health by preventing teen pregnancy and sexually transmitted infections in rural counties of the state by creating an infrastructure to develop and support highly effective health education and parent/caregiver programs.

During SFY2020, MOAHP planned with local partners to review the Positive Prevention Plus curriculum, which has seen a statistically-significant delay in the onset of sexual activity and statistically-significant increases in student-parent communication around sexual health issues.

Adolescent Health - Application Year

Maryland Title V identifies the objective for adolescent health as "ensuring adolescents receive a comprehensive well visit that addresses physical, reproductive, and behavioral health needs." To this end, in SFY 2022, Title V will employ the following strategies to improve adolescent health outcomes statewide:

Objective 1: Decrease the number of asthma Emergency Department (ED) visits from a baseline of 9.2 ED visits per 1,000 for ages 12-17 (2019) to 5.3 in 2026

Local Health Departments

Title V will continue to provide federal Core Public Health funding to local health departments in SFY 2022 to support school based health efforts related to school based health clinics and asthma programming and services which specifically target middle and high school students. In SFY 2021, there were three local health departments who focused their Title V funding on school based health services.

Asthma

Beginning in SFY 2022, local health departments will also be able to use Title V funding for the newly developed SPM 4: Number of asthma Emergency Department (ED) visits.

Addition of this measure/service is to align with the Statewide Integrated Health Improvement Strategy (SIHIS). These services include expanding asthma home visiting, supporting health education, collaborating with providers and the health information exchange in their region, and school based health services to improve asthma health in Maryland.

In 2019, the State of Maryland collaborated with the Center for Medicare and Medicaid Innovation (CMMI) to establish the domains of healthcare quality and delivery that the State could impact under the Total Cost of Care (TCOC) Model. The collaboration also included an agreed upon process and timeline by which the State would submit proposed goals, measures, milestones, and targets to CMMI. As a result of the collaboration with CMMI, the State entered into a Memorandum of Understanding (MOU) that required Maryland to provide a proposal for the Statewide Integrated Health Improvement Strategy (SIHIS) to CMMI by December 31, 2020. The SIHIS aligns statewide efforts across three domains that are interrelated and, if addressed successfully, have the potential to make significant improvement in not just Maryland's healthcare system, but in the health outcomes of Marylanders.

- Domain 1: Hospital Quality
- Domain 2: Care Transformation Across the System
- Domain 3: Total Population Health

Asthma (along with Severe Maternal Morbidity referenced in Women's Health) is included within Domain 3: Total Population Health. The strategy identifies a goal of reducing the number of asthma related Emergency Room visits for children aged 2-17. Title V will specifically collect data on adolescents age 12-17 receiving these services.

In SFY 2022, local health departments may use Title V funding on asthma related programming/services including asthma school based management programs (in collaboration with PHPA's Environmental Health Bureau); provide health care education opportunities on asthma management; developing asthma regional collaboratives to coordinate asthma related activities within the region; or partnering with CRISP (the designated Health Information Exchange for Maryland) to strengthen linkages among pediatric care teams including school health providers, Emergency Departments, primary care and specialists.

Objective 2: Increase the percentage of adolescents (12-17) who receive a preventive medical visit from a baseline

of 81.4% (2019) to 85% by 2025.

School-Based Health Centers (SBHCs)

In SFY 2022, the Maternal and Child Health Bureau will begin its planning year for the transfer of oversight for school-based health centers from the Maryland State Department of Education (MSDE) to the Bureau in SFY 2023. Maryland's school-based centers represent an essential strategy toward improving the lives of Maryland's children/youth and their families and optimizing their ability to reach adulthood. School-based health care addresses the unique needs of youth and increases access to medical, mental, dental, and other health related services. As of SFY 2021, there are 85 SBHC program locations in 14 of the 24 Maryland jurisdictions. Title V will be an integral partner in aligning performance measures for school-based health centers with the State Action Plan and to ensure that services complement the school-based adolescent health services funded with Title V.

Other adolescent health programs that will continue to be supported by Title V funded staff in SFY 2022 include:

Personal Responsibility Education Program (PREP)

In SFY 2022 the Maryland Personal Responsibility Education Program (PREP) will continue to provide comprehensive sex education in eight (8) counties throughout the state. Jurisdictions implementing PREP activities include Baltimore City, Allegany, Anne Arundel, Dorchester, Prince Georges, Washington, Wicomico, and Worcester Counties. Youth will receive PREP education in middle, high school, foster care homes and detention centers across the state. Additionally, activities also include a college-based Peer Educator model implemented on the campuses of the University of Maryland Eastern Shore and Salisbury State University. As COVID-19 restrictions for schools lessen, PREP programs will return to an in-person format of instruction in place of virtual lessons. Local health departments will continue to collaborate with faith-based and community organizations to implement PREP. The PREP program will continue to reach a minimum of 1700 youth as well as 160 parents/caregivers with a combination of evidenced based curriculum instruction, parent education and enrichment programs.

Sexual Risk Avoidance Education (SRAE):

In SFY 2022 the Maryland SRAE program will continue to provide Sexual Risk Avoidance education to middle and high school students across the state. As schools begin to re-open for in person instruction, local health departments and community partners will begin to return to curriculum implementation in health classes, on campus after school programs and community settings. The SRAE program will continue to reach a minimum of 500 youth as well as 100 parents/caregivers with a combination of evidenced based curriculum instruction, parent education and enrichment programs. A request for applications (RFA) will be submitted to determine community based grantees. Ongoing topical training and professional development will be provided to meet the needs of program staff as a means to enhance their work.

Maryland Optimal Adolescent Health Program (MOAHP)

In July 2020, the Maternal and Child Health Bureau, Office of Family and Community Health Services (OFCHS) was awarded a three year federal teen pregnancy prevention grant. Project funds will be distributed to grantees (e.g., Healthy Teen Network, Johns Hopkins University Center for Adolescent Health, local health departments, school, and community-based programs) located throughout the state. Grantees will offer sexual education programming to teens aged 14-19 living in areas of the state with high rates of teen birth and sexually transmitted infections.

The teen pregnancy prevention initiative, formally named Maryland Optimal Adolescent Health Program (MOAHP), promotes equity in reaching optimal health by preventing teen pregnancy and sexually transmitted infections in rural counties of the state by creating an infrastructure to develop and support highly effective health education and parent/caregiver programs. MOAHP will increase the capacity of health education programs to develop students' positive attitudes and values towards sexual and reproductive health and increase opportunities to reinforce skills

and positive behaviors. Parent/caregiver programs will increase healthy communication between adults and youth. Healthy Teen Network (HTN) will lead this effort by providing instruction and guidance to health educators and administrators to improve program outcomes and promote the sustainability of highly effective health education programming in Maryland.

The MOAHP consortium will use the Positive Prevention Plus curriculum, which has seen a statistically-significant delay in the onset of sexual activity and statistically-significant increases in student-parent communication around sexual health issues. HTN will model and enforce behaviors that create an environment in which students feel valued and emphasize individual and group norms that support optimal health-enhancing behaviors as well as demonstrate effective instructional and behavior management strategies that support social-emotional learning.

OFCHS will create networks of support for health educators and students to effectively engage youth, parents/caregivers, and the community in MOAHP. OFCHS and HTN will partner with the Maryland State Department of Education (MSDE) and community stakeholders to replicate, with fidelity, effective programs, and supportive services that are culturally and age appropriate, medically-accurate, and trauma-informed. Johns Hopkins University Center for Adolescent Health will evaluate and inform the program throughout the project period.

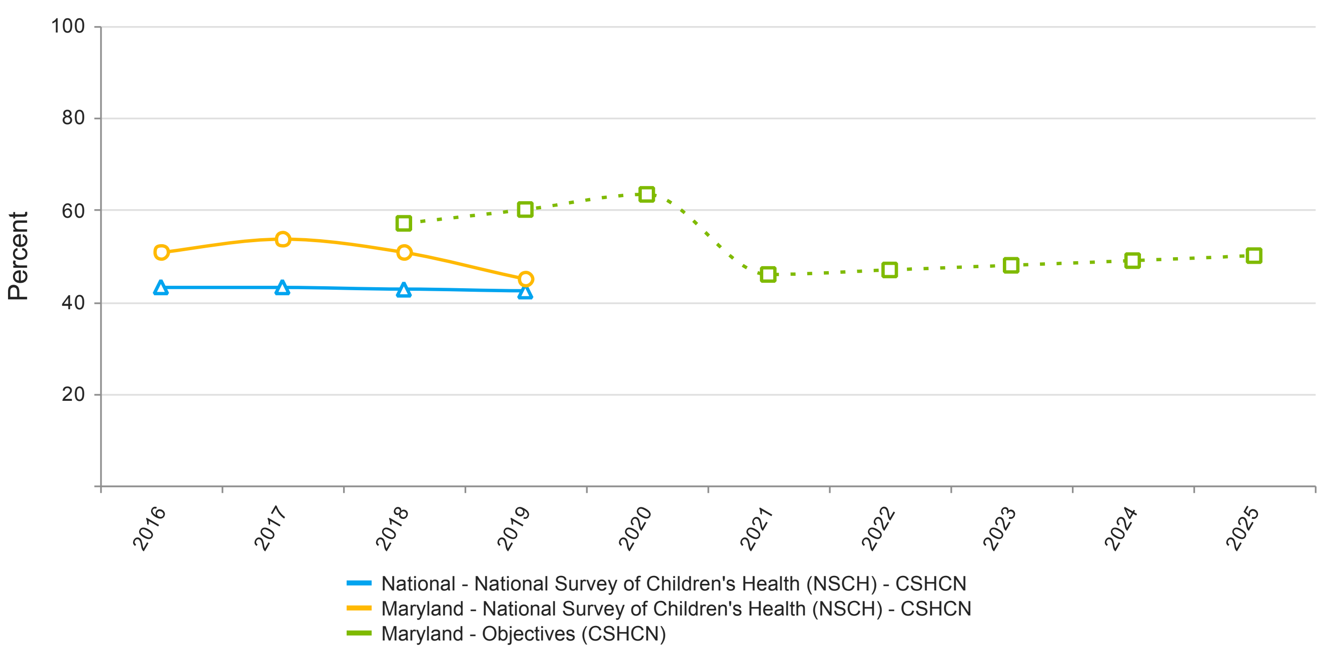
Children with Special Health Care Needs

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH-2018_2019	18.8 %	NPM 11 NPM 12
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH-2018_2019	51.8 %	NPM 11
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH-2018_2019	93.5 %	NPM 11
NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year	NSCH-2018_2019	2.3 %	NPM 11

National Performance Measures

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home
Indicators and Annual Objectives



NPM 11 - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2016	2017	2018	2019	2020
Annual Objective			57	60	63.3
Annual Indicator		50.8	53.4	50.6	44.9
Numerator		127,072	137,990	130,334	117,076
Denominator		250,000	258,184	257,564	260,596
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	45.9	46.9	47.9	48.9	50.0	51.0

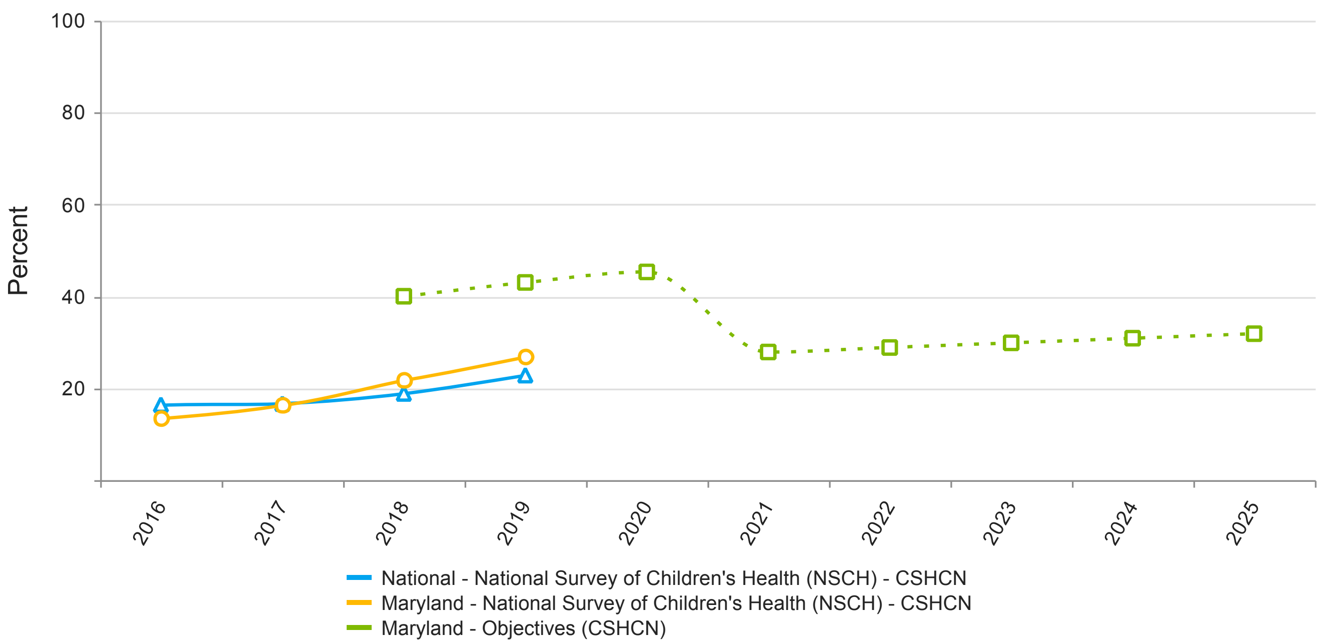
Evidence-Based or –Informed Strategy Measures

ESM 11.1 - Number of CYSHCN who receive patient and family-centered care coordination services

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		0	61	5,300	5,400
Annual Indicator	0	60	5,362	5,770	1,463
Numerator					
Denominator					
Data Source	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data
Data Source Year	2016	FY 2017	FY 18	FY 19	FY 2020
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	5,500.0	5,600.0	5,700.0	5,800.0	6,000.0	6,100.0



NPM 12 - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			40	43	45.3
Annual Indicator		13.4	16.2	21.6	26.9
Numerator		14,817	21,034	28,923	31,754
Denominator		110,803	129,507	133,731	118,003
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	27.9	28.9	29.9	30.9	31.9	32.9

Evidence-Based or –Informed Strategy Measures

ESM 12.1 - Number of CYSCHN and their families who participate in health care transition planning activities

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		0	61	62	63
Annual Indicator	30,855	60	5,697	1,308	416
Numerator					
Denominator					
Data Source	NS-CSHCN	MCHB Data	OGPSHCN	OGPSHCN	OGPSHCN Data
Data Source Year	2009/2010	FY 2017	FY2018	FY 2019	FY 2020
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	64.0	65.0	66.0	67.0	1,300.0	1,500.0

State Action Plan Table

State Action Plan Table (Maryland) - Children with Special Health Care Needs - Entry 1	
Priority Need	
Ensure optimal health and quality of life for all CYSHCN and their families by providing all services within an effective system of care in alignment with the Six Core Outcomes	
NPM	
NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home	
Objectives	
Increase the number of children (0-17) with special health care needs who have a medical home from a baseline of 44.9% to 50% by 2025.	
Strategies	
1.Provide funding to 7 LHDs and CBOs to support projects focused on medical home initiatives either as a primary or a secondary area of focus. Projects include peer-to-peer assistance to families in navigating systems of care, provision of case management services, support and education of health care providers and capacity-building for families of CYSHCN. Provide funding to 4 regional genetic centers and an inclusive child care program, all of which provide some level of case management services to families of CYSHCN. 2.Engage health care providers, particularly pre- and early providers, to inform and educate them about the medical home model. 3.Engage families to inform and educate them about the medical home model.	
ESMs	**Status**
ESM 11.1 - Number of CYSHCN who receive patient and family-centered care coordination services	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	
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 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year	

State Action Plan Table (Maryland) - Children with Special Health Care Needs - Entry 2

Priority Need

Ensure optimal health and quality of life for all CYSHCN and their families by providing all services within an effective system of care in alignment with the Six Core Outcomes

NPM

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services to prepare for the transition to adult health care

Objectives

Increase the number of youth with special health care needs who successfully transition to adult health care from a baseline of 26.9% to 30% by 2025.

Strategies

1. Implement the Six Core Elements of Healthcare Transition 3.0. 2. Promote Got Transition's "Six Core Elements" to transition and principles of successful transition. 3. Continue to provide information and resources to youth to young adult health care transition through the Office of Genetics and People with Special Health Care Needs (OGPSHCN). 4. Provide funding to 7 LHDs and CBOs to support projects focused on health care transition initiatives either as a primary or a secondary focus area, including expanded access to health care transition supports via school programs.

ESMs	Status
ESM 12.1 - Number of CYSCHN and their families who participate in health care transition planning activities	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

The state of Maryland has identified the Priority Need CYSHCN as "ensuring optimal health and quality of life for all children and youth with special health care needs and their families by providing services within an effective system of care in alignment with the six core outcomes."

NPM 11: Percent of children with and without special health care needs, ages 0 through 17, who have a medical home: The National Survey for Children's Health reported in their 2018-2019 data that 44.9% of children ages 0-17 with special health care needs have a medical home, compared to 46.4% of children ages 0-17 without special health care needs.

NPM 12 Percent of adolescents, with and without special health care needs, who received services necessary to make transitions to adult health care: The National Survey for Children's Health reported in their 2018-2019 data that 26.9% of adolescents ages 12-17 with special health care needs received services necessary to make transitions to adult health care, compared to 14.6% of adolescents ages 12-17 without special health care needs.

During SFY 2020 Maryland Title V continued to structure activities around the six core systems outcomes for CYSHCN including:

- Family-Professional Partnership
- Medical Home
- Adequate Insurance
- Early and Continuous Screening
- Easy-to-Use Services and Supports
- Youth Transition to Adult Health Care.

The Office for Genetics and People with Special Health Care Needs (OGPSHCN) is MDH's Children and Youth with Special Health Care Needs (CYSHCN) office. OGPSHCN is housed in the Prevention and Health Promotion Administration's Maternal and Child Health Bureau and includes five programs:

- Early Hearing Detection and Intervention
- Newborn Screening Follow-Up and Critical Congenital Heart Disease Screening
- Children's Medical Services
- Systems Development which administers birth defect surveillance, Long-term Sickle Cell Disease follow-up programs, and the Title V MCH Block Grant Programs to local health departments, community-based nonprofit organizations, and academic clinical centers
- Operations and Support

In SFY 2020, OGPSHCN served 17,380 CYSHCN and their families through the above Title V-supported programs and efforts. This figure reflects counts of unduplicated children and/or families served through direct health care services or enabling services. Additionally, in SFY2020, OGPSHCN began efforts to incorporate workforce development activities into the grant process, in part, by utilizing student interns to introduce concepts of public health and needs of the CYSHCN population, as well as to enhance the work of the office.

Family-Professional Partnership

During SFY 2020, OGPSHCN built upon previous efforts to enhance family engagement and family-professional partnership (FPP) by assessing internal programs and identifying opportunities for change.

OGPSHCN's Parent Resource Coordinator position was staffed from July to mid-December 2019. During that time the Parent Resource Coordinator, who is also a parent of YSHCN, served to help families find local and State

resources for their child, and to provide education and training to families of CYSHCN. Upon her departure, OGPSHCN engaged in a thorough search to fill the Parent Resource Coordinator position, hindered by the fact that State guidelines do not allow targeted recruitment of specific groups (in this case, a parent/caregiver of a CYSHCN or a former CYSHCN). In the absence of a dedicated FPP "expert," the Systems Development Program Chief, the Health Care Transition and Medical Home Coordinator and the OGPSHCN Deputy Director all participated in FPP efforts and in helping families find appropriate resources, while additional office staff also participated in various ventures pertaining to CYSHCN.

OGPSHCN staff hold administrative responsibility for the coordination of several state-wide advisory committees, including: the Advisory Council to the Maryland Early Hearing Detection and Intervention Program; the Advisory Council on Hereditary and Congenital Disorders; and Statewide Steering Committee on Services for Adults with Sickle Cell Disease. Each of these committees mandates some degree of membership from those with lived experience, either parents/caregivers, affected adults, or some combination thereof. In addition to staffing the aforementioned committees, OGPSHCN staff served as members of numerous advisory councils as the expert voice on CYSHCN, a person with lived experience, or in a clinical advisory role. Those committees include: Maryland Commission on Caregiving; Mortality Quality Review Committee, Maryland Developmental Disabilities Council, Youth Camp Advisory Council, Sinerge (Northeast Sickle Cell Grant Collaborative) Advisory Board, ASH-CTN (ASH RC Sickle Cell Disease Clinical Trials Network) Community Advisory Board, Disability Health Inclusion Program Advisory Committee, United Healthcare Community Advisory Council, Traumatic Brain Injury Advisory Board and Charting the Lifecourse Community of Practice Leadership Team. The Deputy Director of OGPSHCN, herself a parent of CYSHCN, also participated on a Policy Review Team with the State's Developmental Disabilities Administration, a sister administration to the Prevention and Health Promotion Administration.

OGPSHCN staff are always striving to improve understanding of successful Family Professional Partnership and to discover and implement new best practices. To that end, staff members attended various professional development opportunities focused on FPP and family engagement, including "Peer Support Best Practices" presented by the Child Neurology Foundation, the 2020 "Family Engagement Convening," sponsored by Family Voices, and multiple other webinars and workshops. Adjacent to serving on the Charting the Lifecourse Community of Practice Leadership Team, the Deputy Director also completed the Charting the LifeCourse Ambassadors series, becoming a Certified Charting the LifeCourse Ambassador.

As a parent of CYSHCN, the OGPSHCN Deputy Director was also invited by The American Academy of Pediatrics (AAP) to participate in the Managing Students with Seizures ECHO (Extension for Community Health Care Outcomes), a multi-cohort learning opportunity and forum for health care professionals to learn and improve access to quality healthcare for children and youth with epilepsy. The OGPSHCN Deputy Director served as the "parent voice" faculty from October 2019 through April 2020, working alongside and presenting to clinical professionals to ensure that the family voice was heard. Additionally, the Deputy Director presented on " Supporting Families in Telehealth Visits" for the Access Improvement and Management of Epilepsy with Telehealth ECHO for the AAP National Coordinating Center for Epilepsy.

In SFY 2020, a large portion of FPP efforts still occurred within the long-standing partnership between OGPSHCN and The Parents' Place of Maryland (PPMD). PPMD is a non-profit, family-directed, and parent-staffed center serving parents of CYSHCN throughout the State and a grantee of OGPSHCN through June 30, 2020. PPMD is Maryland's Parent Training and Information Center, Family-to-Family Health Information Center and Family Voices State Affiliate Organization. OGPSHCN and PPMD worked closely to identify opportunities and plan activities aimed at supporting, informing, and empowering families and improving FPP across Maryland.

In SFY 2020, Systems Development grant funding supported PPMD in providing one-on-one assistance and

navigation services to families around the core outcomes of Medical Home and Health Care Transition. It aided 565 unduplicated (1529 duplicated) families. Additionally, 964 unduplicated children received basic Care Coordination services and 1529 unduplicated families were provided 602 referrals to family resources. PPMD provided 218 workshops on education, advocacy, family/patient rights, guardianship and healthcare to parents and caregivers of CYSHCN. During the reporting period, 132 training sessions and presentations were also conducted to health care providers, including 56 identified collaborative partners. PPMD's monthly newsletter includes articles on education and health care best practices, specifically including information on health care transition, care coordination, and school accommodations for behavior and health-related concerns. The newsletter is emailed to over 4,000 families per month. PPMD also coordinated the statewide Maryland Community of Care Consortium (COC), a working group of diverse stakeholders, including families, providers, advocates, consumers, administrators, and professionals from the public and private service systems. The COC is dedicated to improving systems of care for children and their families in the state of Maryland. Using the national agenda for CSHCN and core outcomes as a starting point, the COC works to create systems of care that promote optimal health, functioning, and quality of life for Maryland CSHCN and their families. Membership in the COC is open to anyone with an interest in improving the systems of care and family members are particularly encouraged to join. In SFY 2020, there were three separate Community of Care Consortia (statewide, Southern Maryland, and Eastern Shore). The Southern Maryland and Eastern Shore COCs are supported through grant funding from OGPSHCN and coordinated by local health departments within the applicable geographic region. All three Consortium of Care (COC) meetings are held quarterly with an average attendance of 30-40 participants, both in person and remote.

In addition to providing grant funding to PPMD in SFY 2020, OGPSHCN provided grant funding to the Parent Navigator Program at Children's National Medical Center in Washington DC. The Parent Navigator Program helps to reduce family stress by providing peer-to-peer support and connecting parents or caregivers to resources, assisting with care navigation, finding educational tools for parents and children, and providing emotional support so that managing a child's healthcare journey is a little easier. The navigators are parents of CYSHCN and bring a unique perspective and understanding to every parent enrolled in the program.

In SFY 2020, OGPSHCN engaged in a focused review of the internal process for awarding grants. In conjunction with a greater focus on competitive procurement processes from Department leadership and an effort to maintain fidelity to MCH Block Grant Program goals, OGPSHCN leadership took a significant portion of the year to analyze and edit the Request for Applications (RFA) for Systems Development grants. This included multiple strategic planning meetings with staff at all levels, consultation with the Administration's Office of Procurement and countless drafts and revisions. While the final RFA was not ultimately posted until SFY 2021 and will be discussed in detail in the next narrative report, the bulk of the work in crafting the RFA took place in SFY 2020. In their narratives, applicants were required to propose projects ensuring that family members would have a meaningful role in grant-funded activities.

Medical Home

In SFY 2020, OGPSHCN continued to focus on expanding awareness of the medical home model through educating families, training providers, and developing new partnerships around the state. The Medical Home (MH) Coordinator conducted outreach efforts and dissemination of information across the state through workshop presentations at The University of Maryland and at Kennedy Krieger Institute, participation in planning and presenting at the state-wide School Health Interdisciplinary Program (SHIP) conference, and attendance at numerous community resource fairs and other outreach opportunities. The COVID-19 Pandemic greatly reduced the opportunities to attend in-person events, which so many outreach efforts are, but as sponsoring organizations shifted their events to the virtual environment, the MH Coordinator was also able to pivot this different style of outreach and engagement. A total of 225 individuals were educated on Medical Home implementation within their respective roles. In particular, the presentation at the SHIP conference educated school health staff on the Medical Home model, what a patient-centered MH looks like, and their role in coordination of care for CYSHCN. The participation

with SHIP conference planning and implementation exhibits a cohesiveness between multiple OGPSHCN-funded grantees and office staff, as it supports several priority focus areas. The MH Coordinator additionally provided technical assistance and resources in support of medical home implementation to local health departments and pediatric provider practices, school health professionals and educational medical institutions.

OGPSHCN provided funding to CYSHCN programs in 13 of Maryland's 24 Local Health Departments (LHDs). These programs utilized nurse care coordinators to provide care coordination services to CYSHCN in their respective jurisdictions in support of a Medical Home model of care. In SFY 2020, a reported 893 (unduplicated) children received basic and/or complex care coordination and case management services from their local health department.

In addition to supporting LHDs, OGPSHCN provided funding to community based organizations and academic institutions through the System Development grants. SFY 2020 Grantees who focused some or all of their project efforts on the medical home were Children's National Medical Center; The Coordinating Center; Johns Hopkins University School of Medicine, Hematology Department; the Kinera Foundation; the Parents' Place of Maryland; the University of Maryland Access for Special Kids (ASK) program; and the Arc Montgomery County Karasik Family, Infant & Child Care Center, a medical childcare program.

Children's National Medical Center supports the MH model by providing integrated access to services and care coordination for Maryland's CYSHCN through Parent Navigator and Complex Care Programs. The navigators provide peer-to-peer support for families and share knowledge and resources for families to effectively navigate their health care system. The Complex Care Program supports medical homes by bridging the gap between primary care providers and tertiary services. In SFY 2020, 175 families were served through the Parent Navigator and Complex Care Programs, and 311 individual CYSHCN received care coordination services.

The Coordinating Center (TCC) developed and piloted the "Very Important Physicians and Kids" ("VIPhysicians&Kids") program in SFY 2020; a new medical home model for CYSHCN. The project was created to address two focus areas:

1. Facilitation of children's and youth's access to a family-centered, comprehensive medical home; and,
2. Promotion of planning by youth, family, and provider for youth's transition to adult health care and services using a health care transition (HCT) model (discussed below).

A goal of this program was to partner with pediatric practices to deliver care coordination services for CYSHCN and their families in a medical home model. Upon enrollment into the program, practices identified CYSHCN who could benefit from care coordination and linked families to VIPKids. The VIPKids program then aimed to address issues often overlooked due to time burden on the physician and/or family by establishing the VIPKids Care Management Line for targeted pediatric offices to respond to priority needs for the families and child/youth with special health care needs. The VIPKids care team assisted the CYSHCN and their families with the development of a person-centered, shared care plan to identify active issues and goals of the child/youth and family, track hospital encounters, and resources provided. This approach to the MH model allows providers to focus on medical care and parents to focus on parenting and is exactly the kind of innovative thinking that OGPSHCN strives to support.

Johns Hopkins University School of Medicine, Hematology Department supported CYSHCN with sickle cell disease (SCD) and with bleeding disorders through its "Improving Hematology Services for Children with Hereditary Hemoglobinopathies and Bleeding Disorders and their Families at the Johns Hopkins University School of Medicine and the State of Maryland" program. The program focused on the Medical Home model with the intent to provide, assess and improve comprehensive services to children with sickle cell disease (SCD) and bleeding disorders in the State of Maryland: improve services, based on previous needs assessments; and improve access to and quality

of these comprehensive services in Maryland. They assessed the effectiveness of the Medical Home in SCD by providing surveillance of the provision of two essential services; A) immunization against encapsulated organism; and B) whether transcranial Doppler screening to prevent stroke is provided as part of the Medical Home. For Hemophilia, they assessed the effectiveness of the Medical Home by determining whether effective dental services are being provided, a key element of effective care of persons with bleeding disorders that is often lacking.

Kinera Foundation (Kinera) provided services through the Eastern Shore Regional Hub, an integrative, centralized, coordinated, and collaborative model of care for CYSHCN, located in the underserved Eastern Shore region of Maryland. In SFY 2020, Kinera Foundation focused efforts on the Medical home model, including community awareness, specialty care, and training. Kinera foundation increased the number of children and youth (including transitioning youth) receiving care coordination services throughout the Eastern Shore of Maryland in collaboration with partners providing services at the "Hub." Kinera also utilized the existing "Kinera Connect", a parent support group platform to connect families and providers, while informing and promoting the benefit of the Medical Home Model. In SFY 2020, 313 CYSHCN were served through the Kinera Foundation.

Parents' Place of Maryland (PPMD) was discussed in detail specific to its work in Family Professional Partnership, but that was only a part of the larger goal of PPMD to promote optimal health for MD CYSHCN and their families and facilitate access to an effective health delivery system so that families are informed, supported, and empowered. Title V funding through OGPSHCN supported focus on the Medical Home within the three target areas of care coordination, family/professional partnerships, and provider and community awareness.

University of Maryland Access for Special Kids (ASK) program provided multidisciplinary care coordination for children with complex medical needs using a MH model approach. The goal of the program is to enhance the care of CYSHCN in their medical home at the University of Maryland health system, including community-based sites across the State. The multifaceted ASK program provided support for families and assisted care providers in serving families; served as a bridge between families, primary care providers and specialists, and as a link to community resources; served as the primary point of contact for families and providers to optimize integration into school and specialized day care; and served as a single point of entry to the University of Maryland health system and pediatric specialists at the children's hospital. In SFY 20, 150 children and families were served through the ASK program.

The Arc Montgomery County Karasik Family, Infant & Child Care Center (KFICCC) is a fully inclusive childcare program for children 6 weeks to 10 years old with and without special health care needs and disabilities. The program provides various services including childcare, special education, nursing, therapies, PreK, and family resources in a single location. KFICCC's medical home model provides services in four areas: 1) nursing care and monitoring; 2) developmental growth; 3) education; and 4) family support. They provided service support to 60 families and provided 15 professional and cultural sensitivity staff development training for the staff. They provided services to 60 (unduplicated) CYSHCN youth.

OGPSHCN also continued to provide funding for clinical genetics services to the University of Maryland, Children's National Medical Center, John Hopkins University, and the Kennedy Krieger Institute Biochemical Genetics Laboratory. These genetics services are provided to reduce or prevent adverse outcomes from heritable conditions; provide opportunities for CYSHCN and their families to receive services necessary to manage genetic conditions; offer culturally-competent and family-oriented services; and increase the number of primary care, specialty care, and other related providers who are informed about genetic contributions to health and illness and able to apply of genetic information to improve the health of individuals and families in their care. In SFY 2020, 7,275 children and their families received clinical genetic services.

Adequate Health Insurance

OGPSHCN's Children's Medical Services (CMS) Program pays for specialty care for qualifying CYSHCN who are

underinsured or uninsured and whose family income does not exceed 200% of the federal poverty level. In SFY 2020, the CMS Program processed 468 applications, determined that 459 CYSHCN were eligible for services, and paid for services for 431 CYSHCN. Relative to SFY 2019, these figures represent a 4.5 percent increase in applications, a 24.4 percent increase in eligible CYSHCN, and an 18.7 percent increase in CYSHCN served. In addition to the fee-for-service payment structure, the CMS Program also purchased health insurance for 38 of the 459 eligible children, which represented a 3 percent increase from SFY 2019. Insurance coverage was purchased for children with the costliest diagnoses so these children could receive health services that were more comprehensive than those covered by the CMS Program, such as general pediatric care, sick visits, emergency room visits and admissions, dental, vision and mental health services. The CMS Program covered the cost of health insurance premiums as well as costs of co-pays, co-insurance, and deductibles. Additionally, there was one insurance-enrolled child enrolled in the Kaiser Permanente's Community Health Access Program. For this child, the CMS Program paid for services not covered by the Community Health Access Program.

The open enrollment period for health insurance plans occurs over a limited period and represents the only time in which health insurance can be purchased for the upcoming year. Since enrollment into the CMS Program occurs throughout the year, the CMS Program continued to cover the cost of care and services for children deemed appropriate for purchase of health insurance plans but who could not be enrolled until the open enrollment period.

During the last 4 months of SFY 2020, no child was disenrolled from the CMS Program as a result of the Governor's Executive Order extending eligibility for certain services during the COVID-19 Pandemic State of Emergency.

Early and Continuous Screening

Newborn Screening (NBS)

Maryland routinely performs two metabolic screens on infants that are born in the state.
Maryland's screening rate has historically been greater than Maryland's birth rate secondary to provider offices collecting a routine repeat specimen on all babies in their practice regardless of where the baby was born. A measure of newborns who have not been screened is determined by monitoring refusals for newborn screening. Maryland has an informed dissent policy for newborn screening which requires birth facilities to notify the short-term follow-up unit of any families who refuse newborn screening within 24 hours of refusal. The number of refusals increased two-fold over the number of refusals in SFY 2019, with 15 refusals reported in SFY 2020. As in prior years, letters were sent to these families encouraging them to reconsider. Of these 15 babies, only 5 babies (33% of the documented refusals) received newborn screening after discharge from the birth facility. This percentage of babies receiving screening after discharge from the birth facility is lower than previous years. In SFY17-SFY 19, 59%, 65% and 71% of the refusals, respectively, had a repeat specimen collected at the primary care facility. It is not known at this time why this percentage has decreased significantly in this period. Whether or not the COVID-19 pandemic has played a role in this decrease is speculative. However, conversations with a few provider offices during this timeframe indicates there was some confusion about whether or not the laboratory was continuing to accept samples, particularly at the beginning of the pandemic. Monitoring the number of refusals and number of babies screened after discharge will continue to help determine if this is a consistent issue.

SFY 2020 completes the first year and a half of screening for Spinal Muscular Atrophy (SMA) in Maryland. Implementation of screening for SMA has proven to be a seamless process within the NBS Follow-up Program. All 8 of the children identified through NBS for SMA in SFY 2020 were located quickly and established care with the appropriate referral center within just a day or two after the results of the newborn screen were available. Additionally, the multiplexing of the testing with severe combined immunodeficiency (SCID) continues to alleviate the false positive SCID screens reported in prior years, particularly in subsequent screens.

Since screening for SMA closely followed the implementation of screening for lysosomal storage disorders (LSD),

SFY 2020 also marks completion of the first year and a half of screening for Pompe Disease, Mucopolysaccharidosis Type 1 (MPS-1) and Fabry Disease. The Maryland State Newborn Screening Laboratory adjusted cut-offs for the multiplexed LSD screen both in May and September of 2020, resulting in a lower number of false positives. However, there are still a large number of babies with a pseudodeficiency in either Pompe or MPS-I being identified through the newborn screen. Second tier testing conducted at the newborn screening lab might help alleviate the need for diagnostic testing for these babies, however, developing and implementing second tier testing is not a viable option at this time given staff vacancies in the lab, particularly in supervisor and manager positions.

In light of the vacancies in the lab, implementation of screening for X-Linked Adrenoleukodystrophy (X-ALD) remains unknown at this time. X-ALD was approved in September 2016 for inclusion on the Maryland Newborn Screening panel when the laboratory has the financial and personnel resources necessary for implementation. Screening for X-ALD cannot be multiplexed with any of the other new disorders and requires purchase of dedicated equipment.

In SFY 2020, a success for the newborn screening program in Maryland was moving forward with the addition of DNA for cystic fibrosis (CF) to the newborn screen. The two screen process for CF previously consisted of Immunoreactive trypsinogen testing (IRT/IRT) and recommended sweat testing after the second elevated IRT. Maryland has moved to IRT/IRT/DNA, unless the initial IRT is over 200 which results in DNA being tested on the initial specimen. The DNA panel usually performed on the second elevated IRT specimen consists of 60 mutations, determined through consultation with our pulmonology specialist to be the most common mutations in our population. Since Maryland has remained a two screen state, the NBS Follow-up program is notified of the initial elevated IRT result only if DNA was tested and was positive or if a routine repeat specimen has not been received on the infant. If there is no repeat at 3 weeks of age, the NBS Follow-up program is notified and then identifies and locates the infant in order to determine if a repeat specimen has been collected and may still be in transit to the lab or if a repeat specimen is still needed. Implementation of DNA for CF began in June of 2020 and analysis of whether time to diagnosis and treatment for CF has been reduced will be conducted after the first full year of screening.

The total number of babies requiring follow-up services for metabolic newborn screening remained high again in SFY 2020 at 2,323 babies. NBS short-term follow-up services are provided by staff consisting of the program chief and two full-time nurses. The nurses provide consultation with hospitals, primary care providers and specialists regarding results obtained through newborn metabolic screening, as well as reporting unsatisfactory specimens. Cases are followed and updated until there is a confirmed diagnosis or final resolution of the case. The team of nurses share 24/7 on-call responsibility, including weekends and holidays.

Secondary to the COVID-19 pandemic, the program staff began teleworking in March of 2020. The transition to teleworking was relatively seamless since the staff already had most of the equipment needed to telework secondary to being on call for weekends and holidays. Staffing for the program was adversely affected in SFY 2020 by the retirement of a nurse who had been with the program for an extended period of time. The retirement occurred in May of 2020, and a new nurse consultant was hired and on-boarded in August of 2020. Remote training of the new nurse required some effort and re-thinking processes, but the remote training appears successful since the new nurse is fully functioning at this time.

Critical Congenital Heart Disease (CCHD) Screening Program

OGPSHCN conducts surveillance for the Critical Congenital Heart Disease (CCHD) Screening Program. The CCHD screening results and follow-up actions are completed prior to the baby's discharge from the hospital and entered into the OZ Systems database by birth facilities. The CCHD screening data is used to identify variations in hospital compliance and to determine final diagnosis for abnormal screens. In SFY 2020, there were 65,279 reported births in the OZ database that are listed as eligible for CCHD screening, and 60,106 babies reported as being screened for CCHD. The combined screening rate for the state is 92.1%. The screening rate in SFY 2019

was 88.7%, indicating the screening rate has increased slightly since the last reporting period. Of the screened babies, 4 babies were identified as having a critical congenital heart defect that was not suspected prenatally or clinically prior to screening. Of note, 27 babies were documented as having a critical congenital heart defect identified either prenatally or clinically prior to screening, indicating prenatal screening and postnatal assessment remains a vital part of identification of critical congenital heart defects. Site visits, coordinated with the OGPSHCN Early Hearing Detection and Intervention (EHDI) Program and Birth Defects Reporting and Information System Program, conducted to discuss CCHD screening and documentation in general with hospitals have been suspended secondary to restrictions related to COVID-19 pandemic. However, based on review of the documentation in the database, it is evident that hospitals are continuing to miss documentation of CCHD results and/or outcomes of the follow-up evaluation. Remote educational opportunities need to be explored for CCHD screening in general and improved documentation within the database.

Sickle Cell Disease Follow up Program

OGPSHCN's Sickle Cell Disease Long-Term Follow up Program follows children diagnosed with sickle cell disease through age 18. The program continues to focus on childhood preventive care standards and provide education and assistance through transition into adulthood. In SFY 2020, 563 children were being followed in the program. In May 2015, a pilot parent mentor program was formed to assist parents of newborns with sickle cell disease. This program continues to grow and develop as new parent mentors are added. In November of 2018, the program conducted a survey of providers to determine awareness of and preparation to discuss Sickle Cell Trait (SCT) testing outcomes, via Newborn Screening, and health concerns with families. The outcome showed that while most providers were aware of SCT potential health risks, the breadth of knowledge was limited. This lead OGPSHCN to explore opportunities to expand knowledge related to SCT among providers, parents of those affected, those affected, and the community at large. Legislation prompted the reconvening of the Statewide Steering Committee on Services for Adults with Sickle Cell Disease," in which OGPSHCN plays a key role both in planning and implementation. SCT Follow-up opportunities are being discussed in the statewide Adult Sickle Cell Disease Steering Committee.

Early Hearing Detection and Intervention (EHDI)

The Maryland Early Hearing Detection and Intervention (EHDI) Program, housed within the OGPSHCN, provides surveillance, and follow up to ensure newborns and infants receive a newborn hearing screening and recommended follow up, including referral to early to intervention services, when appropriate. During SFY 2020, there were 67,059 births reported to the Maryland EHDI OZ Systems database. 66,205 newborns were documented as screened. Out of the newborns screened, 65,044 passed the newborn hearing screen; 3,561 infants missed or did not pass their inpatient screen; 96 were identified as deaf or hard of hearing and documented as referred to early intervention services; 350 infants (284 of these are home births) have files that are closed as lost to follow up or lost to documentation (LTF/D), and there are currently an additional 280 infants whose files are still open and unresolved as of this writing. Follow up for CY20 infants continues until approximately January 2022 so final LTF/D stats are not yet available, but CY 2019 LTF/D is final and was 27.12%. This is an increase from the 15.64% rate from CY 2018.

A knowledge gap exists among physicians and early intervention providers regarding early hearing detection and intervention (EHDI) processes which contribute to delays in determining hearing status by 3 months of age and early intervention (EI) enrollment by 6 months of age. The Maryland EHDI program continues to nurture its partnership with the Maryland State Department of Education (MSDE) Part C Program and other stakeholders to improve EI enrollment rates. Efforts continue to increase the number of infants who are identified as deaf or hard of hearing (DHH) by 3 months of age and to increase the number of DHH infants who are enrolled in (EI) services by 6 months of age, to strengthen the capacity of the MD EHDI system to provide family support and to engage families with children who are DHH and to increase engagement of adults who are DHH throughout the EHDI system.

In SFY 2020, MD EHDI continued the development and implementation of a system of care to raise awareness of

EHDI processes to help ensure infants receive appropriate and timely screening, diagnostic evaluation, and referral to and enrollment in EI services. Both an ad hoc advisory committee of diverse stakeholders and a learning community of physicians and related health care providers established previously to engage health care professionals, families, and other stakeholders in the guidance and implementation of project objectives and strategies, including engagement of medical homes and improvement of timely screening, diagnosis, and referral to early intervention services continued in SFY 2020. A parent partner program developed as part of the EHDI program also remained active. The parent partner program provided family navigation, outreach, and support to families of children identified as deaf or hard of hearing and exhibited an increase in the percentage of parents of deaf and hard of hearing children who engage with the MD EHDI system.

MD EHDI staff reviewed and analyzed current follow up protocols and drafted PDSA cycles to be implemented that are aimed at improving achievement of 1-3-6 guidelines. Impacts from the COVID-19 pandemic were assessed through a combination of approaches. The MD EHDI program staff and MD EHDI Advisory Council board members obtained and shared input on how the pandemic is affecting newborn hearing screening, follow up, and early intervention services. The information obtained allowed MD EHDI staff to better assist families and provide them with up-to-date information and realistic expectations as they navigate the EHDI process. In addition, in response to changes in the status of nonessential health care services in Maryland and inquiries received, the MD EHDI program developed a statement that was provided to birthing staff when necessary. In part, it states: “the newborn hearing screen is a critical step in identifying children who are deaf or hard of hearing. Birthing facilities should make every effort to complete a hearing screen on newborns prior to hospital discharge and to report those findings to MDH following the usual protocols. Hearing screens should be provided safely and consistent with available guidance to minimize the risk of exposure to COVID-19 and other pathogens.”

Birth Defects Reporting and Information Systems (BDRIS)
In SFY 2020, the BDRIS program continued to use the OZ Systems database to monitor birth defects. Birth facility training continued, using a virtual platform subsequent to the COVID-19 pandemic, to make sure staff and administrators were using the system appropriately and effectively, and to increase reporting compliance rates. In SFY 2020, four training sessions were conducted for birthing facilities, as well as one presentation for the Pregnancy Risk Assessment Monitoring System (PRAMS) program. Hospital site visits were conducted in collaboration with the CCHD screening program chief and the EHDI Program audiologist to reinforce appropriate screening and reporting procedures. These site visits were also useful to obtain documentation of the protocols being used by birth facilities for CCHD screening. BDRIS program staff continued to reach out to specialty clinics to encourage reporting of birth defects that are not diagnosed until an infant is discharged from the nursery. The program also continued to send out letters and fact sheets to families with infants identified as having a birth defect. With the emergence of COVID-19, all birthing facilities in Maryland were updated on appropriate reporting. In SFY 2020, 1,087 babies were identified via the birth defects reporting system and linked to resources.

Easy to Use Services and Supports
The overarching mission of the OGPSHCN is to ensure a comprehensive, coordinated, culturally effective, and consumer-friendly system of care that meets the needs of Maryland's CYSHCN and their families. Having community-based services for CYSHCN organized so families can use them easily is integral to accomplishing this mission but implementing strategies to foster ease of use is significantly easier said than done. Services and supports for CYSHCN are complex and convoluted, made unnecessarily more so by regional differences and a lack of a centralized resource repository for families. Through both internal efforts and funding to community-based organizations and to local health departments, OGPSHCN seeks to ameliorate some of the challenges to accessing supports and services.

Kinera Foundation / Eastern Shore Regional Hub

To increase CYSHCN access to specialty care in SFY 2020, OGPSHCN provided grant funding to Kinera Foundation for the Eastern Shore Regional Hub. The Regional Hub was designed to offer specialty care services to CYSHCN and their families, and to function as a centralized, coordinated hub of patient- and family-centered care. The Regional Hub unites providers, therapists, families and supporting agencies to ensure CYSHCN on Maryland's Eastern Shore receive an appropriate level of care in the region in which they reside. Multiple services are offered within one building to increase access to services for Eastern Shore families, reduce the cost of care, and improve the overall health of the family. The Hub provides Speech Therapy, Occupational Therapy, Psychology Services, Durable Medical Equipment Outfitting, Orthotics Outfitting, Assistive Technology, a Resource and Lending Library, Care Coordination, Collaborative Care, Parent/ Caregiver Support, is a Family Friendly Center, and includes a Sensory Quiet Room. Appointments are available six days a week, and appointment times vary by provider. Medicaid clients are accepted, including those enrolled in Waiver Programs. The latter half of SFY 2020 presented significant obstacles to care with the emergence of COVID-19. Most activities had to be suspended or transitioned to a virtual format where applicable.

Local Health Departments / Regional Liaisons

OGPSHCN utilized regional liaisons and the Community of Care Consortium (COC) to identify and share information about community based services throughout the state.

Regional liaisons are employed by a local health department in a given region and provide support, education and mentoring to LHD nurses/care coordinators within their region. They are the designated local contact from OGPSHCN to regional stakeholders, including families, and utilize regional partners to develop an ongoing system of information collection for the region, which can direct services by identifying gaps and unmet needs and assist in implementing regional initiatives as determined by OGPSHCN.

The first regional liaison partnership was with Talbot County on the Eastern Shore of Maryland. This relationship, which includes a full-time nurse devoted to the role, has proven to be very beneficial. As a result of this unique partnership, all nine counties of Maryland's Eastern Shore engage in collaboration whereby nurse care coordinators receive mentoring, support, information, and guidance, and engage in activities focused on best practices for serving CYSHCN. This regional liaison partnership has been of benefit to the aforementioned Kinera Foundation Eastern Shore Regional Hub, and the regional liaison serves as the chair for the Regional Hub Advisory Committee to assist in ongoing project development.

A second regional liaison partnership was established in SFY 2017 when OGPSHCN partnered with the Calvert County Health Department to provide a regional liaison for the southern region of the state. This role is served by Calvert County's Medical Home Coordinator. Again, the implementation of a regional liaison framework allows the three counties that make up the area identified as 'Southern Maryland' to engage in collaborative activities for training and to share information to foster easy to use services and supports for families.

Parents' Place of Maryland and Local Health Departments / Community of Care Consortia

The state-side Maryland Community of Care Consortium for CYSHCN (COC) continued to provide a forum for learning, networking, and communication among various stakeholder groups. In SFY 2020, The Parents' Place of Maryland requested OGPSHCN grant funding to coordinate and hold four COC meetings. During each COC meeting, local community projects and programs serving CYSHCN are presented and opportunities to collaborate are discussed. COC members also give feedback on all programmatic activities within OGPSHCN. Due to COVID-19, only three meetings of the state-wide COC were held in SFY 2020.

Modeled after the highly successful state-wide COC, both regional liaisons also developed and coordinated regional Community of Care Consortia in their respective areas. In SFY 2020 both the Eastern Shore COC and the Southern

Maryland COC conducted quarterly meetings for their specific regions and facilitated community education and input into the OGPSHCN programs and resources. In the latter half of SFY 2020, all meetings were conducted virtually.

OGPSHCN Internal efforts

Resource Line and Resource Locator

In SFY 2020, the OGPSHCN Resource Line and Resource Locator continued to grow and serve as a valuable resource for accessing community-based services. The Resource Line is a live resource service that is staffed by OGPSHCN's Parent Resource Coordinator, while the Resource Locator is an online resource with over 1,100 listings. In SFY 2020, the most requested topics were general resource information and questions regarding funding sources. There were 1234 unique visits to the Resource Locator between July 1, 2019, and June 30, 2020. Approximately 13.8% of users returned to the site after the initial visit. A majority of the users came from the United States (91%) with users from the Philippines, India, France, and Indonesia making up the remainder (9%). OGPSHCN promoted use of the Resource Line and Resource Locator through partners' online listservs, newsletters, and dissemination of fliers at local events. The Resource Locator is translatable into 50 languages and uses a language link translation service for those that choose to call in for assistance.

Internal Case Presentation and Training opportunities

In the SFY 2021 application, it was noted that OGPSHCN staff would continue to identify opportunities for cross-program integration between the Systems Development Program, which manages the grants, and OGPSHCN's other programs, with a focus on how the Systems Development grant activities might act in synergy with other programs or expand the functional capacity of those programs to address specific programmatic needs that have a direct outcome on Maryland's CYSHCN. In an effort to support cross-program collaboration and integration, a case presentation opportunity was added to routine senior staff meetings. OGPSHCN "Program Chiefs" meet monthly; time was allotted on each agenda and a case presentation form template was provided to each chief with a rotating schedule. The intent was and is to foster increased communication and collaboration between OGPSHCN programs and to share resources that could support families.

OGPSHCN also conducts bi-monthly "all-staff" meetings during which training opportunities have been implemented, some focused on Title V-specific topics (Block grant summary overview) and others focused more on office or state-specific topics (Quality improvement, Maryland's legislative process), but all with the overarching goal of increasing staff knowledge of sister programs, familiarity with federal and state programs and requirements, and capacity to service Maryland's CYSHCN

Policy Review Team

As previously mentioned under Family Professional Partnership, the Deputy Director of OGPSHCN, herself a parent of CYSHCN, also participated on a Policy Review Team with the Maryland Developmental Disabilities Administration (DDA), a sister administration to the Prevention and Health Promotion Administration. The Policy Review Team was an effort to make sure that the DDA was hearing directly from people with developmental disabilities, their families, and advocates, with the assigned tasks to review and provide input and feedback on draft DDA policies, procedures, and guidance.

Youth Transition to Adult Health Care

During FY20, OGPSHCN focused efforts on education and awareness, interagency partnerships, technical assistance, and systems development activities to increase the number of youths with special health care needs (YSHCN) that receive the services necessary to make a successful transition to adult health care. Due to the COVID-19 Pandemic beginning in March of 2020 many of the in person activities were canceled and/or switched to virtual which was a hindrance for some health care transition activities and services. Many of the programs funded by OGPSHCN created effective and supportive outreach initiatives that were very successful in keeping youth, families

and partners engaged in health care transition initiatives.

Again, through both internal efforts and through funding to community-based organizations and to local health departments, OGPSHCN sought to increase the number of YSHCN that receive the services necessary to make a successful transition to adult health care.

OGPSHCN Internal efforts
In SFY 2020, The Health Care Transition Program (HCT) collaborated with other state agencies to incorporate HCT into program planning and increase overall education and awareness about HCT, including the Maryland Department of Social Services - Foster Care Programs, the Specialized Health Needs Interagency Collaboration program (a collaborative partnership between the Kennedy Krieger Institute and the Maryland State Department of Education), the Medicaid Adult Dental Pilot Program, and United Health Care Community Advisory Board. The OGPSHCN Health Care Transition Coordinator also again served on the planning committee for the School Health Interdisciplinary Program (SHIP) conference, a project of the National Center for School Mental Health.

OGPSHCN provided both Medical Home and HCT trainings to University of Maryland School of Social Work, state Foster Care Transition Coordinators, Jewish Community Services, the Maryland Chapter of the Epilepsy Foundation, the state Department of Juvenile Justice, Kennedy Krieger Institute clinical social workers, and continued collaboration with school health nurses and school-based health teams through the Maryland State Department of Education (MSDE). OGPSHCN continued utilizing partnerships and funding to engage adult primary care physicians in learning opportunities focused on HCT and support initiatives focused on increasing adult provider education.

In an effort to offset the challenges presented by COVID-19 and to keep parents/caregivers, youth, providers, support systems, and school health professionals engaged in health care transition training and educational activities, OGPSHCN Health Care Transition Coordinator updated the HCT-specific webpage with current content and developed a new online virtual presentation request form.

In SFY 2020, The Health Care Transition Coordinator participated in 14 health fairs reaching over 1500 participants. Two of the health fairs were virtual due to the pandemic. She gave 11 presentations to a total of over 1,400 participants and attended several professional conferences, both online and in-person. She also participated on the Annual School Health Interdisciplinary Program(SHIP) Planning Committee. SHIP provides comprehensive training on coordinated school health. The conference focuses on topics vital to school professionals. Through her participation the OGPSHCN Health Care Transition Coordinator ensures that YSHCN are included in that conversation at every level.

Local Health Departments
In SFY 2020, OGPSHCN provided funding to several LHDs for provision of local HCT-related guidance to CYSHCN and their families and associated services. When the COVID-19 pandemic hit in March 2020, many of the local health department services and programs were halted. Once services were available in the virtual environment, there was an overwhelming demand for services. Providing secure virtual services has allowed for a greater reach of participants, however, virtual services and assessments are not without challenges, including inconsistent access to reliable technology, obtaining consents, language barriers, and more. Some services had to be postponed indefinitely as they could not be transitioned to the virtual environment successfully.

Children's National Medical Center - Complex Care and Parent Navigator Program: In addition to the Parent Navigator Program discussed under the Medical Home section, the Parent Navigator Transitioning Program pilot project focused on providing transition-related services and identifying appropriate adult providers for YSHCN.

During FY20, The Parent Navigator Program facilitated four (4) transition training workshops for families; one at a Children's National primary care site and the remaining three in partnership with the ARC of Prince George's County. The Navigator Program provided navigation services to 311 children (175 families); resolved 702 patient issues; completed 116 surveys, 90 transition readiness assessments, and 4 family focused workshops (noted above). The Program assisted 75 youth in the transition from pediatric to adult care.

As many providers and medical facilities can relate, Children's National had many challenges in the latter part of FY20 due to the COVID-19 Pandemic. The Parent Navigator Program immediately engaged families in coaching on how to connect using virtual platforms to facilitate their ability to access healthcare services through telemedicine. This proved to be very successful. Parent Navigators educated and connected over 200 families to new technology. These interactions were extremely helpful for the clinicians as well.

The Coordinating Center (TCC) developed the aforementioned "Very Important Physicians and Kids" ("VIPhysicians&Kids") pilot program in FY20; a new medical home model for CYSHCN. The project was created to address two focus areas:

1. Facilitation of children's and youth's access to a family-centered, comprehensive medical home (discussed above); and,
2. Promotion of planning by youth, family, and provider for youth's transition to adult health care and services using a health care transition (HCT) model.

VIPhysicians&Kids' aim is to address gaps in care by establishing virtual medical homes for CYSHCN that integrate care coordination, shared care planning, and provider, youth, and family HCT education and readiness. With guidance from TCC's Clinical Care Coordinators, youth received support and resources to identify adult primary and specialty providers as well as adult disability services. Upon the emergence of the COVID-19 pandemic, this program developed new strategies to maintain communication with providers and families by collaborating with TCC's Marketing and Communications Team to expand the content and use of the program's web-page to include access to all program materials, including but not limited to, referral and enrollment forms. During SFY 2020, 13 providers were trained under this new project.

As part of the program, the Clinical Care Coordinators worked with the pediatric providers to confirm transition transfer information was complete and accurate for the new adult providers. The goal of this project was to connect YSHCN with adult providers inclined to care for this medically complex population. In SFY 2020, 209 client referrals were made in their ongoing care coordination. The Coordinating Center has a Transition Connection Initiative Advisory Board that includes pediatricians, adult health care providers, youth, and family representatives to provide expert assistance with HCT best practices and performance.

The Johns Hopkins Transition Independence Network (J-TraIN) project implemented a customized, evidence-based best practice model for HCT. J-TraIN is a collaborative within the Johns Hopkins Health System that seeks to improve transition between pediatric and adult medicine for youth with special health care needs through direct patient care and provider and community education, both within the Johns Hopkins institution and across the state of Maryland. In SFY 2020, J-TraIN provided HCT training to 319 providers. J-Train held ten ECHO (Extension for Community Healthcare Outcomes) sessions for providers, totaling 45 participants. In SFY 2020, a total of 227 people were served in their clinics supported in part by OGPSHCN funding. An annual Transition Symposium typically held in-person in the Spring was quickly converted to a virtual event.

Johns Hopkins University School of Medicine, Hematology Department supported CYSHCN with sickle cell disease (SCD) and with bleeding disorders through its "Improving Hematology Services for Children with Hereditary Hemoglobinopathies and Bleeding Disorders and their Families at the Johns Hopkins University School of Medicine and the State of Maryland" program. The program focused on Health Care Transition with the intent to assess the effectiveness of current efforts in transition of youths with SCD and bleeding to adult care using the Transition

Readiness Assessment Questionnaire (TRAQ) survey instrument and Post-transition surveys and assess the effectiveness of community health workers as a means to improve transition in the SCD population. The project also provided transition plans to enhance interactions with primary providers, which also enhances the Medical Home (discussed above).

Parents' Place of Maryland (PPMD) focused its efforts on Family/Professional Partnership within the Medical Home and Health Care Transition. The project provided one on one assistance, information, support, and training to families and their CYSHCN across the state. Specific to HCT, the Project focused on two Target Areas – Youth and Family Readiness and Community Education and Readiness. In SFY 2020, PPMD conducted 144 medical home trainings and 100 healthcare transition trainings and trained between both MH and HCT outcome areas 12,843 families and over 900 professionals.

Workforce Development

In addition to focused activities around the six core systems outcomes for CYSHCN, in SFY 2020 OGPSHCN continued the ongoing effort to incorporate workforce development activities into the office programs by accepting student interns from various colleges and universities within the state. These interns range from health education majors to nursing and public health majors, from both undergraduate and graduate level programs. The office is utilizing student interns to introduce concepts of public health, needs of the CYSHCN population, newborn screening, surveillance and follow up activities, as well as to enhance the work of the office.

In the past few years, OGPSHCN has hosted students from Morgan State University and Coppin State University - both HBCUs - and from the University of Maryland and Stevenson University. The interns have worked on various projects ranging from updating and developing health education materials, to developing discussion sessions, and assisting with programmatic work. Interns are welcomed to OGPSHCN through a "meet and greet " style meeting with OGPSHCN leadership and any Program Chiefs and staff with whom they will be working directly. Upon the end of their internship, they are invited to present their work and what they have learned at an office-wide meeting specifically for this purpose.

Children with Special Health Care Needs - Application Year

HRSA identifies its key strategic goal for children and youth with special health care needs as creating an effective system of care to allow for optimal health and quality of life for all CYSHCN and their families. An effective system of care ensures:

- Families are partners in care
- Screening occurs early and continuously
- Families can easily use community-based services
- Children and youth have access to an accessible family-centered, comprehensive medical home
- There is adequate insurance and funding to cover services
- Families and providers plan for transition to adult care and services.

The State of Maryland identifies the objective for this population as improved health through comprehensive, coordinated care for CYSHCN and support for successful transition to adult health care.

For the 2021-2025 Five-Year Action Plan, the Maryland Steering Committee selected Medical Home (NPM 11) and Health Care Transition (NPM 12) as the NPMs for children and youth with special health care needs. These NPMs include children and youth with and without special health care needs crossing both CSHCN and Child Health population domains.

Medical Home

According to the 2018-2019 National Survey of Children's Health, 44.9% of children ages 0 to 17 with special health care needs had a medical home, compared to 46.4% of children ages 0 to 17 without special health care needs.

NPM 11: Medical Home

The strategy selected for this NPM is to encourage implementation of the Medical Home model in pediatric primary care practices through education and training opportunities. OGPSHCN will explore the possibility of providing a continuing education course on Medical Home Implementation for MDs, PAs, NPs, nurses, and other medical providers, with a focus on engaging providers-in-training and early career providers.

In addition, discussions will be sought around expansion, replication, and sustainability of medical home-focused initiatives currently underway by current OGPSHCN grantees who were awarded under the 2020 competitive request for applications. Specific topics for these discussions include patient/family-centered care, sustainable care coordination and/or case management and shared plans of care between primary care providers and specialists.

Health Care Transition. In 2017, 15.3% of children in Maryland received services necessary to transition to adult health care, compared with 14.2% nationally. 21.6% of children and youth with special health care needs received services necessary for transition to adult health care, compared to the national average of 18.9%.

NPM 12: Transition

The strategy selected for this NPM is to increase and enhance parent/family education and training around HCT. Internally, OGPSHCN will explore strategies to engage families in the transition process for their youth with special health care needs. Provider knowledge and willingness to treat is essential for successful transition, but only with the concentrated efforts of engaged families and youth will we truly see an increase in the measures. Similar to plans under Medical Home, discussions will be sought around expansion, replication, and sustainability of health care transition-focused initiatives currently underway by current OGPSHCN grantees who were awarded under the 2020 competitive request for applications. Specific topics for these discussions include increasing adult provider

willingness and capacity to provide quality care for youth with special health care needs, increasing family awareness of transition benchmarks, and increasing health care and school-based professional awareness of transition benchmarks.

Development of measures for NPM 11 and NPM 12

In SFY 2022, OGPSHCN will conduct analyses of CYSHCN numbers and percentages by jurisdiction and race using Medicaid data, for the dual purpose of identifying baselines for comparative analyses between jurisdictions and tracking of trends over time. In addition, OGPSHCN will evaluate the potential use of existing measures, such as Healthcare Effectiveness Data and Information Set (HEDIS®) measures, for evaluating CYSHCN relative to all children and youth for specific measures, such as receipt of preventive care and immunizations. OGPSHCN will also consider evaluating preventive care in Medicaid recipients among transition-age youth and among all CYSHCN receiving Medicaid; this may serve as a measure of connectedness to health care and presence of a medical home, especially when analyzed longitudinally (e.g., using a measuring frame of 2-3 years).

OGPSHCN will also consider opportunities in the context of an existing partnership between the Office of Quality Initiatives and the University of Maryland, College Park that is focused on sickle cell data. A potential focus area is morbidity and mortality among young adults with sickle cell disease and sickle cell trait. Analysis of Maryland data would allow comparison with national data and permit identification of priority needs for young adults with these conditions. In addition, sickle cell analyses could serve as a template for analyses of all CYSHCN and for specific conditions such as asthma.

Office for Genetics and People with Special Health Care Needs (OGPSHCN)

The Office for Genetics and People with Special Health Care Needs (OGPSHCN) administers Title V funds via grants to local health departments (LHDs), community-based organizations and academic clinical centers. The activities supported by these grants, along with efforts led by staff, are central to Maryland's work on the Title V priorities of Medical Home and Health Care Transition.

OGPSHCN staff provide education, information and resources to providers, families, and youth with special health care needs on the components of the medical home model and on health care transition and various fact sheets and videos about health care transition and medical home can be found on the OGPSHCN website,

Several years ago, OGPSHCN developed a Health Care Notebook and a Maryland Youth to Young Adult Care Notebook. These care notebooks were designed for parents and caregivers of a child with special health care needs and provides a helpful central tool to store all of a child's health care information. The care notebooks allow parents and caregivers to provide any health information about their child, including reports from recent doctor's visits, recent summaries of hospital stays, current school plans, test results and informational pamphlets. Additionally, parents and caregivers can also provide pertinent information about their child that they feel people caring for their child may need. In SFY 2022, OGPSHCN will review the care notebooks to update for current needs and technology options, including ensuring that youth with special health care needs play a role in creating their own care notebook.

OGPSHCN has administered Medical Home and Health Care Transition focused grants using Title V funds to grantees from local health departments, academic clinical centers, and community based organizations for the last several years. In SFY 2020, OGPSHCN engaged in a focused review of the internal process for awarding grants. In conjunction with a greater focus on competitive procurement processes from Department leadership and an effort to maintain fidelity to MCH Block Grant Program goals, OGPSHCN leadership took a significant portion of the year to analyze and edit the request for applications (RFA) for CYSHCN grants. This included brainstorming meetings with staff at all levels, consultation with the Administration's procurement office, and multiple drafts and revisions. The final

competitive RFA was posted in SFY 2021, with the first segment of the anticipated 3-year grant cycle being shortened due to COVID-19 pandemic. The first time award period for these grants was from November 15, 2020 through June 30, 2021. These grant awards are eligible for continued funding for two subsequent years upon satisfactory completion of project objectives and at OGPSHCN's discretion.

In their applications, applicants were required to select at least one "focus area" corresponding to one of the core outcomes identified by HRSA as critical indicators of success in implementing community-based systems or services for CYSHCN (Table 1). Projects could incorporate elements of more than one focus area but were required to identify one as primary.

Table 1. Focus Areas from Maryland's CYSHCN Request for Applications

<table>
<tr><th>Focus Area</th><th>Corresponding Core Outcome</th></tr>
<tr><td>Family Professional Partnership</td><td>Families of CYSHCN partner in decision making at all levels and are satisfied with the services they receive.</td></tr>
<tr><td>Medical Home Implementation</td><td>CYSHCN receive coordinated ongoing comprehensive care within a medical home</td></tr>
<tr><td>Health Care Transition</td><td rowspan="2">YSHCN receive the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.</td></tr>
<tr><td>Workforce Development</td></tr>
</table>

SFY 2022 Grantees resulting from the competitive RFA posted in SFY 2021 and continuing post receipt of the non-competing continuation application, include:

Table 2. FY22 OGPSHCN Grantees

Grantee	Focus Area(s)	Project Description
Children's National Medical Center Parent | Navigator Program	Family Professional Partnership	Provide peer to peer support to families of Maryland children with special health care needs followed in the Goldberg Center for Community Pediatric Health and the Complex Care Program.

		Build on existing community education programs at Children's National and develop targeted transition and educational programs for both community primary care pediatricians and staff and pediatric trainees through a partnership with Children's National clinically integrated network, the Pediatric Health Network (PHN)
National Alliance to Advance Adolescent Health	Healthcare Transition	Increase school mental health professional training in evidence-informed transition practices and replicate a new school mental health transition initiative modeled after Got Transition's Six Core Elements of Health Care Transition. Ensure expanded access to transition supports via school mental health programs
The Coordinating Center	Medical Home	Expand on the VIPhysicians&Kids pilot program, which received OGPSHCN funding in FY2020) VIPhysicians&Kids is The Coordinating Center's exclusive, medical home service for families with CYSHCN. Patients of pediatric practices enrolled in VIPhysicians&Kids have access to the VIPhysicians&Kids Care Team. The Care Team supports the development of a shared care plan that is centered on achieving personal goals. The Care Team supports practices so that providers can focus on medical treatment for their patients, and families can focus on parenting their children, while the Care Team works to resolve issues that impact the patient's health. The Center aims to increase the number of participating practices from two to five (with one focused on Sickle Cell), strengthen the family professional partnership, and develop strategies to become a scalable, replicable, and sustainable model supported by practices, health care systems and third-party payers once the grant has ended.
Baltimore County Health	Family	Improve family professional partnerships in

Department	Professional Partnership	Baltimore County by utilizing several strategies including: care coordination, education of families, needs assessments through focus groups, education through provider toolkits and expansion of emergency preparedness efforts for CYSHCN
Calvert County Health Department	Medical Home	Coordinate with the Calvert County Behavioral Health Services to provide a patient-centered behavioral health medical home to families of infants under two years old whose parents have a history of substance use disorder, severe mental health disorder and/or homelessness. Use an intensive case management model, with monthly contacts to families and twice monthly support meetings. Families will be directed to needed financial resources and workforce-development resources. Families will be taught the components of the medical home model so that they can develop a patient-centered medical home with adult and primary care providers. Appointment compliance will be monitored from the participating family member and the child's well visits, and the child will be continuously screened for developmental and immunization delays. For other CYSHCN from birth to age 12 who are not currently being case managed by another source, resource assistance and case management will be provided as needed, including educating families in the benefits of a patient-centered medical home.
Talbot County Health Department	Medical Home, Family Professional Partnership, and Health Care Transition	Create a systematic approach for the transition of care coordination competencies to families of CYSHCN and the Medical Home. Regional systems approach focusing on addressing gaps and barriers will overlap to support these efforts

Additional SFY 2022 Grantees are:
The Arc Montgomery County: Supports the Karasik Family Infant & Child Care Center, a fully inclusive childcare program for children 6 week to 10 years old with and without special health care needs and disabilities.

Clinical genetic centers: These awards provide continuous consultation support to OGPSHCN Newborn Screening Follow-Up Program and clinical care to Maryland children identified by newborn screening.

Children’s National Medical Center, Division of Genetics and Metabolism - To support operation of the Genetics and Newborn Screening Follow-up program.

Johns Hopkins University, McKusick-Nathans Institute of Genetic Medicine - To provide genetic services through The Johns Hopkins University Department of Genetic Medicine.

Kennedy Krieger Hospital-Biochemical Genetics Laboratory - To provide diagnostic and follow-up testing for metabolic disorders identified by the Maryland newborn screening program and for other metabolic conditions not identified by the newborn screening process.

University of Maryland, Baltimore - To provide diagnostic and long-term follow-up for CYSHCN identified by newborn screening.

In SFY 2022 OGPSHCN will continue to monitor and review reporting requirements from all grantees to ensure fidelity to Department goals and grant agreement scopes of work, while also planning for future iterations of the request for applications to be posted and the work that needs to be done across the state.

An additional requirement for SFY 2021 grantees and continued with the SFY 2022 grants is the establishment of routine grantee meetings to discuss topics identified as priorities by OGPSHCN. Much of the planning for these meetings took place internally during SFY 2021, with the intent to implement fully in SFY 2022. OGPSHCN will sponsor opportunities for grantees to discuss topics to be of primary importance for grants administered under its purview and, in turn, the yield of the grant work for Maryland’s CYSHCN and their families. These topics will be discussed in a relatively informal and conversational environment and include, but are not limited to:

- social return on investment;
- addressing health and wellness equity;
- performance measures and outcome measures; and
- grant work intersections with OGPSHCN’s programs and opportunities for complementary activities.

OGPSHCN will also host a more structured “all-grantee” meeting that will require the attendance of each grant’s Project Director, along with one CYSHCN or family member who is a contributor to the grantee’s project. Maternal and Child Health Bureau and Prevention and Health Promotion Administration leadership will also be invited to these ‘all-grantee’ meetings.

Family Professional Partnership (FPP)

In SFY 2020 and 2021, OGPSHCN drafted and posted the newly revised competitive RFA discussed above with the explicit requirement that all proposed projects ensure family members have a meaningful role in grant-funded activities. This requirement continues in SFY 2022 and beyond.

OGPSHCN's dedicated Parent Resource Coordinator departed in late 2019, which posed a challenge for delivering parent perspective trainings and providing FPP resources. However, OGPSHCN sees an opportunity to integrate Family Professional Partnership into all facets of the work. All too often, a single family member is identified and the box for family engagement is checked. OGPSHCN wants to see the family voice fully incorporated into all facets of program development, implementation, and administration. Without the conscious, valued, and sustained involvement of family, none of the other goals will ever be fully and meaningfully accomplished. Collaboration with

those with lived experience is essential to determining what is needed, why needs are not currently being met, and what can be done to address those needs. Family Professional Partnership is not a separate outcome but is the very foundation upon which all other desired outcomes can be achieved.

OGPSHCN will continue to seek opportunities to provide family sensitivity trainings to internal and external partners who serve CYSHCN, as well as trainings for families on resource identification, advocacy, and caregiver stress, and will also identify additional opportunities and strategies to integrate the family voice.

Medical Home

In SFY 2022, OGPSHCN will further develop and refine the role of care coordination and case management within the context of future grant requests for applications, with a focus on outcome measures, quality improvement, and sustainability of local care coordination services. A topic of continued interest is measuring the value of care coordination, which has implications for other aspects of Maryland's efforts around Title V priorities for CYSHCN, both with respect to determination of what constitutes value and the development of a robust measure(s).

The focus in SFY 2022 will be on determining the exact landscape of care coordination in various regions, including care coordination provided by MCOs, private insurers, and health systems and practices to determine exactly where gaps exist. Through this effort, we hope to establish a local or regional plan for sustainable care coordination, challenge grantees to identify ways to make this happen, and build a foundation of care coordination infrastructure that will also facilitate health care transition. One of our current grantees, The Coordinating Center, is doing some exciting and innovative work around the medical home and care coordination which can potentially be expanded.

Family Professional Partnership within the Medical Home:

A great deal of effort in the past has focused on educating families about the Medical Home system of care, however, the reality is that families are more of a recipient of the medical home framework once it has been implemented and have very little control of how, when, or even if, a given provider can and will adopt this framework. Awareness of the existence of the concept is important, but awareness alone will not increase its implementation within the provider community. OGPSHCN will endeavor to engage providers-in-training and early career providers to inform and educate about the medical home, and also to provide some practical tips on how to implement a medical home in their practice.

Adequate Insurance

An OGPSHCN-wide programmatic assessment during FY18 resulted in the formation of a workgroup to examine needs related to OGPSHCN's Children's Medical Services Program (CMS), including increasing program costs, which continues today. CMS pays for specialty care for qualifying CYSHCN who are underinsured or uninsured and whose family income does not exceed 200% of the federal poverty level. In previous years, a small internal workgroup reviewed program-related data and programmatic processes and developed a draft document describing findings, strategic options, and recommendations. This past year has presented operational challenges for the CMS program due to the COVID-19 pandemic. Universal eligibility extensions were granted by virtue of the state of emergency resulting from the pandemic, which in turn led to a number of participants enrolled in the CMS program. While the exact impact of pandemic-related job loss is unknown, it is possible it had an impact on new applicants for CMS services, The steady increase in CMS participants and the lack of regular turnover due to participants no longer being eligible has posed an operational challenge. This has, in turn, prevented program-level strategic planning or in-depth data analyses. As the pandemic continues at a lesser magnitude relative to 2020, OGPSHCN is again strategizing how to minimize program costs without reducing quality of care. In SFY 2021, Maternal and Child Health Bureau and OGPSHCN leadership met with The Catalyst Center (National Center for Health Insurance and Financing for CYSHCN) to explore opportunities for their technical assistance. This will continue to be explored in SFY 2022.

Family Professional Partnership within Adequate Insurance
One strategy currently under consideration was derived from the most recent iteration of the internal CMS workgroup. The idea is to create a stakeholder workgroup to include internal and external representatives (MDH staff, fiscal representatives from major medical institutions, LHD representatives, input from the Office of Immigrant Health) to discuss cost mitigation ideas. Increasing medical costs are a collective and expanding issue; only by working together can we ensure that no child is lost. Should this idea blossom into planning and implementation in SFY 2022, family representation would also be a necessary component of the stakeholder workgroup.

Early and Continuous Screening
Newborn Screening Follow-Up: The Newborn Screening Follow-up Program (NBS) is working with the State Public Health Laboratory in developing an updated version of the Newborn Screening Follow-up module that is housed within the Laboratory Information Management System. This version will be internet-based, improving access to the database during afterhours on-call follow-up nurse coverage. Reporting capabilities will also be enhanced, thereby improving the ability to perform quality assurance monitoring. Additionally, time-intensive activities should be reduced with automated generation of fax cover sheets and letters notifying parents/providers of unsatisfactory specimens. The development of the new version has been delayed secondary to significant staffing issues in the laboratory, as well as other operational issues related to COVID-19.

Implementation of lysosomal storage disorder (LSD) screening and DNA testing for cystic fibrosis, as well as the loss of a senior nurse due to retirement, has resulted in a significant reduction of time available for planning of an educational webinar providing technical assistance on specimen collection to reduce the number of unsatisfactory specimens received by the State Public Health Laboratory. A new nurse has been hired as a replacement for the retired nurse and is functioning fairly independently at this time, and the LSD screening cut-offs have been adjusted twice resulting in a reduction in the number of abnormal LSD results, so the planning process and recording of the educational webinar will be a priority in SFY 2022.

Implementation of screening for X-Linked Adrenoleukodystrophy (X-ALD) has not taken place at this time in Maryland. The laboratory is in the process of obtaining equipment and staffing needed to implement screening, and an implementation date is forthcoming.

Critical Congenital Heart Disease (CCHD) Screening: Analysis of hospital reporting compliance is ongoing to target improved documentation of CCHD screening and outcomes. Since staffing resources for NBS and CCHD are shared, more time and resources have been needed to support NBS activities in this past year. In SFY 2022, it is anticipated that more time and resources will be available to support increased surveillance of CCHD screening and outcomes, including assessment of CCHD-specific screening processes for babies born in non-traditional settings.

Birth Defects Reporting and Information System (BDRIS): Funding is being pursued to continue and expand upon this work. Recent internal discussions have revolved around how BDRIS can be capitalized upon and utilized for additional surveillance efforts. Funding provided through a previous Zika virus-related grant, and the current COVID-19 pandemic, have exemplified the need for surveillance of emerging threats and the rewards of active case ascertainment in addition to the current passive reporting system. Additionally, we will continue educating providers about the importance of surveillance and reporting results to improve the birth defects reporting compliance rate.

Sickle Cell Long-Term Follow-Up: The Sickle Cell Long Term Follow Up Program will begin looking at ways to incorporate Sickle Cell Trait notification and education into existing program activities and will develop an outreach

plan focused on increasing the number of young adults and men who participate in the sickle cell mentoring program. FY20 legislation prompted the reconvening of the Statewide Steering Committee on Services for Adults with Sickle Cell Disease, in which OGPSHCN plays a key role both in planning and implementation. This role will continue in SFY 2022.

Early Hearing Detection and Intervention (EHDI): The Maryland EHDI Program continues to prioritize timeliness and quality improvement to ensure that Maryland infants receive hearing screenings at the earliest age possible, preferably by three months of age, and appropriate follow up. The Maryland EHDI Program currently receives funding from EHDI-focused grants from HRSA and the CDC. The Program continues to strengthen partnerships with related stakeholders (Vital Statistics Administration, Maryland State Department of Education, and other public health programs). Educational outreach with pediatricians, other health care providers, and early intervention providers is continuing with a focus on the importance of early hearing detection and of reporting results. OGPSHCN personnel will continue to staff the statewide EHDI Advisory Council in SFY 2022

Family Professional Partnership within Early and Continuous Screening:
Family Professional Partnership plays an important role within the advisory framework of each of the programs focused on early and continuous screening. While the actual work of these programs is rather clinical in nature, the Advisory Council to the Maryland Early Hearing Detection and Intervention Program, the Advisory Council on Hereditary and Congenital Disorders, and the Statewide Steering Committee on Services for Adults with Sickle Cell Disease all require representation from family members and/or those with lived experience. Each Council/Committee provides advice to OGPSHCN on various aspects of their respective area of focus, reviews outward facing materials - particularly those being sent to families - and exemplifies FPP in action by inviting family members / those with lived experience and clinical professionals to the same table. This practice will continue in SFY 2022.

Additionally, through separate funding, the MD EHDI Program is actively seeking to increase family support and engagement through a vendor-coordinated program. This program will be developed and implemented in SFY 2022.

Easy-to-Use Services and Supports
A priority goal in SFY 2022 and beyond will be to increase internal efforts to determine challenges to accessing services and supports and develop strategies to overcome those challenges. OGPSHCN plans to solicit input from both grantee and non-grantee LHDs, community-based organizations and families to determine the most significant challenges to obtaining and utilizing services. As family members and professionals in this field, it is tempting to think we know what those challenges are, but it is only through keen and engaged listening that we can accurately learn of and assess these challenges. The pending Maternal and Child Health strategic plan and the recent Needs Assessment will also aid in this endeavor.

The Maryland Community of Care Consortium for CYSHCN (COC) has served as a forum for learning, networking, and communication among various stakeholder groups for years. The COC was coordinated by The Parents' Place of Maryland (PPMD) through grant funding through SFY 2020. COC work was not included in the SFY 2021 competitive RFA and discussions between OGPSHCN, Bureau and Administrative leadership are ongoing to plan and implement continuation of the COC. It is a valuable statewide collaborative effort that OGPSHCN would like to see continue in one form or another.

Internally, the Resource Line and Resource Locator will continue to grow and serve as a valuable resource for accessing community-based services. In addition, case presentation and training opportunities will continue via OGPSHCN staff meetings.

Family Professional Partnership within Easy-to-use Supports and Services:
A 'low hanging fruit' opportunity to enhance family professional partnership exists within the routine meetings conducted internally with OGPSHCN staff. Case presentations during senior staff meetings and training during all-staff meetings are opportunities to discuss and strategize for successful FPP and potentially to invite families to share their experiences.

Additionally, the COC meetings have always been open to all stakeholders, with individual family members encouraged to attend, and family-led organizations well represented.

Youth Transition to Adult Health Care
As discussed above in the Medical Home section and displayed in Table 1, in the RFA posted in SFY 2021, applicants were required to select at least one focus area corresponding to one of the core outcomes identified by HRSA as critical indicators of success in implementing community-based systems or services for CYSHCN. Health Care Transition (HCT) was one of those focus areas. While only one grantee selected HCT as their primary focus area during the application stage, several are working on HCT as a secondary focus (see Table 2). OGPSHCN will use the aforementioned grantee meetings to commence in FY22 to educate other grantees on HCT and will continue outreach and collaboration efforts as in past years.

Outreach and collaboration are ongoing with numerous stakeholders, including community organizations and other state agencies. Plans for SFY 2022 include continued partnering with and participation in statewide conferences such as SHIP (School Health Interdisciplinary Program), the Mid-Atlantic Association of Community Health Centers, and minority health programs to include transition programs, resources, and services as part of conference materials. Plans also include collaboration with foster care programs to enhance awareness of and education about HCT for youth in foster care. In addition, OGPHSCN will seek continued partnership with the Maryland Department of Juvenile Services for monthly "transition resource information" updates as part of an ongoing program offering parent, youth, and staff education and resources regarding community services related to HCT. Throughout SFY 2022, OGPSHCN plans to conduct more statewide presentations on health care transition. The focus will be on early-career providers to increase the capacity and willingness of adult providers to see youth and young adults with special health care needs. The HCT transition program will also continue providing technical assistance to faith-based projects such as the Missions Restoration Project, sponsored by the AKA Sorority of Maryland.

Family Professional Partnership within Youth Transition to Adult Health Care
A goal for SFY 2022 is to vitalize parent/family training around HCT. While the focus of efforts around the Medical Home may rest within the provider community, the focus of activities around HCT awareness would ideally rest with the family. There are numerous challenges to successful health care transition including a shortage of adult providers willing to see youth and adults with special health care needs and families not knowing how, when, and why to focus on transition efforts is a significant challenge that might be tackled more effectively within OGPSHCN's scope of influence.

Workforce Development
SFY 2022 will bring into focus additional opportunities for workforce development, not only among staff but also in the communities we serve. While OGPSHCN continues to support staff training, as well as incorporate workforce development into internship opportunities, we will also look to provide opportunities to CYSHCN. Youth with special health care needs are much less likely than their non-disabled peers to finish high school, pursue post-secondary education, get jobs, or live independently according to The National Survey of Children with Special Health Care Needs (NS-CSHCN) Chartbook 2009-2010, released in June 2013.

Healthy People 2020 goals include increasing the proportion of children and youth with disabilities who spend at least 80 percent of their time in regular education programs; reducing unemployment among people with disabilities; and increasing employment among people with disabilities. Recognizing the overlap between children and youth with disabilities and CYSHCN and the importance of social determinants of health, we will identify opportunities and collaboration focused on post-secondary education, beginning with community colleges offering both degree and certificate programs, to increase educational and employment opportunities for Maryland youth with special health care needs. In SFY 2022, OGPSHCN will continue to have leadership representation on the Maryland Community of Practice for Supporting Families and Charting the Lifecourse Framework (MD-CoP), which is coordinated by the Maryland Department of Health's Developmental Disabilities Administration. The goal of the MD-CoP is to "build capacity across and within the state to create policies, regulations, systems and practices to enhance the lives of people with intellectual and developmental disabilities and their families enabling all people to live, love, work, play, learn and pursue their aspirations in their community." This collaborative effort will help to improve policies, programs, and practices around HCT, workforce development and more.

In SFY 2022, OGPSHCN leadership will additionally seek out pathways for targeted recruitment of specific groups (e.g., a parent/caregiver of a CYSHCN or a former CYSHCN) within the framework of approved state hiring practices. This will provide a foundation for future recruitment efforts.

Looking forward

Finally, while the current grantees resulting from the SFY 2021 competitive RFA should remain in effect until June 30, 2023, now is the time for us to assess the needs of the communities we serve and discuss desired edits to applicant scopes of work beyond FY23. The pending Maternal and Child Health strategic plan and the recent Needs Assessment will aid in this effort, as will careful review of reporting requirements from all grantees. The last year or two were a bit of a turning point for OGPSHCN grants administration. This has been a difficult transition on many levels, but the fervent hope is that with more focused attention to a truly competitive process and a strenuous application review process, we will see innovative and sustainable programs that can change the landscape for CYSHCN in Maryland for the better.

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

Beginning with the FY 2022 Application/FY 2020 Annual Report, public input will be obtained through improved processes which will include posting for public comment and presentation to stakeholder groups. The Application/Annual Report will be posted on the Maternal and Child Health Bureau's Title V webpage for a one week period after submission. Stakeholder groups, including local health department grantees will be alerted to the posting and provided a direct link. Public comments will then be integrated into the Application/Report in FY 2023.

The Application/Annual Report was presented to the Maryland Maternal Health Improvement Task Force in July. The Maternal Health Innovation Program is a HRSA funded initiative in which Title V collaborates with Johns Hopkins University, University of Maryland, Baltimore County, and the Maryland Patient Safety Center to coordinate and implement the Maryland Maternal Health Improvement Task Force.

After submission of the Application/Annual Report to HRSA and following our Annual Review, the FY 2022 Application/FY 2020 Annual Report will be posted to the Title V webpage on the MDH website. This webpage also includes the ability for visitors to leave public comments. The Title V Manager is responsible for addressing the public comments that are received, provide responses, and make recommendations for incorporation into Title V practice and interventions.

III.G. Technical Assistance

Acting upon feedback received during the Annual Title V Review in October 2020, Maryland Title V team engaged in technical assistance with the MCH Evidence team from Georgetown University. With a new Director and Deputy Director of MCHB, the sessions informed the Title V team on ways to align the State Action Plan with funded services, the Needs Assessment, other HRSA funded grants, and other health initiatives emerging in the state. As a result, Maryland Title V has reassessed their National Performance Measures, added new State Performance Measures and has identified improved data sources for reporting progress with priority needs.

National Performance, State Performance Measures, Objectives, and Evidence Based Strategy Measures: During SFY 2021, Maryland Title V prioritized re-assessing the national performance measures that consisted of reviewing data sources and evaluating numerators and denominators. The Title V team developed State Performance Measures that aligned with Title V Needs Assessment, other HRSA funded grants, state health initiatives with the MCH Evidence team from Georgetown. The Title V team also developed objectives that were specific, measurable, and realistic with the updated SPMs and also for the NPMs. Maryland Title V will continue its progress with addressing alignment of the State Action Plan and will request technical assistance to develop more robust evidence based strategy measures with the MCH Evidence team from Georgetown University.

Health Equity Technical Assistance: Maryland Title V is committed to addressing the persistent racial disparities in health outcomes for Black, Indigenous, and other People of Color (BIPOC). To this end, Title V worked to update its state action plan, priorities, and metrics during this past year with technical assistance from the MCH Evidence team as well as the Office of Minority Health and Health Disparities at the Maryland Department of Health.

Maryland Title V remains committed to achieving health equity and will continue to seek the assistance of the MCH Evidence team in the development of the evidence based strategy measures that further operationalizes the health equity framework. In addition, Title V will seek technical assistance in improved application of equity principles within Title V initiatives. During Fiscal Year 2021, the Title V team started an Equity Workgroup within the Bureau to share learnings, readings, and develop tools for the Bureau and Title V. Additional assistance to assess initiatives and ensure that initiatives implement the equity framework would benefit Title V greatly.

Centralized Title V Data System Collection: Currently, many local health departments use separate case management systems for their clients. Several local health departments use paper, spreadsheets, or other databases. A centralized data collection system would allow the opportunity to collect data in a consistent manner and would benefit Title V greatly. Identifying necessary components for a Statewide- Title V Data System to prevent duplication of data would be helpful. Currently, there are limited resources and funding to develop a Title V statewide data collection system. However, providing resources or sharing best practices from other states would assist in reporting to Title V.

Public Health Workforce: Overall, health departments have been working many hours and assumed additional duties to address the COVID pandemic through testing, contact tracing, linkages to resources, and vaccinations. Many staff have been re-assigned to COVID duties while still trying to maintain their primary duties. Many staff have been fatigued due to the workload. Providing resources or sharing best practices from other states would assist in ways that Title V can help with retaining MCH workforce.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - MD Medicaid MCH WIC MOU.pdf

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - Assurance of Compliance Non-Construction Programs 02.22.2021_DS.pdf

Supporting Document #02 - Assurance_of_Compliance_DHHS_02.19.2021 (2) (1).pdf

Supporting Document #03 - MCH Partnerships and Collaborations.pdf

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - MCHB Org Chart 08 2021.pdf

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Maryland

	FY 22 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 11,850,506	
A. Preventive and Primary Care for Children	$ 3,790,573	(31.9%)
B. Children with Special Health Care Needs	$ 4,375,345	(36.9%)
C. Title V Administrative Costs	$ 461,752	(3.9%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 8,627,670	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 8,887,880	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 0	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 0	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 8,887,880	
A. Your State's FY 1989 Maintenance of Effort Amount $ 8,262,484		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 20,738,386	
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)	$ 111,489,625	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 132,228,011	

OTHER FEDERAL FUNDS	FY 22 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	$ 849,070
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 935,663
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 160,020
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Sudden Unexpected Infant Death (SUID) Case Registry Program	$ 75,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 7,483,512
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 235,000
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 4,000,000
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 96,237,166
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > State Optimal Adolescent Health Program	$ 1,414,194

	FY 20 Annual Report Budgeted		FY 20 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 11,673,326		$ 11,850,506	
A. Preventive and Primary Care for Children	$ 4,087,240	(35%)	$ 3,790,573	(31.9%)
B. Children with Special Health Care Needs	$ 4,566,012	(39.1%)	$ 5,831,719	(49.2%)
C. Title V Administrative Costs	$ 626,053	(5.4%)	$ 388,142	(3.3%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 9,279,305		$ 10,010,434	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 8,754,995		$ 8,887,880	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	$ 0		$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	$ 0		$ 0	
6. PROGRAM INCOME (Item 18f of SF-424)	$ 0		$ 0	
7. TOTAL STATE MATCH (Lines 3 through 6)	$ 8,754,995		$ 8,887,880	
A. Your State's FY 1989 Maintenance of Effort Amount $ 8,262,484				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	$ 20,428,321		$ 20,738,386	
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)	$ 117,178,515		$ 87,533,536	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 137,606,836		$ 108,271,922	

OTHER FEDERAL FUNDS	FY 20 Annual Report Budgeted	FY 20 Annual Report Expended
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 194,299	$ 193,741
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 3,200,000	$ 530,184
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 104,089,634	$ 80,478,303
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 938,985	$ 604,790
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 7,925,829	$ 5,015,732
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000	$ 75,825
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	$ 729,768	$ 369,897
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Sudden Unexpected Infant Death Case Registry Program		$ 54,406
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention		$ 210,658

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**Federal Allocation, A. Preventive and Primary Care for Children:**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: Total expenditures are used as a baseline for budgeting for the application year. Historically, the amount budget v. expended differs ony by a few hundred of dollars.	
2.	**Field Name:**	**Federal Allocation, B. Children with Special Health Care Needs:**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: Increased CYSHCN Expenditures were due to a backlog of payments for services that were reconciled in FY 2020.	
3.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: Based on an indirect cost rate of 27.09% on wages and salaries, excluding fringe benefits.	

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served

State: Maryland

I. TYPES OF INDIVIDUALS SERVED

IA. Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	$ 1,611,418	$ 1,299,712
2. Infants < 1 year	$ 1,611,418	$ 540,360
3. Children 1 through 21 Years	$ 3,790,573	$ 3,790,573
4. CSHCN	$ 4,375,345	$ 5,831,719
5. All Others	$ 0	$ 0
Federal Total of Individuals Served	$ 11,388,754	$ 11,462,364

IB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Pregnant Women	$ 3,396,482	$ 3,396,482
2. Infants < 1 year	$ 1,730,064	$ 1,730,064
3. Children 1 through 21 Years	$ 1,167,003	$ 1,167,003
4. CSHCN	$ 400,000	$ 400,000
5. All Others	$ 2,194,331	$ 2,194,331
Non-Federal Total of Individuals Served	$ 8,887,880	$ 8,887,880
Federal State MCH Block Grant Partnership Total	$ 20,276,634	$ 20,350,244

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

1.	**Field Name:**	**IA. Federal MCH Block Grant, 4. CSHCN**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: Federal expenditures for CYSHCN was overspent due to increase need for Children Medical Services which covers insurance premiums for CYSHCN that are not eligible for the state Medicaid program.	
2.	**Field Name:**	**IA. Federal MCH Block Grant, Federal Total of Individuals Served**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: The discrepancy in budgeted v. expended lies within the Children's Medical Services (CMS) Program which due to cost of services and the need for services was greater than in past years.	

Data Alerts: None

Form 3b
Budget and Expenditure Details by Types of Services

State: Maryland

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	$ 3,140,093	$ 4,672,948
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 448,526	$ 448,526
B. Preventive and Primary Care Services for Children	$ 217,832	$ 217,832
C. Services for CSHCN	$ 2,473,735	$ 4,006,590
2. Enabling Services	$ 6,943,046	$ 5,510,797
3. Public Health Services and Systems	$ 1,767,367	$ 1,666,761
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		$ 343,171
Physician/Office Services		$ 936,038
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 392,958
Dental Care (Does Not Include Orthodontic Services)		$ 4,241
Durable Medical Equipment and Supplies		$ 67,943
Laboratory Services		$ 0
Other		
CYSHCN Purchase of Care		$ 2,928,597
Direct Services Line 4 Expended Total		$ 4,672,948
Federal Total	$ 11,850,506	$ 11,850,506

IIB. Non-Federal MCH Block Grant	FY 22 Application Budgeted	FY 20 Annual Report Expended
1. Direct Services	$ 400,000	$ 4,788,662
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 0	$ 4,388,662
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 400,000	$ 400,000
2. Enabling Services	$ 6,349,969	$ 1,481,597
3. Public Health Services and Systems	$ 2,137,911	$ 2,617,621
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		$ 0
Physician/Office Services		$ 4,388,662
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 0
Dental Care (Does Not Include Orthodontic Services)		$ 0
Durable Medical Equipment and Supplies		$ 0
Laboratory Services		$ 0
Other		
Medical Daycare		$ 400,000
Direct Services Line 4 Expended Total		$ 4,788,662
Non-Federal Total	$ 8,887,880	$ 8,887,880

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

1.	**Field Name:**	**IIA. Federal MCH Block Grant, 1. C. Services for CSHCN**
	Fiscal Year:	**2022**
	Column Name:	**Application Budgeted**
	Field Note: Direct Services for CYSCHN is overspent from budgeted due to an increase in the need for services from the Children's Medical Services Program.	
2.	**Field Name:**	**IIA. Federal MCH Block Grant, 1. C. Services for CSHCN**
	Fiscal Year:	**2020**
	Column Name:	**Annual Report Expended**
	Field Note: Overspent on Children's Medical Services	
3.	**Field Name:**	**IIB. - Other - Medical Daycare**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: Medical Daycare State General Fund Expenditure	

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated

State: Maryland

Total Births by Occurrence: 65,525 **Data Source Year: 2020**

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Valid Screen	(B) Aggregate Total Number of Out-of-Range Results	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	65,525 (100.0%)	4,505	232	229 (98.7%)

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	Maple Syrup Urine Disease	Medium-Chain Acyl-Coa Dehydrogenase Deficiency	Methylmalonic Acidemia (Cobalamin Disorders)
Methylmalonic Acidemia (Methylmalonyl-Coa Mutase)	Mucopolysaccharidosis Type 1	Primary Congenital Hypothyroidism	Propionic Acidemia	S, ßeta-Thalassemia
S,C Disease	S,S Disease (Sickle Cell Anemia)	Severe Combined Immunodeficiences	Spinal Muscular Atrophy Due To Homozygous Deletion Of Exon 7 In SMN1	ß-Ketothiolase Deficiency
Trifunctional Protein Deficiency	Tyrosinemia, Type I	Very Long-Chain Acyl-Coa Dehydrogenase Deficiency	X-Linked Adrenoleukodystrophy	

2. Other Newborn Screening Tests

Program Name	(A) Total Number Receiving at Least One Screen	(B) Total Number Presumptive Positive Screens	(C) Total Number Confirmed Cases	(D) Total Number Referred for Treatment
Fabry Disease	65,525 (100.0%)	178	5	5 (100.0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

The Sickle Cell Disease Long-Term Follow-Up Program follows children diagnosed with sickle cell disease through age 18. The program continues to focus on childhood preventive care standards and provides education and assistance through the transition into adulthood. In FY 2020, 563 children were being followed in the program. In May 2015, a pilot parent mentor program was formed to assist new parents of newborns with sickle cell disease. This program continues to grow and develop as new parent mentors are added. In November 2018, the program conducted a survey of providers to determine awareness of and preparation to discuss Sickle Cell Trait (SCT) testing outcomes via Newborn Screening and health concerns with families. The outcome showed that most providers were aware of SCT potential health risks, but the breadth of knowledge was limited. SCT follow-up opportunities are being discussed in the statewide Adult Sickle Cell Disease Steering Committee which convened in 2020.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	**Field Name:**	**Core RUSP Conditions - Total Number Referred For Treatment**
	Fiscal Year:	**2020**
	Column Name:	**Core RUSP Conditions**

Field Note:
Two infants have been referred to care (S,S disease) but have not begun care as of yet. One parent refused treatment for their infant (Isovaleric Acidemia)

Data Alerts: None

Form 5
Count of Individuals Served by Title V & Total Percentage of Populations Served by Title V

State: Maryland

Annual Report Year 2020

Form 5a – Count of Individuals Served by Title V
(Direct & Enabling Services Only)

		Primary Source of Coverage				
Types Of Individuals Served	**(A) Title V Total Served**	**(B) Title XIX %**	**(C) Title XXI %**	**(D) Private / Other %**	**(E) None %**	**(F) Unknown %**
1. Pregnant Women	53,742	40.0	0.0	57.0	3.0	0.0
2. Infants < 1 Year of Age	66,793	0.0	40.0	57.0	3.0	0.0
3. Children 1 through 21 Years of Age	117,570	0.0	32.0	63.0	4.0	1.0
3a. Children with Special Health Care Needs 0 through 21 years of age^	23,662	0.0	38.0	61.0	1.0	0.0
4. Others	4,931	14.0	0.0	79.0	7.0	0.0
Total	243,036					

Form 5b – Total Percentage of Populations Served by Title V
(Direct, Enabling, and Public Health Services and Systems)

Populations Served by Title V	Reference Data	Used Reference Data?	Denominator	Total % Served	Form 5b Count (Calculated)	Form 5a Count
1. Pregnant Women	70,178	Yes	70,178	100.0	70,178	53,742
2. Infants < 1 Year of Age	66,793	Yes	66,793	100.0	66,793	66,793
3. Children 1 through 21 Years of Age	1,567,666	Yes	1,567,666	100.0	1,567,666	117,570
3a. Children with Special Health Care Needs 0 through 21 years of age^	317,693	Yes	317,693	100.0	317,693	23,662
4. Others	4,408,088	Yes	4,408,088	1.0	44,081	4,931

^Represents a subset of all infants and children.

Form Notes for Form 5:

Due to the COVID-19 Pandemic which closed clinics and programs from March 2020-June 2020, and then at limited capacity, total number served in each category may have been effected.

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2020**
	Field Note: Pregnant people receiving services through Title V funded programs including at local health departments, Child Health Systems Improvement, Babies Born Healthy, family planning clinics, and High Risk Infants program.	
2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2020**
	Field Note: Includes all newborn screenings	
3.	**Field Name:**	**Children 1 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: Children receiving services through local health departments including school based health services and family planning clinics.	
4.	**Field Name:**	**Children with Special Health Care Needs 0 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: CYSHCN receiving services through grantees of OGPSHCN and local health departments.	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2020**
	Field Note: Others receiving services through family planning clinics.	

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women**
	Fiscal Year:	**2020**
	Field Note: Providers in Maryland should be completing the Prenatal Risk Assessment on all pregnant people. These PRAs are sent to local health department ACCUs to coordinate needed services.	
2.	**Field Name:**	**InfantsLess Than One Year**
	Fiscal Year:	**2020**
	Field Note: All infants receive newborn screening at birth.	
3.	**Field Name:**	**Children 1 Through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: Through social media campaigns including those focused on immunizations, well visits, dental care, and mental health, along with advertisements of services provided by local health departments, children age 1-21 are reached.	
4.	**Field Name:**	**Children with Special Health Care Needs 0 through 21 Years of Age**
	Fiscal Year:	**2020**
	Field Note: All CYSCHN in the state should be outreached by early intervention, speciality programs, case managers, and folllow up programs.	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2020**
	Field Note: All others receiving services through local health departments and family planning clinics.	

Data Alerts:

1.	Infants Less Than One Year, Form 5a Count is greater than or equal to 90% of the Form 5b Count (calculated). Please check that population based services have been included in the 5b Count and not in the 5a Count.

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: Maryland

Annual Report Year 2020

I. Unduplicated Count by Race/Ethnicity

	(A) Total	(B) Non-Hispanic White	(C) Non-Hispanic Black or African American	(D) Hispanic	(E) Non-Hispanic American Indian or Native Alaskan	(F) Non-Hispanic Asian	(G) Non-Hispanic Native Hawaiian or Other Pacific Islander	(H) Non-Hispanic Multiple Race	(I) Other & Unknown
1. Total Deliveries in State	70,130	29,486	22,269	12,860	111	5,127	0	0	277
Title V Served	70,130	29,486	22,269	12,860	111	5,127	0	0	277
Eligible for Title XIX	48,006	11,503	19,257	6,330	117	2,027	76	0	8,696
2. Total Infants in State	69,926	29,595	22,336	13,670	186	4,139	0	0	0
Title V Served	69,926	29,595	22,336	13,670	186	4,139	0	0	0
Eligible for Title XIX	37,680	4,978	8,033	2,122	103	1,274	55	0	21,115

Form Notes for Form 6:

None

Field Level Notes for Form 6:

1.	**Field Name:**	**1. Total Deliveries in State**
	Fiscal Year:	**2020**
	Column Name:	**Total**

Field Note:
Live births, VSA 2019 Annual Report

2.	**Field Name:**	**1. Title V Served**
	Fiscal Year:	**2020**
	Column Name:	**Total**

Field Note:
Live births, VSA 2019 Annual Report

3.	**Field Name:**	**1. Eligible for Title XIX**
	Fiscal Year:	**2020**
	Column Name:	**Total**

Field Note:
Pregnant women enrolled in Medicaid, Medicaid data 2019

4.	**Field Name:**	**2. Total Infants in State**
	Fiscal Year:	**2020**
	Column Name:	**Total**

Field Note:
Population age <1, NCHS Bridged-Race Population Estimates 2019

5.	**Field Name:**	**2. Title V Served**
	Fiscal Year:	**2020**
	Column Name:	**Total**

Field Note:
Population age <1, NCHS Bridged-Race Population Estimates, 2019

6.	**Field Name:**	**2. Eligible for Title XIX**
	Fiscal Year:	**2020**
	Column Name:	**Total**

Field Note:
Infants enrolled in Medicaid, Medicaid 2019 data

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: Maryland

A. State MCH Toll-Free Telephone Lines	2022 Application Year	2020 Annual Report Year
1. State MCH Toll-Free "Hotline" Telephone Number	(800) 456-8900	(800) 456-8900
2. State MCH Toll-Free "Hotline" Name	MDH Medicaid for Pregnant Women	MDH Medicaid for Pregnant Women
3. Name of Contact Person for State MCH "Hotline"	Marian Pierce	Marian Pierce
4. Contact Person's Telephone Number	(410) 767-6111	(410) 767-6111
5. Number of Calls Received on the State MCH "Hotline"		2,714

B. Other Appropriate Methods	2022 Application Year	2020 Annual Report Year
1. Other Toll-Free "Hotline" Names	N/A	N/A
2. Number of Calls on Other Toll-Free "Hotlines"		0
3. State Title V Program Website Address	https://phpa.health.maryland.gov/mch	https://phpa.health.maryland.gov/mch
4. Number of Hits to the State Title V Program Website		341
5. State Title V Social Media Websites	facebook.com/marylanddepartmentofhealth	facebook.com/marylanddepartmentofhealth
6. Number of Hits to the State Title V Program Social Media Websites		0

Form Notes for Form 7:

None

Form 8
State MCH and CSHCN Directors Contact Information

State: Maryland

1. Title V Maternal and Child Health (MCH) Director	
Name	Shelly Choo, MD
Title	Director, Maternal and Child Health Bureau
Address 1	201 W. Preston Street
Address 2	
City/State/Zip	Baltimore / MD / 21201
Telephone	4435713424
Extension	
Email	shelly.choo@maryland.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Jed Miller, MD
Title	Director, Office of Genetics and People with Special Health Care Needs
Address 1	201 W. Preston Street
Address 2	
City/State/Zip	Baltimore / MD / 21201
Telephone	4107675642
Extension	
Email	jed.miller1@maryland.gov

3. State Family or Youth Leader (Optional)	
Name	Stacy Taylor
Title	Deputy Director, Office of Genetics and People with Special Health Care Needs
Address 1	201 W. Preston St.
Address 2	
City/State/Zip	Baltimore / MD / 21201
Telephone	(443) 977-0433
Extension	
Email	stacy.taylor@maryland.gov

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: Maryland

Application Year 2022

No.	Priority Need	Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period)
1.	Ensure that all babies are born healthy and propser in their first year	Continued
2.	Ensure that adolescents age 12-17 receive comprehensive well visits that address physical, reproductive, and behavioral health needs.	Continued
3.	Ensure optimal health and quality of life for all CYSHCN and their families by providing all services within an effective system of care in alignment with the Six Core Outcomes	Continued
4.	Ensure that all birthing people are in optimal health before, during, and after pregnancy	Continued
5.	Ensure that all children have an opportunity to develop and reach their full potential	Continued
6.	Ensure children with asthma and their families have the tools and supports necessary to manage their condition so that it does not impede their daily activities	New
7.	Address the racial disparities in Severe Maternal Morbidity rates among Black NH and White NH	New

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 9 State Priorities – Needs Assessment Year – Application Year 2021

No.	Priority Need	Priority Need Type (New, Revised or Continued Priority Need for this five-year reporting period)
1.	Risk Appropriate Perinatal Care	New
2.	Breastfeeding	New
3.	Safe Sleep	Continued
4.	Adolescent Well Visit	Continued
5.	Medical Home	Continued
6.	Transitions	Continued
7.	Preventive Dental Visit-Pregnancy	Continued
8.	Smoking-Pregnancy	Continued
9.	Child Developmental Screenings	Continued

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 10
National Outcome Measures (NOMs)

State: Maryland

Form Notes for Form 10 NPMs, NOMs, SPMs, SOMs, and ESMs.

None

NOM 1 - Percent of pregnant women who receive prenatal care beginning in the first trimester

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	74.5 %	0.2 %	49,981	67,069
2018	74.6 %	0.2 %	50,559	67,772
2017	73.8 %	0.2 %	50,375	68,265
2016	72.0 %	0.2 %	49,044	68,127
2015	71.1 %	0.2 %	48,674	68,505
2014	70.6 %	0.2 %	48,351	68,446
2013	67.4 %	0.2 %	44,741	66,393
2012	68.0 %	0.2 %	47,698	70,186
2011	67.7 %	0.2 %	45,046	66,571
2010	68.9 % ⚡	0.2 % ⚡	41,490 ⚡	60,199 ⚡

Legends:

Indicator has a numerator <10 and is not reportable

⚡ Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 1 - Notes:

None

Data Alerts: None

 Created on 8/30/2021 at 10:15 AM

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

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	82.9	3.5	566	68,272
2017	80.3	3.4	554	68,950
2016	66.0	3.1	466	70,576
2015	67.7	3.6	357	52,704
2014	73.2	3.2	514	70,180
2013	77.7	3.4	532	68,449
2012	81.2	3.5	532	65,480
2011	99.8	3.9	648	64,928
2010	115.7	4.2	758	65,530
2009	102.8	3.9	688	66,896
2008	88.0	3.6	602	68,385

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 2 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015_2019	17.5	2.2	63	359,651
2014_2018	18.7	2.3	68	363,394

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 3 - Notes:

None

Data Alerts: None

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	8.7 %	0.1 %	6,111	70,147
2018	8.8 %	0.1 %	6,266	71,038
2017	8.9 %	0.1 %	6,375	71,599
2016	8.5 %	0.1 %	6,248	73,085
2015	8.6 %	0.1 %	6,297	73,585
2014	8.6 %	0.1 %	6,345	73,878
2013	8.5 %	0.1 %	6,088	71,913
2012	8.8 %	0.1 %	6,417	72,839
2011	8.9 %	0.1 %	6,466	73,037
2010	8.8 %	0.1 %	6,474	73,766
2009	9.1 %	0.1 %	6,836	75,014

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 4 - Notes:

None

Data Alerts: None

NOM 5 - Percent of preterm births (<37 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	10.3 %	0.1 %	7,211	70,130
2018	10.2 %	0.1 %	7,231	71,034
2017	10.5 %	0.1 %	7,491	71,592
2016	10.1 %	0.1 %	7,408	73,088
2015	10.0 %	0.1 %	7,380	73,567
2014	10.1 %	0.1 %	7,455	73,871
2013	9.8 %	0.1 %	7,053	71,758
2012	10.3 %	0.1 %	7,461	72,698
2011	10.2 %	0.1 %	7,469	72,875
2010	10.4 %	0.1 %	7,662	73,613
2009	10.4 %	0.1 %	7,820	74,936

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 5 - Notes:

None

Data Alerts: None

NOM 6 - Percent of early term births (37, 38 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	27.3 %	0.2 %	19,129	70,130
2018	26.1 %	0.2 %	18,564	71,034
2017	26.1 %	0.2 %	18,669	71,592
2016	25.4 %	0.2 %	18,585	73,088
2015	25.0 %	0.2 %	18,376	73,567
2014	24.6 %	0.2 %	18,160	73,871
2013	24.6 %	0.2 %	17,686	71,758
2012	24.6 %	0.2 %	17,860	72,698
2011	24.4 %	0.2 %	17,771	72,875
2010	24.9 %	0.2 %	18,357	73,613
2009	25.1 %	0.2 %	18,835	74,936

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

NOM 6 - Notes:

None

Data Alerts: None

NOM 7 - Percent of non-medically indicated early elective deliveries

Data Source: CMS Hospital Compare

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019/Q1-2019/Q4	2.0 %			
2018/Q4-2019/Q3	2.0 %			
2018/Q3-2019/Q2	1.0 %			
2018/Q2-2019/Q1	1.0 %			
2018/Q1-2018/Q4	1.0 %			
2017/Q4-2018/Q3	1.0 %			
2017/Q3-2018/Q2	1.0 %			
2017/Q2-2018/Q1	1.0 %			
2017/Q1-2017/Q4	1.0 %			
2016/Q4-2017/Q3	1.0 %			
2016/Q3-2017/Q2	1.0 %			
2016/Q2-2017/Q1	1.0 %			
2016/Q1-2016/Q4	1.0 %			
2015/Q4-2016/Q3	4.0 %			
2015/Q3-2016/Q2	9.0 %			
2015/Q2-2016/Q1	10.0 %			
2015/Q1-2015/Q4	12.0 %			
2014/Q3-2015/Q2	5.0 %			
2014/Q2-2015/Q1	6.0 %			
2014/Q1-2014/Q4	3.0 %			
2013/Q4-2014/Q3	3.0 %			
2013/Q3-2014/Q2	3.0 %			

Legends:

NOM 7 - Notes:

None

Data Alerts: None

NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	6.2	0.3	440	71,277
2017	6.6	0.3	471	71,847
2016	6.9	0.3	507	73,359
2015	7.2	0.3	531	73,856
2014	7.0	0.3	518	74,152
2013	7.0	0.3	504	72,185
2012	6.9	0.3	507	73,105
2011	7.6	0.3	559	73,321
2010	7.2	0.3	535	74,039
2009	7.3	0.3	547	75,291

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 8 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	6.0	0.3	428	71,080
2017	6.4	0.3	461	71,641
2016	6.5	0.3	478	73,136
2015	6.6	0.3	485	73,616
2014	6.5	0.3	480	73,921
2013	6.6	0.3	477	71,953
2012	6.4	0.3	463	72,883
2011	6.8	0.3	498	73,093
2010	6.8	0.3	504	73,801
2009	7.2	0.3	542	75,059

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.1 - Notes:

None

Data Alerts: None

NOM 9.2 - Neonatal mortality rate per 1,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	4.1	0.2	293	71,080
2017	4.5	0.3	319	71,641
2016	4.7	0.3	344	73,136
2015	4.8	0.3	351	73,616
2014	4.6	0.3	338	73,921
2013	4.5	0.3	327	71,953
2012	4.7	0.3	344	72,883
2011	5.2	0.3	378	73,093
2010	4.7	0.3	350	73,801
2009	5.1	0.3	383	75,059

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.2 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	1.9	0.2	135	71,080
2017	2.0	0.2	142	71,641
2016	1.8	0.2	134	73,136
2015	1.8	0.2	134	73,616
2014	1.9	0.2	142	73,921
2013	2.1	0.2	150	71,953
2012	1.6	0.2	119	72,883
2011	1.6	0.2	120	73,093
2010	2.1	0.2	154	73,801
2009	2.1	0.2	159	75,059

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.3 - Notes:

None

Data Alerts: None

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	270.1	19.5	192	71,080
2017	269.4	19.4	193	71,641
2016	317.2	20.9	232	73,136
2015	311.1	20.6	229	73,616
2014	292.2	19.9	216	73,921
2013	309.9	20.8	223	71,953
2012	306.0	20.5	223	72,883
2011	335.2	21.5	245	73,093
2010	323.8	21.0	239	73,801
2009	333.1	21.1	250	75,059

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.4 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	97.1	11.7	69	71,080
2017	97.7	11.7	70	71,641
2016	72.5	10.0	53	73,136
2015	92.4	11.2	68	73,616
2014	89.3	11.0	66	73,921
2013	82.0	10.7	59	71,953
2012	75.5	10.2	55	72,883
2011	79.4	10.4	58	73,093
2010	75.9	10.1	56	73,801
2009	98.6	11.5	74	75,059

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 9.5 - Notes:

None

Data Alerts: None

NOM 10 - Percent of women who drink alcohol in the last 3 months of pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	7.7 %	1.0 %	4,852	62,661
2017	8.3 %	1.0 %	5,224	62,971
2016	8.9 %	0.9 %	5,825	65,120
2015	9.7 %	1.0 %	6,335	65,364
2014	9.5 %	0.9 %	6,225	65,780
2013	7.7 %	0.9 %	4,921	64,306
2012	9.4 %	1.1 %	6,104	65,289
2011	8.9 %	1.1 %	5,818	65,300
2010	8.9 %	1.1 %	5,840	65,772
2009	9.9 %	1.1 %	6,592	66,417
2008	8.8 %	1.0 %	5,921	67,517
2007	7.4 %	0.9 %	4,914	66,622

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has an unweighted denominator between 30 and 59 or confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 10 - Notes:

None

Data Alerts: None

NOM 11 - Rate of neonatal abstinence syndrome per 1,000 birth hospitalizations

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	12.7	0.4	877	68,976
2017	13.3	0.4	920	69,180
2016	13.1	0.4	920	70,422
2015	13.2	0.5	701	53,099
2014	13.4	0.4	948	70,870
2013	13.0	0.4	904	69,306
2012	11.6	0.4	774	66,584
2011	10.5	0.4	691	66,119
2010	9.5	0.4	634	66,665
2009	8.3	0.4	562	67,937
2008	7.3	0.3	504	69,472

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 11 - Notes:

None

Data Alerts: None

NOM 12 - Percent of eligible newborns screened for heritable disorders with on time physician notification for out of range screens who are followed up in a timely manner. (DEVELOPMENTAL)

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

NOM 12 - Notes:

None

Data Alerts: None

NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)

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

NOM 13 - Notes:

None

Data Alerts: None

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

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	10.6 %	1.4 %	136,722	1,286,835
2017_2018	10.0 %	1.5 %	127,239	1,267,442
2016_2017	9.0 %	1.2 %	113,081	1,252,855
2016	9.0 %	1.2 %	112,430	1,252,032

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 14 - Notes:

None

Data Alerts: None

NOM 15 - Child Mortality rate, ages 1 through 9, per 100,000

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	14.6	1.5	97	662,566
2018	15.5	1.5	103	664,105
2017	15.6	1.5	104	667,948
2016	15.8	1.5	106	670,711
2015	20.3	1.7	136	670,836
2014	17.7	1.6	119	671,448
2013	16.7	1.6	111	666,603
2012	18.0	1.7	119	662,541
2011	16.2	1.6	107	659,217
2010	15.2	1.5	100	659,833
2009	16.0	1.6	105	655,038

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 15 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	31.3	2.0	237	757,229
2018	28.7	1.9	218	760,010
2017	33.4	2.1	254	761,565
2016	33.4	2.1	254	759,740
2015	29.9	2.0	227	759,736
2014	22.8	1.7	174	763,694
2013	27.3	1.9	209	765,139
2012	31.3	2.0	242	773,432
2011	32.3	2.0	251	776,406
2010	30.8	2.0	242	785,270
2009	33.0	2.0	261	790,570

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.1 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2019	7.9	0.8	91	1,146,283
2016_2018	8.7	0.9	100	1,152,302
2015_2017	8.2	0.8	95	1,156,115
2014_2016	6.9	0.8	80	1,158,159
2013_2015	6.9	0.8	80	1,161,768
2012_2014	8.7	0.9	102	1,173,032
2011_2013	11.0	1.0	130	1,184,125
2010_2012	11.4	1.0	137	1,200,823
2009_2011	11.3	1.0	137	1,214,384
2008_2010	12.0	1.0	148	1,229,879
2007_2009	14.7	1.1	182	1,236,839

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.2 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2017_2019	7.8	0.8	89	1,146,283
2016_2018	7.1	0.8	82	1,152,302
2015_2017	6.5	0.8	75	1,156,115
2014_2016	6.5	0.8	75	1,158,159
2013_2015	6.3	0.7	73	1,161,768
2012_2014	6.1	0.7	72	1,173,032
2011_2013	5.7	0.7	68	1,184,125
2010_2012	5.3	0.7	64	1,200,823
2009_2011	5.9	0.7	72	1,214,384
2008_2010	5.9	0.7	72	1,229,879
2007_2009	6.4	0.7	79	1,236,839

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 16.3 - Notes:

None

Data Alerts: None

NOM 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	19.4 %	1.5 %	260,596	1,339,840
2017_2018	19.2 %	1.6 %	257,564	1,344,597
2016_2017	19.2 %	1.4 %	258,184	1,343,836
2016	18.6 %	1.6 %	250,000	1,343,874

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.1 - Notes:

None

Data Alerts: None

NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	18.8 %	3.3 %	48,870	260,596
2017_2018	8.3 %	1.9 %	21,436	257,564
2016_2017	14.7 %	2.6 %	37,919	258,184
2016	26.0 %	4.3 %	64,987	250,000

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.2 - Notes:

None

Data Alerts: None

NOM 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	3.1 % ϟ	0.9 % ϟ	35,921 ϟ	1,156,312 ϟ
2017_2018	2.0 % ϟ	0.6 % ϟ	22,126 ϟ	1,132,008 ϟ
2016_2017	2.5 %	0.6 %	28,463	1,120,237
2016	4.1 %	1.0 %	45,908	1,116,162

Legends:

⚑ Indicator has an unweighted denominator <30 and is not reportable

ϟ Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.3 - Notes:

None

Data Alerts: None

NOM 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	8.2 %	1.1 %	93,322	1,141,804
2017_2018	10.3 %	1.3 %	115,075	1,113,679
2016_2017	11.8 %	1.3 %	129,569	1,100,731
2016	10.8 %	1.4 %	117,992	1,093,513

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 17.4 - Notes:

None

Data Alerts: None

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

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	51.8 % ⚡	5.5 % ⚡	81,415 ⚡	157,080 ⚡
2017_2018	52.8 % ⚡	6.2 % ⚡	79,416 ⚡	150,539 ⚡
2016_2017	63.6 % ⚡	5.7 % ⚡	89,108 ⚡	140,147 ⚡
2016	68.1 % ⚡	6.4 % ⚡	94,282 ⚡	138,528 ⚡

Legends:

🏴 Indicator has an unweighted denominator <30 and is not reportable

⚡ Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 18 - Notes:

None

Data Alerts: None

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

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	93.5 %	1.1 %	1,250,085	1,337,302
2017_2018	93.1 %	1.2 %	1,249,389	1,342,059
2016_2017	93.9 %	0.9 %	1,261,384	1,343,503
2016	93.7 %	1.1 %	1,258,778	1,343,208

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 19 - Notes:

None

Data Alerts: None

NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Data Source: WIC

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018	16.4 %	0.2 %	7,721	47,153
2016	15.6 %	0.2 %	7,891	50,469
2014	16.5 %	0.2 %	8,100	49,008
2012	16.2 %	0.2 %	8,363	51,503
2010	17.1 %	0.2 %	8,758	51,280
2008	16.3 %	0.2 %	6,596	40,557

Legends:

Indicator has a denominator <50 and is not reportable

Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	12.8 %	0.4 %	28,910	226,200
2017	12.6 %	0.3 %	28,487	226,002
2015	11.5 %	0.2 %	26,316	228,179
2013	11.0 %	0.2 %	25,455	231,036
2011	12.0 %	0.8 %	29,379	245,278
2009	12.0 %	1.1 %	30,848	257,496
2007	12.9 %	1.1 %	32,855	254,909
2005	12.6 %	1.1 %	31,387	249,623

Legends:

Indicator has an unweighted denominator <100 and is not reportable

Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	17.6 %	2.5 %	100,089	568,211
2017_2018	14.5 %	2.6 %	79,529	549,812
2016_2017	15.7 %	2.4 %	89,354	567,381
2016	16.9 %	2.4 %	96,856	571,754

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 20 - Notes:

None

Data Alerts: None

NOM 21 - Percent of children, ages 0 through 17, without health insurance

Data Source: American Community Survey (ACS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	3.0 %	0.3 %	40,425	1,331,209
2018	3.0 %	0.3 %	40,114	1,336,906
2017	3.9 %	0.4 %	52,934	1,345,120
2016	3.3 %	0.4 %	43,863	1,346,368
2015	4.2 %	0.3 %	55,893	1,346,012
2014	3.4 %	0.3 %	45,150	1,347,272
2013	4.3 %	0.3 %	57,589	1,344,277
2012	3.8 %	0.3 %	51,552	1,342,323
2011	4.5 %	0.4 %	60,555	1,346,032
2010	4.9 %	0.3 %	65,771	1,350,668
2009	4.7 %	0.3 %	63,797	1,349,602

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 21 - Notes:

None

Data Alerts: None

NOM 22.1 - Percent of children who have completed the combined 7-vaccine series (4:3:1:3*:3:1:4) by age 24 months

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2016	73.5 %	3.3 %	54,000	74,000
2015	73.9 %	3.6 %	55,000	75,000
2014	70.0 %	3.8 %	52,000	75,000
2013	72.5 %	3.6 %	54,000	74,000
2012	66.7 %	4.2 %	50,000	75,000
2011	75.6 %	4.1 %	57,000	75,000

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

Estimates with 95% confidence interval widths >20 or that are inestimable might not be reliable

NOM 22.1 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) – Flu

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019_2020	74.8 %	1.1 %	941,973	1,259,322
2018_2019	74.5 %	1.5 %	940,620	1,262,916
2017_2018	67.5 %	1.6 %	848,968	1,257,723
2016_2017	68.5 %	2.5 %	868,723	1,268,024
2015_2016	72.8 %	2.1 %	915,983	1,258,218
2014_2015	64.5 %	3.0 %	810,079	1,255,158
2013_2014	66.0 %	2.3 %	836,263	1,267,127
2012_2013	67.6 %	2.7 %	853,540	1,263,588
2011_2012	64.0 %	3.6 %	824,711	1,289,465
2010_2011	62.7 %	2.7 %	771,223	1,230,020
2009_2010	49.5 %	2.3 %	588,753	1,189,401

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or because the relative standard error is >0.3.

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.2 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	78.9 %	2.8 %	297,815	377,552
2018	74.7 %	3.1 %	283,824	379,953
2017	69.2 %	3.5 %	263,244	380,264
2016	64.5 %	3.2 %	245,374	380,245
2015	60.3 %	3.3 %	229,471	380,246

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.3 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	91.6 %	1.9 %	345,693	377,552
2018	88.4 %	2.1 %	336,034	379,953
2017	88.3 %	2.6 %	335,786	380,264
2016	85.1 %	2.4 %	323,385	380,245
2015	86.5 %	2.3 %	328,905	380,246
2014	85.0 %	2.7 %	323,794	380,851
2013	83.2 %	3.2 %	318,664	383,012
2012	78.1 %	3.4 %	300,758	385,101
2011	73.0 %	2.7 %	284,003	389,332
2010	61.2 %	3.3 %	234,929	383,916
2009	51.9 %	4.1 %	202,186	389,944

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate > 1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.4 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	94.9 %	1.4 %	358,427	377,552
2018	91.8 %	2.0 %	348,823	379,953
2017	91.8 %	2.2 %	348,975	380,264
2016	84.9 %	2.6 %	322,627	380,245
2015	87.3 %	2.3 %	331,887	380,246
2014	86.5 %	2.5 %	329,314	380,851
2013	78.0 %	3.4 %	298,661	383,012
2012	74.9 %	3.5 %	288,608	385,101
2011	78.5 %	2.4 %	305,702	389,332
2010	68.9 %	3.1 %	264,513	383,916
2009	59.3 %	4.1 %	231,140	389,944

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval width/estimate >1.2

Estimates with 95% confidence interval widths > 20 or that are inestimable might not be reliable

NOM 22.5 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	13.9	0.3	2,603	186,613
2018	14.1	0.3	2,645	187,101
2017	14.2	0.3	2,667	188,265
2016	15.9	0.3	3,017	189,190
2015	17.0	0.3	3,214	189,152
2014	17.8	0.3	3,379	189,695
2013	19.3	0.3	3,690	191,242
2012	22.1	0.3	4,286	193,953
2011	24.4	0.4	4,797	196,427
2010	27.3	0.4	5,396	197,629
2009	30.7	0.4	6,140	199,852

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 23 - Notes:

None

Data Alerts: None

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2019	15.6 %	1.5 %	9,718	62,162
2017	12.4 %	1.2 %	7,680	61,977
2016	13.3 %	1.1 %	8,480	63,932
2015	11.9 %	1.1 %	7,612	64,089
2014	12.0 %	1.1 %	7,734	64,505
2013	11.4 %	1.1 %	7,145	62,837
2012	12.3 %	1.3 %	7,826	63,627

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has an unweighted denominator between 30 and 59 or a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

NOM 24 - Notes:

None

Data Alerts: None

NOM 25 - Percent of children, ages 0 through 17, who were unable to obtain needed health care in the past year

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2018_2019	2.3 %	0.5 %	30,815	1,331,725
2017_2018	2.1 %	0.6 %	27,505	1,337,635
2016_2017	1.7 % ϟ	0.5 % ϟ	22,648 ϟ	1,338,569 ϟ
2016	1.3 % ϟ	0.5 % ϟ	17,042 ϟ	1,343,874 ϟ

Legends:

⚑ Indicator has an unweighted denominator <30 and is not reportable

ϟ Indicator has a confidence interval width >20% points, >1.2 times the estimate, or that is inestimable and should be interpreted with caution

NOM 25 - Notes:

None

Data Alerts: None

Form 10
National Performance Measures (NPMs)

State: Maryland

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

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

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	79.2	93.4
Numerator	954	891
Denominator	1,205	954
Data Source	VSA	VSA
Data Source Year	2018	2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	93.7	94.0	94.3	94.6	95.0	95.3

Field Level Notes for Form 10 NPMs:

None

NPM 4A - Percent of infants who are ever breastfed

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2019	2020
Annual Objective		
Annual Indicator	84.1	88.6
Numerator	51,263	55,833
Denominator	60,967	63,040
Data Source	NIS	NIS
Data Source Year	2016	2017

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	88.9	89.2	89.5	89.8	90.1	90.4

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data		
Data Source: National Immunization Survey (NIS)		
	2019	**2020**
Annual Objective		
Annual Indicator	28.0	29.4
Numerator	16,851	17,961
Denominator	60,103	61,137
Data Source	NIS	NIS
Data Source Year	2016	2017

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	30.8	32.2	33.6	35.0	36.4	37.8

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2016	2017	2018	2019	2020
Annual Objective	78.6	79	75.8	77.3	78.8
Annual Indicator	76.0	74.6	78.2	78.2	81.6
Numerator	49,042	47,705	48,293	48,293	50,368
Denominator	64,531	63,975	61,753	61,753	61,754
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2014	2015	2017	2017	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	80.3	81.8	83.3	84.8	85.3	86.8

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data			
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)			
	2018	**2019**	**2020**
Annual Objective		70.5	71.9
Annual Indicator	29.0	29.0	32.9
Numerator	16,948	16,948	19,188
Denominator	58,441	58,441	58,412
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019

State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			70.5	71.9
Annual Indicator	69.1			
Numerator	45,750			
Denominator	66,226			
Data Source	PRAMS			
Data Source Year	2015			
Provisional or Final ?	Final			

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	33.3	33.7	34.1	34.5	34.9	35.3

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
Indicator reflects the estimated percentage of recent mothers reporting their new baby usually sleeps in a crib or portable crib AND did not report their new baby sleeps with themselves or another person.

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

Federally Available Data			
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)			
	2018	2019	2020
Annual Objective		68.1	69.5
Annual Indicator	51.7	51.6	56.6
Numerator	30,441	30,441	32,851
Denominator	58,942	58,942	58,015
Data Source	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019

State Provided Data				
	2017	2018	2019	2020
Annual Objective			68.1	69.5
Annual Indicator	66.8			
Numerator	44,268			
Denominator	66,226			
Data Source	PRAMS			
Data Source Year	2015			
Provisional or Final ?	Final			

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	57.6	58.6	59.6	60.6	61.6	62.6

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:

Indicator reflects the estimated percentage of recent mothers who did not report their new baby usually sleeps with pillows, bumper pads, plush or thick blankets, stuffed toys, or an infant positioner.

NPM 6 - Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			34.2	34.6	35
Annual Indicator		43.1	36.6	34.7	40.9
Numerator		60,201	49,586	47,097	55,907
Denominator		139,848	135,327	135,685	136,579
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	41.9	42.9	43.9	44.9	45.9	46.9

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			87.3	87.7	88
Annual Indicator		88.7	87.1	87.1	81.4
Numerator		393,976	386,469	386,469	359,586
Denominator		444,207	443,800	443,800	441,589
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2016_2017	2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	82.2	83.0	83.8	84.6	85.4	86.2

Field Level Notes for Form 10 NPMs:

None

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			57	60	63.3
Annual Indicator		50.8	53.4	50.6	44.9
Numerator		127,072	137,990	130,334	117,076
Denominator		250,000	258,184	257,564	260,596
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	45.9	46.9	47.9	48.9	50.0	51.0

Field Level Notes for Form 10 NPMs:

None

NPM 12 - Percent of adolescents with and without special health care needs, ages 12 through 17, who received services to prepare for the transition to adult health care - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			40	43	45.3
Annual Indicator		13.4	16.2	21.6	26.9
Numerator		14,817	21,034	28,923	31,754
Denominator		110,803	129,507	133,731	118,003
Data Source		NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	27.9	28.9	29.9	30.9	31.9	32.9

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2016	2017	2018	2019	2020
Annual Objective	57.2	57.9	58.6	59.3	60
Annual Indicator	53.3	52.6	53.3	53.3	54.1
Numerator	35,180	34,237	33,752	33,752	33,888
Denominator	65,996	65,122	63,361	63,361	62,695
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2014	2015	2017	2017	2019

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	54.9	55.7	56.5	57.3	59.1	59.9

Field Level Notes for Form 10 NPMs:

None

NPM 14.1 - Percent of women who smoke during pregnancy

Federally Available Data					
Data Source: National Vital Statistics System (NVSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	6.7	6.6	6.5	6.4	6.3
Annual Indicator	6.5	5.9	5.5	5.3	4.7
Numerator	4,758	4,299	3,932	3,719	3,281
Denominator	73,116	72,838	71,324	70,599	69,782
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2015	2016	2017	2018	2019

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	4.4	4.1	3.8	3.5	3.2	2.9

Field Level Notes for Form 10 NPMs:

None

Form 10
National Performance Measures (NPMs) (2016-2020 Needs Assessment Cycle)

State: Maryland

2016-2020: NPM 2 - Percent of cesarean deliveries among low-risk first births

Federally Available Data					
Data Source: National Vital Statistics System (NVSS)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective	29.5	29	28.5	28.1	27.4
Annual Indicator	29.9	28.5	28.2	28.2	27.6
Numerator	7,249	6,935	6,652	6,574	6,417
Denominator	24,240	24,363	23,551	23,331	23,216
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2015	2016	2017	2018	2019

Field Level Notes for Form 10 NPMs:

None

2016-2020: NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			84.4	85.4	86.4
Annual Indicator		82.8	83.1	81.5	81.1
Numerator		1,048,242	1,042,901	1,027,878	1,036,093
Denominator		1,266,026	1,254,794	1,260,632	1,277,497
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Field Level Notes for Form 10 NPMs:

None

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

Field Level Notes for Form 10 NPMs:

None

2016-2020: NPM 14.2 - Percent of children, ages 0 through 17, who live in households where someone smokes - Child Health

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH)					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective			18.8	18.5	18.3
Annual Indicator		14.4	12.9	12.1	10.9
Numerator		191,487	171,018	159,811	141,251
Denominator		1,325,743	1,323,530	1,316,517	1,297,373
Data Source		NSCH	NSCH	NSCH	NSCH
Data Source Year		2016	2016_2017	2017_2018	2018_2019

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

Field Level Notes for Form 10 NPMs:

None

NPM 14.2 - Percent of children, ages 0 through 17, who live in households where someone smokes - Adolescent Health

Field Level Notes for Form 10 NPMs:

None

Form 10
State Performance Measures (SPMs)

State: Maryland

SPM 1 - Rate of overdose mortality for women ages 15-49

Measure Status:	Active

State Provided Data	
	2020
Annual Objective	
Annual Indicator	24.1
Numerator	334
Denominator	1,385,375
Data Source	VSA
Data Source Year	2019
Provisional or Final ?	Final

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	23.9	23.7	23.5	23.3	23.0

Field Level Notes for Form 10 SPMs:

None

SPM 2 - Excess rate between Black Non-Hispanic Severe Maternal Morbidity (SMM) events to White Non-Hispanic SMM events per 10,000 delivery hospitalizations

Measure Status:	Active

State Provided Data	
	2020
Annual Objective	
Annual Indicator	328.5
Numerator	640
Denominator	19,481
Data Source	Health Services Cost Review Commission
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	312.1	295.7	279.3	262.8	246.5

Field Level Notes for Form 10 SPMs:

None

SPM 3 - Receipt of Primary Care During Early Childhood

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		67.4	64.6	65.8	67.1
Annual Indicator	66.3	63.5	65.9	67.1	67
Numerator	27,004	25,389	30,621	25,794	24,969
Denominator	40,723	39,994	46,466	38,455	37,253
Data Source	Medicaid	Medicaid	Medicaid	Medicaid	Medicaid
Data Source Year	2016 (CY)	2017 (CY)	2018 (CY)	2019 (CY)	2020 (CY)
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	68.2	69.4	70.6	71.8	73.0	74.2

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
2016 baseline of Medicaid patients age 15 months who had 5 or more well child visits during the first 15 months of life = 66.3%; 2022 objective = 10% increase, 72.9%

SPM 4 - Number of Asthma Emergency Room Visits per 1,000 for Children age 2-17 with a primary diagnosis of asthma

Measure Status:	Active

State Provided Data	
	2020
Annual Objective	
Annual Indicator	9.2
Numerator	10,974
Denominator	1,195,993
Data Source	Health Services Cost Review Commission
Data Source Year	2018
Provisional or Final ?	Final

Annual Objectives					
	2022	2023	2024	2025	2026
Annual Objective	8.5	7.2	6.7	6.2	5.3

Field Level Notes for Form 10 SPMs:

None

Form 10
State Performance Measures (SPMs) (2016-2020 Needs Assessment Cycle)

2016-2020: SPM 4 - Identification of Mental and Behavioral Health Needs in Adolescents

Measure Status:					**Active**
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		0	69.2	70.6	72
Annual Indicator	68	68.1	67.7	68.8	60.9
Numerator	161,592	170,027	175,803	182,799	164,342
Denominator	237,690	249,788	259,681	265,842	269,866
Data Source	Medicaid (ages 11-18 years)	Medicaid (ages 11-18 years)	Medicaid (ages 11-18)	Medicaid (ages 11-18)	Medicaid
Data Source Year	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

1. **Field Name:** **2016**

   Column Name: **State Provided Data**

   Field Note:
   Title V is still in the early process of developing adolescent health measures through its participation in the AYAH CoIIN, and this is a brand new SPM for Maryland. This SPM has been selected to complement NPM 10 (preventive health visits), and to begin to track the % of Medicaid patients who receive mental/behavioral health screens. Since the SPM is new as of June 2017, data has not been collected from Medicaid yet, however Title V will begin to collect the data from Medicaid during FY18 and will set objectives during FY18 based on the baseline.

2. **Field Name:** **2020**

   Column Name: **State Provided Data**

   Field Note:
   The decline between 2019 and 2020 is attributed to COVID-19 and the closures/limitations of provider practices during the pandemic.

2016-2020: SPM 6 - Hospital Policy Changes to Reduce Low-risk Cesarean Deliveries

Measure Status:				**Active**
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective	71.2	100	100	100
Annual Indicator	100	100	100	100
Numerator	31	31	31	31
Denominator	31	31	31	31
Data Source	AIM Data	AIM Data	AIM Data	AIM Data
Data Source Year	CY 2017	CY 2018	CY 2019	CY 2020
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**
	Field Note: All 31 of 32 hospitals participating in AIM incorporate patient safety bundles in their care procedures. The degree of incorporation across hospitals varies.	
2.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**
	Field Note: The Perinatal Quality Collaborative's focus on Low-risk Cesarean Deliveries has ended.	

2016-2020: SPM 7 - Hospital Policy Changes to Improve Quality of Care for Infants with Neonatal Abstinence Syndrome

Measure Status:				Active
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective	26	32	32	32
Annual Indicator	20	31	31	31
Numerator				
Denominator				
Data Source	MCHB and MPSC	MCHB	MCHB	MCHB
Data Source Year	CY 2017	CY 2018	CY 2019	CY 2020
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

None

2016-2020: SPM 8 - Barriers and Facilitators to Dental Care During Pregnancy

Measure Status:				**Active**
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective	85	50	50	0
Annual Indicator	85	16	0	0
Numerator				
Denominator				
Data Source	MCHB	OOH	OOH	OOH
Data Source Year	FY2017	FY 2018	FY 2019	FY 2020
Provisional or Final ?	Final	Final	Final	Final

Field Level Notes for Form 10 SPMs:

1. **Field Name:** **2017**

   Column Name: **State Provided Data**

   Field Note:
   In 2015-2016, data collection instruments, recruitment flyers/letters, and consent forms were developed,submitted, and approved by IRBs. Interviews of pregnant women began during 2016 and into FY17 with 85 women interviewed. More interviews are planned during FY18/FY19.

2. **Field Name:** **2019**

   Column Name: **State Provided Data**

   Field Note:
   The Office of Oral Health did not conduct provider trainings as it was part of the PIOHQI grant which ended.

3. **Field Name:** **2020**

   Column Name: **State Provided Data**

   Field Note:
   The Office of Oral Health did not conduct provider trainings as it was part of the PIOHQI grant which ended.

Form 10
Evidence-Based or –Informed Strategy Measures (ESMs)

State: Maryland

ESM 3.1 - Percentage of very low birth weight infants delivered at appropriate level hospitals

Measure Status:	Active

State Provided Data		
	2019	**2020**
Annual Objective		
Annual Indicator	79.2	93.4
Numerator	954	891
Denominator	1,205	954
Data Source	VSA	VSA
Data Source Year	2018	2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	93.7	94.0	94.3	94.6	95.0	95.3

Field Level Notes for Form 10 ESMs:

None

ESM 4.1 - Number of birthing hospitals designated as breastfeeding friendly

Measure Status:	Active

State Provided Data		
	2019	**2020**
Annual Objective		
Annual Indicator		10
Numerator		
Denominator		
Data Source		MDH Breastfeeding Policy Committe
Data Source Year		FY 2020
Provisional or Final ?		Final

Annual Objectives						
	2021	**2022**	**2023**	**2024**	**2025**	**2026**
Annual Objective	10.0	11.0	12.0	13.0	15.0	17.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**

Field Note:
Due to the COVID-19 Pandemic outreach to the hospitals was severely limited during FY 2020.

ESM 5.1 - Percentage of infants less than 6 months who are placed on their backs to sleep

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator	78.2	81.6
Numerator	48,293	50,368
Denominator	61,753	61,754
Data Source	PRAMS	PRAMS
Data Source Year	2017	2019
Provisional or Final ?	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	80.3	81.8	83.3	84.8	86.3	86.8

Field Level Notes for Form 10 ESMs:

None

ESM 6.1 - Number of parents who receive information/education on the importance of developmental screenings

Measure Status:	Active

State Provided Data

	2016	2017	2018	2019	2020
Annual Objective		2,832	1,181	1,201	1,220
Annual Indicator	2,785	1,162	1,035	1,022	749
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	MCHB Data	MCHB	MCHB Data
Data Source Year	2016	2017	2018	2019	FY 2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	1,239.0	1,259.0	1,278.0	1,278.0	1,300.0	1,400.0

Field Level Notes for Form 10 ESMs:

1. **Field Name:** **2016**

   Column Name: **State Provided Data**

   Field Note:
   2022 objective = 10% increase in number of parents who received developmental screening education from 2016 baseline
   2016 baseline = 2,785; 2022 objective = 3,064

2. **Field Name:** **2020**

   Column Name: **State Provided Data**

   Field Note:
   Home Visiting services through the Local Health Departments was severly limited during the COVID-19 Pandemic. As a result, fewer families were provided with developmental screening education.

ESM 10.1 - Number of adolescent (12-17) who receive well visits through school based health centers

Measure Status:	Active

State Provided Data		
	2019	2020
Annual Objective		
Annual Indicator		37,578
Numerator		
Denominator		
Data Source		MCHB Data
Data Source Year		FY 2020
Provisional or Final ?		Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	45,000.0	60,000.0	75,000.0	90,000.0	110,000.0	125,000.0

Field Level Notes for Form 10 ESMs:

1. **Field Name:** **2020**

   Column Name: **State Provided Data**

   Field Note:
   School closures due to the COVID-19 Pandemic, limited the number of well visits completed at school based health clinics during FY 2020

ESM 11.1 - Number of CYSHCN who receive patient and family-centered care coordination services

Measure Status:	Active

State Provided Data					
	2016	2017	2018	2019	2020
Annual Objective		0	61	5,300	5,400
Annual Indicator	0	60	5,362	5,770	1,463
Numerator					
Denominator					
Data Source	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data
Data Source Year	2016	FY 2017	FY 18	FY 19	FY 2020
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives						
	2021	2022	2023	2024	2025	2026
Annual Objective	5,500.0	5,600.0	5,700.0	5,800.0	6,000.0	6,100.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
This is a newly revised ESM. We have bugun collecting this data in July of 2016 and will have this data available for FY17. We will use the FY17 data as our baseline for setting future year objectives.

2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
This number, is based on several grantees who have not yet separated out care coordination from transition services.

3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Total number of children who received basic or complex care coordination through Nurse Care Coordinators at the 24 local health departments in the state.

ESM 12.1 - Number of CYSCHN and their families who participate in health care transition planning activities

Measure Status:	Active

State Provided Data

	2016	2017	2018	2019	2020
Annual Objective		0	61	62	63
Annual Indicator	30,855	60	5,697	1,308	416
Numerator					
Denominator					
Data Source	NS-CSHCN	MCHB Data	OGPSHCN	OGPSHCN	OGPSHCN Data
Data Source Year	2009/2010	FY 2017	FY2018	FY 2019	FY 2020
Provisional or Final ?	Provisional	Final	Final	Final	Final

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	64.0	65.0	66.0	67.0	1,300.0	1,500.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
ESM has been revised. We have begun collecting this information in July 2016 for FY 2017. We will utilize our Parent Survey and OGPSHCN programmatic data as the data source and will use this FY17 data as our baseline for setting future objective targets. The figure provided is from the 2009/2010 National Survey on CSHCN.

2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
Includes count of children who have received transition services. This number includes reports from several grantees who did not separate out care coordination from transition services.

3.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
Previous data included counts for both care coordination and transition services. Changes have occurred that has grantees providing data on each service separately to better assess progress in meeting the measure.

ESM 13.1.1 - Percentage of pregnant individuals who receive a preventive dental visit

Measure Status:	Active

State Provided Data

	2019	2020
Annual Objective		
Annual Indicator	28.2	28.8
Numerator	7,979	8,346
Denominator	28,259	28,939
Data Source	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report
Data Source Year	CY 2018	CY 2019
Provisional or Final ?	Final	Final

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	28.4	29.9	31.4	32.5	34.0	35.5

Field Level Notes for Form 10 ESMs:

1. **Field Name:** **2019**

   Column Name: **State Provided Data**

   Field Note:
   Data is from CY 2018. Source Office of Oral Health's Legislative Report

2. **Field Name:** **2020**

   Column Name: **State Provided Data**

   Field Note:
   After reviewing this ESM, the decision was made to use PRAMS data as it is more representative of the state population of pregnant individuals.

ESM 14.1.1 - Number of pregnant individuals who use the statewide tobacco QuitLine

Measure Status:	Active

State Provided Data

	2016	2017	2018	2019	2020
Annual Objective		167	136	137	139
Annual Indicator	165	135	131	99	86
Numerator					
Denominator					
Data Source	MDH CTPC Quitline Data	MDH CTPC Quitline Data	MDH CTPC Quitline Data	MDH CTPC Quitline Data	Quit Line Data
Data Source Year	FY16	FY17	FY 18	FY 19	FY 2020
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives

	2021	2022	2023	2024	2025	2026
Annual Objective	140.0	142.0	143.0	143.0	143.0	143.0

Field Level Notes for Form 10 ESMs:

1. **Field Name:** **2016**

Column Name: **State Provided Data**

Field Note:
2022 objective = 5% increase from 2016 baseline

Form 10
Evidence-Based or -Informed Strategy Measures (ESMs) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 2.1 - Hospital Technical Assistance on Low-risk Cesarean Delivery Reduction

Measure Status:					**Active**
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		31	31	31	31
Annual Indicator	31	31	31	31	31
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	MCHB Data	MCHB Data	MCHB
Data Source Year	2016	2017	2018	2019	2020 (CY)
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1. **Field Name:** **2016**

   Column Name: **State Provided Data**

   Field Note:
   As of 2016, 31 of 32 delivery hospitals in Maryland have agreed to participate on the Maryland Perinatal Neonatal Collaborative effort focused on reduction of low-risk cesarean deliveries. MCHB's objective is to maintain the provision of technical assistance annually to the 31 hospitals.

2. **Field Name:** **2019**

   Column Name: **State Provided Data**

   Field Note:
   MCHB was able to reach this goal within the first two years of implementation.

3. **Field Name:** **2020**

   Column Name: **State Provided Data**

   Field Note:
   The contract for the MD Perinatal Quality Collaborative ended at the end of FY 2019. A competive bidding process was initiated for continuation of the PQC in FY 2020.

2016-2020: ESM 5.1 - Safe Sleep Parental Interviews

Measure Status:					Active
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		25	25	0	0
Annual Indicator	0	0	34	0	0
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	MCHB Data	MCHB Data	MCHB Data
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Interviews are scheduled to take place in CY 2017 and CY 2018 (25 per year)

2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
Work to conduct these interviews was initiated but the vendor was not able to complete the task. We will likely drop this as a NPM going forward.

3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
There were 315 attempts to interview parents who experienced an infant loss. Tracking does not include cause of death for these interviews.

4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
MCHB had contracted with a grantee to perform parental interviews. The grantee was not able to meet the conditions of the award as it pertained to parental interviews. Although MCHB will continue with the Safe Sleep Performance Measure parental interviews will not be included in assessing progress.

5.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**

Field Note:
The entity with the contract to perform Parental Interviews failed to meet this deliverable. The entity is no longer under contract with MDH.

2016-2020: ESM 10.1 - Adolescent Health Measures

Measure Status:					Active
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		2	3	3	3
Annual Indicator	0	3	3	3	3
Numerator					
Denominator					
Data Source	2016	2017	2018	2019	2020
Data Source Year	MCHB Data	MCHB Data	MCHB Data	MCHB Data	MCHB Data
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
This work is being done through the AYAH CoIIN, which began in April 2017 and will continue through fall 2018
2016 baseline = 0 measures identified/tracked, 2018 objective = 5 measures identified/tracked

2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
This work is being done through the AYAH CoIIN, which began in April 2017 and will continue through fall 2018. A clinical demonstration site has been selected but data collection has not yet begun.
2017 baseline= 3 measures identified:
- Adolescent Well Visit: % of Medicaid recipients who receive a well visit at the demonstration site.
- Volume of Medicaid patients at each clinic.
- Number of all clinical encounters of Medicaid patients ages 10-25 at each CoIIN site

3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
There were no other measures identified/tracked beyond those that were identified in FY 2017.

4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
There were no other measures identified/tracked beyond those that were identified in FY 2017.

5.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**

Field Note:
There were no other measures identified/tracked beyond those that were identified in FY 2017.

2016-2020: ESM 13.1.1 - Oral Health Provider Training

Measure Status:				**Active**
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			1,055	1,075
Annual Indicator			0	0
Numerator				
Denominator				
Data Source			OOH	OOH
Data Source Year			FY 2019	FY 2020
Provisional or Final ?			Final	Final

Field Level Notes for Form 10 ESMs:

1. **Field Name:** **2019**

   Column Name: **State Provided Data**

   Field Note:
   The Office of Oral Health did not conduct provider trainings during FY 19. Provider training was part of the PIOHQI grant which ended.

2. **Field Name:** **2020**

   Column Name: **State Provided Data**

   Field Note:
   The Office of Oral Health did not conduct provider trainings during FY 19. Provider training was part of the PIOHQI grant which ended.

2016-2020: ESM 13.2.1 - Oral Health Provider Training

Measure Status:					Active
State Provided Data					
	2016	**2017**	**2018**	**2019**	**2020**
Annual Objective		0	1,000	1,000	1,000
Annual Indicator	0	1,000	0	0	0
Numerator					
Denominator					
Data Source	MCHB Data	MCHB Data	OOH Data	OOH	OOH
Data Source Year	2016	2017	2018	2019	2020
Provisional or Final ?	Final	Final	Final	Final	Final

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Oral health during pregnancy and infancy practice guidelines were in development during 2016/2017, and dissemination will begin in late 2017 or 2018. 2016 baseline = 0 trained because they are still in development.

2.	**Field Name:**	**2017**
	Column Name:	**State Provided Data**

Field Note:
Maryland's Mouths Matter Program has successfully engaged medical providers to implement evidence-based oral disease prevention services. As of July 2017, 1,034 medical providers have completed the fluoride varnish training curriculum

3.	**Field Name:**	**2018**
	Column Name:	**State Provided Data**

Field Note:
Office of Oral Health reports that the number of providers at trainings that occurred in FY 18 were not counted. Reason unknown, however, there was a staff transition during the fiscal year that may have contributed.

4.	**Field Name:**	**2019**
	Column Name:	**State Provided Data**

Field Note:
The Office of Oral Health did not conduct provider trainings during FY 19. Provider trainings were part of PIOHQI grant which ended.

5.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**

Field Note:
The Office of Oral Health did not conduct provider trainings during FY 19. Provider trainings were part of PIOHQI grant which ended.

2016-2020: ESM 14.2.1 - Smoking Cessation

Measure Status:				Active
State Provided Data				
	2017	**2018**	**2019**	**2020**
Annual Objective			136	138
Annual Indicator			99	86
Numerator				
Denominator				
Data Source			Quitline Data	Quit Line Data
Data Source Year			FY 2019	FY 2020
Provisional or Final ?			Final	Final

Field Level Notes for Form 10 ESMs:

None

Form 10
State Performance Measure (SPM) Detail Sheets

State: Maryland

SPM 1 - Rate of overdose mortality for women ages 15-49
Population Domain(s) – Women/Maternal Health

Measure Status:	Active
Goal:	To reduce the number of overdose fatalities for women age 15-49
Definition:	**Unit Type:** Rate **Unit Number:** 100,000 **Numerator:** # of overdose fatalities for women age 15-49 **Denominator:** # of women age 15-49
Data Sources and Data Issues:	VSA Data and Health Services Cost Review Commission (HSCRC)
Significance:	While the report for cases reviewed in FY2020 are still being finalized due to COVID related delays, preliminary data demonstrate that there were 38 pregnancy-associated deaths in 2018. Twelve of the 38 total deaths (32 percent) resulted from substance use and unintentional overdose deaths. In nine of the 12 cases, two or more drugs were found by postmortem toxicology testing. From 2010 to 2018 of opioid identified postmortem, pregnancy-associated unintentional overdose deaths in Maryland, Fentanyl or fentanyl analogs have been the most frequently detected opioid.

SPM 2 - Excess rate between Black Non-Hispanic Severe Maternal Morbidity (SMM) events to White Non-Hispanic SMM events per 10,000 delivery hospitalizations
Population Domain(s) – Women/Maternal Health

Measure Status:	Active
Goal:	A 20% reduction in Black Non-Hispanic SMM events by 2026
Definition:	**Unit Type:** Rate **Unit Number:** 10,000 **Numerator:** # of Black Non-Hispanic SMM events **Denominator:** # of Black Non-Hispanic delivery hospitalizations
Data Sources and Data Issues:	Health Services Cost Review Commission (HSCRC)
Significance:	Reduce and eliminate the racial disparities in SMM

SPM 3 - Receipt of Primary Care During Early Childhood
Population Domain(s) – Child Health

Measure Status:	Active
Goal:	All children in Maryland will be screened for developmental needs
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** % of Medicaid patients age 15 months who had 5 or more well child visits during the first 15 months of life **Denominator:** % of Medicaid patients age 15 months
Data Sources and Data Issues:	Medicaid data
Significance:	Early identification of developmental disorders is critical to the well-being of children and their families. It is an integral function of the primary care medical home. The percent of children with a developmental disorder has been increasing, yet overall screening rates have remained low. The American Academy of Pediatrics recommends screening tests begin at the nine month visit. MCHB chose NPM 6 to measure developmental screening using a parent completed screening tool, however developmental screening is also appropriate in the primary care setting for infants and young children. MCHB will focus on receipt of primary care for young children as a precursor to developmental screening in the primary care setting. MCHB will partner with Medicaid and local health departments to track data and develop future strategies.

SPM 4 - Number of Asthma Emergency Room Visits per 1,000 for Children age 2-17 with a primary diagnosis of asthma
Population Domain(s) – Child Health, Adolescent Health

Measure Status:	Active
Goal:	Reduce the number of ED visits for children age 2-17 with asthma
Definition:	**Unit Type:** Rate **Unit Number:** 1,000 **Numerator:** # of children age 2-17 with primary diagnosis of asthma during an ED visit **Denominator:** # of children age 2-17
Data Sources and Data Issues:	Maryland Health Care Cost Review Commission
Significance:	Asthma is a priority for MDH and is one of the largest racial and ethnic health disparities in terms of ED visit rates. Asthma is responsible for more Emergency Department (ED) visits than some other major chronic disease such as hypertension and diabetes ED visits.

Form 10
State Performance Measure (SPM) Detail Sheets (2016-2020 Needs Assessment Cycle)

2016-2020: SPM 4 - Identification of Mental and Behavioral Health Needs in Adolescents
Population Domain(s) – Adolescent Health

Measure Status:	Active
Goal:	All adolescents in Maryland will be screened for mental and behavioral health needs
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of Medicaid patients ages 11-18 years who received a mental or behavioral health screen in the past year **Denominator:** Number of Medicaid patients ages 11-18
Healthy People 2020 Objective:	Increase the proportion of children with mental health problems who receive treatment to 75.8% in 2020.
Data Sources and Data Issues:	Medicaid Data
Significance:	The prevalence of mental/behavioral health conditions has been increasing among children and has been found to vary by geographic and socio-demographic factors. However, a significant portion of children diagnosed with a mental health condition do not receive treatment. Further, the receipt of treatment is generally dependent on socio-demographic and health related factors. Title V will work with Medicaid to begin to collect data on the % of patients ages 11-18 who received a mental or behavioral health screen in the past year, as a means of identifying mental/behavioral health conditions in the adolescent population and linking with treatment.

2016-2020: SPM 6 - Hospital Policy Changes to Reduce Low-risk Cesarean Deliveries
Population Domain(s) – Women/Maternal Health

Measure Status:	Active
Goal:	Maintain technical assistance to Maryland delivery hospitals (including annual and quarterly data on individual hospital cesarean rates & AIM resources) on low-risk cesarean reduction, and increase the % of hospitals implementing policy changes
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** # of delivery hospitals that report compliance with the AIM Safe Reduction of Primary Cesarean Birth patient safety bundle **Denominator:** # of delivery hospitals
Data Sources and Data Issues:	MCHB and Maryland Patient Safety Center Data
Significance:	Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots - risks that compound with subsequent cesarean deliveries. Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. The low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the ACOG, The Joint Commission (PC-02), National Quality Forum (Number 0471), Center for Medicaid and Medicare Services (CMS)- CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement. MCHB will target hospital-level policy and practice changes to impact the entire population of pregnant women in Maryland. This will be supported by providing technical assistance to delivery hospitals across the state including resources from the Alliance to Improve Maternal Health (AIM) and ACOG, as well as quarterly and annual hospital-level data on cesarean birth rates. MCHB has access to several process measures but chose AIM cesarean reduction safety bundle compliance as the most relevant and important. The project is anticipated to last through the end of 2018 and the objective for 2018 will be sustained beyond that year.

2016-2020: SPM 7 - Hospital Policy Changes to Improve Quality of Care for Infants with Neonatal Abstinence Syndrome
Population Domain(s) – Perinatal/Infant Health

Measure Status:	Active
Goal:	Increase the number of delivery hospitals participating in Maryland's Perinatal Neonatal Quality Collaborative that integrate a policy or practice change to improve the care of infants with NAS to 32 (of 32 total)
Definition:	**Unit Type:** Count **Unit Number:** 32 **Numerator:** # of delivery hospitals that report utilizing a protocol for initiation, escalation, and weaning of medications for treatment of NAS **Denominator:**
Data Sources and Data Issues:	MCHB and Maryland Patient Safety Center
Significance:	Substance use during pregnancy is a significant problem in Maryland and increases the risk for poor pregnancy outcomes and Neonatal Abstinence Syndrome (NAS) in exposed newborns, as well as maternal and fetal death. According to the Maryland Health Services Cost Review Commission, the number of infants born with NAS in Maryland has increased annually since 2009 when 958 infants were born with NAS, compared with 1,419 infants in 2015. In 2016, 2,157 infants were born with NAS, however this was the first year of ICD-10 coding which may account for some of the increase. MCHB continues to collaborate with the Maryland Patient Safety Center (MPSC) to support the Maryland Perinatal Neonatal Quality Collaborative. Thirty-one of the 32 delivery hospitals plus one chronic care hospital with an NAS treatment program are participating in the current Collaborative effort to standardize care of infants with NAS. The goals of this initiative are to reduce length of stay and length of treatment with medication, to reduce 30 day readmissions for NAS, and to reduce transfers to a higher level of care. The MPSC has partnered with the Vermont Oxford Network (VON) to utilize their NAS Implementation Package statewide. This provides Collaborative participants with access to evidence-based education modules and resources for improving outcomes and increasing the quality and safety of the care provided to infants with NAS and their families. MCHB will continue to support the Collaborative with technical assistance and education, and with the MPSC will track the number of hospitals that implement policy or practice changes to improve the care of infants with NAS. MCHB has access to multiple process measures related to policy/practice changes to improve NAS care, but chose this particular measure for an SPM due to its relevance. This project is anticipated to continue through the end of 2018.

2016-2020: SPM 8 - Barriers and Facilitators to Dental Care During Pregnancy
Population Domain(s) – Women/Maternal Health

Measure Status:	Active
Goal:	Interview pregnant women across Maryland to assess oral health knowledge, understanding, attitudes, behaviors and practices, and barriers and facilitators to receiving oral health care during pregnancy
Definition:	**Unit Type:** Count **Unit Number:** 200 **Numerator:** # of pregnant women surveyed/interviewed **Denominator:**
Data Sources and Data Issues:	MDH Office of Oral Health Program Data
Significance:	Oral health is key to overall health and well-being for children and adults. Appropriate oral care is especially important during pregnancy, when both the woman's own and her future child's oral health can be affected. Title V is partnering with the Office of Oral Health to survey and interview low-income pregnant women in Maryland about oral health knowledge, understanding, attitudes, behaviors and practices, and barriers and facilitators to receiving oral health care during pregnancy. These findings will be used to inform future efforts to improve access to and receipt of oral health care during pregnancy.

Form 10
State Outcome Measure (SOM) Detail Sheets

State: Maryland

No State Outcome Measures were created by the State.

Form 10
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Maryland

ESM 3.1 - Percentage of very low birth weight infants delivered at appropriate level hospitals
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:	VLBW babies will be born in a Level III+ Neonatal Intensive Care Unit
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of VLBW babies delivered at a Level III or IV Hospital **Denominator:** Number of VLBW babies
Data Sources and Data Issues:	VSA Data
Significance:	Infants born in appropriate level hospitals have a decreased risk of adverse outcomes

ESM 4.1 - Number of birthing hospitals designated as breastfeeding friendly
NPM 4 – A) Percent of infants who are ever breastfed B) Percent of infants breastfed exclusively through 6 months

Measure Status:	Active
Goal:	Increase the number of birthing hospitals promoting breastfeeding
Definition:	**Unit Type:** Count **Unit Number:** 32 **Numerator:** Number of birthing hospitals that achieve Breastfeeding Friendly accreditation status **Denominator:**
Data Sources and Data Issues:	MDH's Breastfeeding Policy Committee
Significance:	Increased support from hospitals will have a positive impact on the number of women who initiate breastfeeding

ESM 5.1 - Percentage of infants less than 6 months who are placed on their backs to 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:	Increased numbers of infants will be placed on their backs to sleep. Challenges to safe sleep practices will be addressed
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of infants less than 6 months placed on their backs to sleep **Denominator:** Total number of infants less than six months old
Data Sources and Data Issues:	PRAMS, home visiting programs assessing safe sleep environments
Significance:	Reduction in infant mortality

ESM 6.1 - Number of parents who receive information/education on the importance of developmental screenings
NPM 6 – Percent of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in the past year

Measure Status:	Active
Goal:	Increase the number of parents who recieve education about developmental screening tools.
Definition:	**Unit Type:** Count **Unit Number:** 5,000 **Numerator:** Parents that receive education about developmental screening tools **Denominator:**
Data Sources and Data Issues:	MCHB Data
Significance:	Early identification of developmental disorders is critical to the well-being of children and their families. It is an integral function of the primary care medical home. The percent of children with a developmental disorder has been increasing, yet overall screening rates have remained low. The American Academy of Pediatrics recommends screening tests begin at the nine month visit. Title V funds local health departments to educate parents of children at risk for developmental delays or behavioral health issues about developmental screening. Education is primarily focused on parents of children who are receiving local health department case management for elevated blood lead levels or Infants & Toddlers Program services.

ESM 10.1 - Number of adolescent (12-17) who receive well visits through school based health centers
NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Measure Status:	Active
Goal:	Increase the number of adolescents receiving annual well visits
Definition:	**Unit Type:** Count **Unit Number:** 750,000 **Numerator:** Number of adolescents 12-17 receiving an annual well visit **Denominator:**
Data Sources and Data Issues:	MCHB Data
Evidence-based/informed strategy:	Adolescents receiving well visits through school based health clinics
Significance:	Preventive well visits for adolescents promote healthy behaviors, help reduce risk taking behaviors and can detect conditions that may interfere with an adolescent's physical, social and emotional growth and well-being.

ESM 11.1 - Number of CYSHCN who receive patient and family-centered care coordination services
NPM 11 – Percent of children with and without special health care needs, ages 0 through 17, who have a medical home

Measure Status:	Active
Goal:	Increase the number of CYSHCN who receive patient and family-centered care coordination services (CCS).
Definition:	**Unit Type:** Count **Unit Number:** 70,000 **Numerator:** Number of CYSHCN who received CCS **Denominator:**
Data Sources and Data Issues:	DHMH/MCHB Data
Significance:	The American Academy of Pediatrics (AAP) specifies seven qualities essential to medical home care: accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally effective. CYSHCN who receive quality care coordination services are less likely to experience medication errors, unnecessary or repetitive diagnostic tests, unnecessary emergency room visits, and ultimately experience better health outcomes.

ESM 12.1 - Number of CYSCHN and their families who participate in health care transition planning activities
NPM 12 – Percent of adolescents with and without special health care needs, ages 12 through 17, who received services to prepare for the transition to adult health care

Measure Status:	Active
Goal:	Increase the number of CYSHCN and their families who participating in transition planning activities
Definition:	**Unit Type:** Count **Unit Number:** 50,000 **Numerator:** Number of YSHCN and families that participate in transition planning activities. **Denominator:**
Data Sources and Data Issues:	DHMH/MCHB Data
Significance:	According to American Academy of Pediatrics, Supporting the health care transition from adolescence to adulthood in the medical home, as teens grow into adulthood, their health care needs change. During this transition, most teens may begin to take more responsibility for their health care and most will need to leave their pediatricians for adult health care providers. As teens with special health care needs become adults, receiving proper health care can be a challenge. Youth participating in their Health Care Transition Planning is part of the process of becoming independent and learning to manage one's own health while preventing periods of gaps in services. Losing access to primary care, even for a short time, can affect the long-term health of a youth with special health care needs.

ESM 13.1.1 - Percentage of pregnant individuals who receive a preventive dental visit
NPM 13.1 – Percent of women who had a preventive dental visit during pregnancy

Measure Status:	Active
Goal:	To increase the number of pregnant individuals who have a preventive dental visit during pregnancy
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of pregnant women with Medicaid who have a dental visit during pregnancy **Denominator:** Total number of pregnancy women with Medicaid
Data Sources and Data Issues:	Medicaid Data from Office of Oral Health
Significance:	Preventive dental visits are indicative of overall health of both mother and infant.

ESM 14.1.1 - Number of pregnant individuals who use the statewide tobacco QuitLine
NPM 14.1 – Percent of women who smoke during pregnancy

Measure Status:	Active
ESM Subgroup(s):	Pregnant Women
Goal:	By 2022, increase by 5% the number of pregnant smokers who call the Quitline annually.
Definition:	**Unit Type:** Count **Unit Number:** 200 **Numerator:** # of pregnant individuals who use the Maryland tobacco quitline **Denominator:**
Data Sources and Data Issues:	2016-2022 MDH Center for Tobacco Prevention and Control Quitline Data
Significance:	Women who smoke during pregnancy are more likely to experience a fetal death or deliver a low birth weight baby. Further, secondhand smoke (SHS) is a mixture of mainstream smoke (exhaled by smoker) and the more toxic side stream smoke (from lit end of nicotine product) which is classified as a “known human carcinogen” by the US Environmental Protection Agency, the US National Toxicology Program, and the International Agency for Research on Cancer. Adverse effects of parental smoking on children have been a clinical and public health concern for decades and were documented in the 1986 U.S. Surgeon General Report. The MDH Center for Tobacco Prevention and Control launched a Pregnancy Rewards Program in 2014, which offers pregnant and postpartum women (up to six months) rewards for series of completed calls with a Quit Coach. Though initially requiring referral by physician, that barrier was removed and now a pregnant smoker can simply call and let the Quitline know that she is pregnant and interested in the rewards/incentive program. This ESM will measure the impact of the Pregnancy Rewards Program and accompanying media campaigns/health communication interventions on the number of pregnant Quitline callers.

Form 10
Evidence-Based or -Informed Strategy Measure (ESM) (2016-2020 Needs Assessment Cycle)

2016-2020: ESM 2.1 - Hospital Technical Assistance on Low-risk Cesarean Delivery Reduction
2016-2020: NPM 2 – Percent of cesarean deliveries among low-risk first births

Measure Status:	Active
Goal:	Maintain technical assistance to Maryland delivery hospitals (including annual and quarterly data on individual hospital cesarean rates, ACOG guidelines, AIM resources, and policies/strategies) on low-risk cesarean reduction.
Definition:	**Unit Type:** Count **Unit Number:** 32 **Numerator:** Number of delivery hospitals that receive technical assistance on low-risk cesarean birth reduction **Denominator:**
Data Sources and Data Issues:	MCHB and Maryland Patient Safety Center Data
Significance:	Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots—risks that compound with subsequent cesarean deliveries. Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. This low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the ACOG, The Joint Commission (PC-02), National Quality Forum (#0471), Center for Medicaid and Medicare Services (CMS) – CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement. MCHB will target hospital-level policy and practice changes to impact the entire population of pregnant women in Maryland. This will be supported by providing technical assistance to delivery hospitals across the state including resources from the Alliance to Improve Maternal Health (AIM), as well as quarterly and annual hospital-level data on cesarean birth rates.

2016-2020: ESM 5.1 - Safe Sleep Parental Interviews

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:	Conduct 50 parental interviews for Sudden Unexpected Infant Death (SUID) cases between January 2017 and December 2018 to inform safe sleep and SIDS prevention activities.
Definition:	**Unit Type:** Count **Unit Number:** 50 **Numerator:** Number of interviews conducted of parents who experienced a SUID loss. **Denominator:**
Data Sources and Data Issues:	MCHB Data
Significance:	Sleep-related infant deaths, also called Sudden Unexpected Infant Deaths (SUID), are the leading cause of infant death after the first month of life and the third leading cause of infant death overall. Sleep-related SUIDs include Sudden Infant Death Syndrome (SIDS), unknown cause, and accidental suffocation and strangulation in bed. Due to heightened risk of SIDS when infants are placed to sleep in side (lateral) or stomach (prone) sleep positions, the AAP has long recommended the back (supine) sleep position. However, in 2011, AAP expanded its recommendations to help reduce the risk of all sleep-related deaths through a safe sleep environment that includes use of the back-sleep position, on a separate firm sleep surface (room-sharing without bed sharing), and without loose bedding. Among others, additional higher-level recommendations include breastfeeding and avoiding smoke exposure during pregnancy and after birth. These expanded recommendations have formed the basis of the National Institute of Child Health and Development (NICHD) Safe to Sleep Campaign. MCHB has contracted with a vendor to conduct parental interviews for SUID cases to understand barriers to new parents adopting safe sleep recommendations, to direct future SIDS prevention efforts. MCHB's objective is to conduct 25 interviews annually in CYs 2017 and 2018.

2016-2020: ESM 10.1 - Adolescent Health Measures

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

Measure Status:	Active
Goal:	Identify and track a set of adolescent health measures through CoIIN efforts around access and quality of care, and use to drive future activities/improvements
Definition:	**Unit Type:** Count **Unit Number:** 100 **Numerator:** Number of AYAH measures that are identified by the CoIIN team and tracked/monitored by Title V **Denominator:**
Data Sources and Data Issues:	MCHB/CoIIN Data
Significance:	In February 2017, Maryland was selected to participate in the second cohort of the Adolescent and Young Adult Health (AYAH) Collaborative Improvement and Innovation Network (CoIIN). The Maryland team will identify measures currently used in Maryland with relevance to well visits for adolescents and young adults, and determine if there are opportunities for alignment of measures used within the State and/or with national measure sets. Receipt of adolescent well visits is an existing measure within the State Health Improvement Process and has been a priority area for the Medicaid program as well. The Maryland Team will also look at opportunities related to design of State-specific measures that could drive improvements in access to and quality of well visits for adolescents and young adults, including sustained access to and utilization of well care. This ESM will report the number of measures that the Maryland AYAY CoIIN team identifies and begins to track. The objective for 2018 is 5 measures, which will continue to be tracked in the following years after the CoIIN ends.

2016-2020: ESM 13.1.1 - Oral Health Provider Training
NPM 13.1 – Percent of women who had a preventive dental visit during pregnancy

Measure Status:	Active
Goal:	Increase the number of OBGYN and dental health providers who receive state oral health during pregnancy and infancy guidelines and training
Definition:	**Unit Type:** Count **Unit Number:** 10,000 **Numerator:** Number of OBGYN and dental health providers who receive pregnancy and infancy guidelines training **Denominator:**
Data Sources and Data Issues:	MDH Office of Oral Health
Significance:	Oral health is key to overall health and well-being for children and adults. Appropriate oral care is especially important during pregnancy, when both the woman's own and her future child's oral health can be affected. Title V is partnering with the Office of Oral Health to develop Maryland oral health during pregnancy and infancy practice guidelines for medical and dental professionals. This ESM will report on the number of providers who receive/are trained on the new guidelines, which are still in development. The goal is to begin dissemination of guidelines to health care providers in Fall/Winter 2017. Objective targets may be updated during FY18 based on initial roll-out.

2016-2020: ESM 13.2.1 - Oral Health Provider Training
2016-2020: 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 OBGYN and dental health providers who receive state oral health during pregnancy and infancy guidelines and training
Definition:	**Unit Type:** Count **Unit Number:** 1,000 **Numerator:** Number of providers trained **Denominator:**
Data Sources and Data Issues:	MCHB/Oral Health Data
Significance:	Oral health is key to overall health and well-being for children and adults. Appropriate oral care is especially important during pregnancy, when both the woman's own and her future child's oral health can be affected. Title V is partnering with the Office of Oral Health to develop Maryland oral health during pregnancy and infancy practice guidelines for medical and dental professionals. This ESM will report on the number of providers who receive/are trained on the new guidelines, which are still in development. The goal is to begin dissemination of guidelines to health care providers in Fall/Winter 2017. Objective targets may be updated during FY18 based on initial roll-out.

2016-2020: ESM 14.2.1 - Smoking Cessation

2016-2020: NPM 14.2 – Percent of children, ages 0 through 17, who live in households where someone smokes

Measure Status:	Active
Goal:	By 2022, reduce by 10% the percent of children who live in households where someone smokes
Definition:	**Unit Type:** Count **Unit Number:** 200 **Numerator:** # of pregnant smokers who call the Maryland tobacco quitline **Denominator:**
Data Sources and Data Issues:	2016-2022 MDH Center for Tobacco Prevention and Control Quitline Data
Significance:	Women who smoke during pregnancy are more likely to experience a fetal death or deliver a low birth weight baby. Further, secondhand smoke (SHS) is a mixture of mainstream smoke (exhaled by smoker) and the more toxic side stream smoke (from lit end of nicotine product) which is classified as a “known human carcinogen” by the US Environmental Protection Agency, the US National Toxicology Program, and the International Agency for Research on Cancer. Adverse effects of parental smoking on children have been a clinical and public health concern for decades and were documented in the 1986 U.S. Surgeon General Report. The MDH Center for Tobacco Prevention and Control launched a Pregnancy Rewards Program in 2014, which offers pregnant and postpartum women (up to six months) rewards for series of completed calls with a Quit Coach. Though initially requiring referral by physician, that barrier was removed and now a pregnant smoker can simply call and let the Quitline know that she is pregnant and interested in the rewards/incentive program. This ESM will measure the impact of the Pregnancy Rewards Program and accompanying media campaigns/health communication interventions on the number of pregnant Quitline callers.

Form 11
Other State Data

State: Maryland

The Form 11 data are available for review via the link below.

Form 11 Data

Form 12
MCH Data Access and Linkages

State: Maryland

Annual Report Year 2020

Data Sources	Access				Linkages	
	(A) State Title V Program has Consistent Annual Access to Data Source	**(B) State Title V Program has Access to an Electronic Data Source**	**(C) Describe Periodicity**	**(D) Indicate Lag Length for Most Timely Data Available in Number of Months**	**(E) Data Source is Linked to Vital Records Birth**	**(F) Data Source is Linked to Another Data Source**
1) Vital Records Birth	Yes	Yes	Annually	10		
2) Vital Records Death	Yes	No	Annually	10	No	
3) Medicaid	Yes	No	Quarterly	6	No	
4) WIC	Yes	Yes	More often than monthly	2	No	
5) Newborn Bloodspot Screening	Yes	Yes	More often than monthly	0	No	
6) Newborn Hearing Screening	Yes	Yes	More often than monthly	0	No	
7) Hospital Discharge	Yes	Yes	Quarterly	4	No	
8) PRAMS or PRAMS-like	Yes	Yes	Annually	24	Yes	

Form Notes for Form 12:

None

Field Level Notes for Form 12:

None