Maternal and Child Health Services Title V Block Grant

Maryland

FY 2024 Application/ FY 2022 Annual Report

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I. General Requirements

I.A. Letter of Transmittal

DEPARTMENT OF HEALTH

Wes Moore, Governor · Aruna Miller, Lt. Governor · Laura Herrera Scott, M.D., M.P.H., Secretary

June 30, 2023

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 State Program funding for Federal Fiscal Year (FFY) 2024. 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 email 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 2024 and Annual Report for FFY 2022.

Sincerely,

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

cc: Courtney McFadden, MPH
Lauren Whiteman, MPH

DEPARTMENT OF HEALTH

Wes Moore, Governor · Aruna Miller, Lt. Governor · Laura Herrera Scott, M.D., M.P.H., Secretary

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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: January 31, 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 ensure 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 strong funding for health and social service programs including maternal and child health programs. During FY 2022, the federal Title V award was $12,008,626 and the state met its match of $3 for every $4 of federal funds. In FY 2022, Title V provided direct, enabling, and public health systems services to approximately 231,945 pregnant people, infants, children, including children with special health care needs, and adolescents.[1]

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 in 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 Maternal and Child Health Block Grant agency, the Maryland Department of Health's Maternal and Child Health Bureau (MCHB) provides the leadership to implement strategies focused on improving the health and well-being of MCH populations across the state. MCHB staff partners across other bureaus and offices within the Department and collaborates with other state agencies to fulfill Title V's mission.

Maryland Title V implements evidence-informed strategies to support the state's identified priorities and selected National Performance Measures (NPMs), as well as State Performance Measures (SPMs) that align with other health improvement initiatives in the state. These Title V priorities and performance measures provide a centralized framework and unifying plan for MCH initiatives.

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. Maryland Title V also serves as the central connector amongst various maternal and child health initiatives. Finally, Title V funding supports critical public health infrastructure such as epidemiology, surveillance, program managers and other initiatives which are not covered by state funding.

This annual report and 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.[2] 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 FY 2020. Through a ten month process that included both primary and secondary data collection and analysis, nine National Performance Measures were identified. Title V has also identified the need for four additional State Performance Measures to align with statewide health improvement plans.

Title V Population Domains:

Women/Maternal Health: Maryland has identified "ensuring all birthing people are in optimal health before, during, after birth" as a priority need in Women/Maternal Health. 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 SPM2: 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.

- **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 update and disseminate the "Oral Health Care During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers and Oral Health During Pregnancy – 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 people through home visiting, home birth certification, early intervention, and family planning clinics, routinely screen women for tobacco use and offer referrals to the state's QuitLine.
- **SPM 1: Number of Overdose Mortalities for Women, ages 15-49 in Maryland per 100,000 population.** The State Performance Measure related to Overdose Mortality Rate for women, ages 15-49 reflects the need to address the increasing number of overdose deaths in the state and align with the Statewide Integrated Health Improvement Strategy (SIHIS) as part of the Total Cost of Care, Maryland's healthcare finance model. Strategies to prevent overdose fatalities include facilitating linkages to substance use disorder treatment using the prenatal risk assessment tool with State Medicaid and Centers for Disease Control and Prevention Overdose Data to Action partners, including the postpartum infant maternal referral form in the State's Health Information Exchange, developing a linkages to care toolkit for providers of birthing people, and understanding opioid use through PRAMS surveillance.
- **SPM 2: Excess Rate of Black Non-Hispanic Severe Maternal Morbidity Rate to White Non-Hispanic Severe Maternal Morbidity rate:** In order to address maternal disparities, Title V is aligning with the Statewide Integrated Health Improvement Strategy goals to reduce the disparity gaps within the severe maternal morbidity rate. Overall, work towards addressing disparities will improve health for all Maryland birthing people. Title V supports activities and efforts with federal and matching funds to improve maternal health and decrease disparities through the Perinatal Support Program, Perinatal Neonatal 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.

Perinatal/Infant Health: 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" by addressing the racial disparities in infant outcomes.

- **NPM 3: Percent of VLBW and LBW 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 are 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.

- **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 Initiative, infant safe sleep education and portable cribs are distributed. Title V supports local Fetal and Infant Mortality Review (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.

Children's Health: Maryland has identified the following priority needs for Child Health, "ensuring that all children have the opportunity to develop and reach their full potential." Title V efforts in Maryland continue to focus on children with Medicaid 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 State Performance Measure related to childhood asthma (SPM 4). In an effort to align with the Statewide Integrated Health Improvement Strategy (SIHIS), Maryland also has the 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:** (Percent of children enrolled in Medicaid who reached 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 the Maryland State Department of Education (MSDE) for school based health centers and school health services.
- **SPM 4: Number of ED visits per 1,000 for children ages 2-17 with a primary diagnosis of asthma:** Local health departments have the option to use Title V funds to support asthma programming/services.[3] 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 incidence 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" and "ensure that adolescents with asthma and their families have the tools and support necessary to manage their

conditions." There is one NPM, 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 was selected since it informs the SPM.

- **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. Title V funds support an Adolescent Health Coordinator at the state level who manages the Sexual Risk Avoidance, Pregnancy Responsibility Education Program and Maryland Optimal Adolescent Health Program grants. As of FY23, Title V oversees the Maryland School-Based Health Center Program.
- **SPM 4: Number Asthma ED visits per 1,000 for ages 2-17:** Beginning in FY 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 and adolescents.

Children with Special Health Care Needs (CSHCN): Maryland's priority need for the Children and Youth with Special Health Care Needs domain is "to improve the health of children and youth with special health care needs through early identification, comprehensive, and coordinated care, and to support their successful transition to adult health care."

These priorities focus on medical home access and transition support/services for children and youth with special health care needs (CYSHCN).

- **NPM 11: Percent of children with and without special health care needs, ages 0-17, who have a medical home:** Maryland Title V 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. Title V CYSHCN plans to work with local health departments to provide care coordination to make sure children with specific needs have a medical home.
- **NPM 12: Percent of adolescents with and without special health care needs, ages 12-17, who received services to prepare for the transition 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. Title V CYSHCN will work with local health departments to prepare for the transition to adult health care through care coordination.

Cross Cutting: **SPM 5: Percentage of MCH Bureau committees/workgroups that include community members/persons with lived experience.**

Maryland Title V added a cross cutting state performance measure. Title V continues to shift towards achieving equity and reducing disparities. Title V will work on reviewing various committees and workgroups to include community members/persons with lived experience. In addition, Title V has shared some of its statewide operational work.

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[1] This includes services provided through core public health funding, family planning, perinatal care coordination, Early Hearing, and Detection Intervention, Newborn Screening Follow-up, grants through the CYSHCN

[2] 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

[3] Started in FY 2022

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 $11,800,000 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 FY 2022, the state match totalled $10,246,958 and supported services such as family planning/reproductive health clinics, care coordination services for pregnant women (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

Maternal Child Health Success Story

The Title V Program funds Babies Born Healthy (BBH), a perinatal care coordination program that engages women and communities to provide coordinated care and address disparities in infant mortality rates in Maryland. In 2022, there were nine sites across eight jurisdictions in Maryland. In Maryland, infant mortality rates in non-Hispanic births are consistently double for Black births compared to White births.

One BBH site, the Montgomery County Health Department (MCDH) has numerous initiatives worth highlighting.

Under its Bright Start Campaign, their jurisdiction selects specific zip codes to focus program outreach and activities to reach the higher need Black non-Hispanic pregnant population who receive Medicaid benefits. This specific population bears 43% of fetal and infant losses while making up only 20% of births in their county.[1]

The MCDH BBH program utilizes nurses and community health workers to provide health screenings, care coordination, health promotion, and education services to persons at high risk for adverse pregnancy outcomes. The program has strong ties to its community and holds regular outreach and education events.

The MDCH BBH held an outreach campaign, Right from the Start (RFTS), in August 2022 to empower and support Black families and people of childbearing age to improve outcomes for pregnancy, early childhood, and beyond. At the event, families were presented with information on mental health, perinatal care, self-care, breastfeeding, doula support, early interventions, self-advocacy, and growth and development activities for children. Over 60 adults and 18 children participated in the event.

In August 2022, in honor of Black Breastfeeding Week (BBW), the BBH also organized a celebratory event that included a baby thrift store, breastfeeding milestone awards, panel discussions, and raffles. More than 45 postpartum and prenatal birthing people attended this event.

The county's program also partnered with White Oak Community Center (WOCC) to honor Sudden Infant Death Syndrome (SIDS) Awareness Month. Staff provided Safe Sleep door hangers, knocked on doors, and talked to families, infant caregivers, and healthcare providers about safe sleep. They reached over 200 families during October.

Due to their efforts in health equity, this BBH program was presented with the Solidarity for Health Equity award for reducing racial disparities in infant mortality. More information about the award can be found here. More information on Montgomery County's BBH program can be found in this news article.

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. According to the U.S. Census Bureau, Maryland had an estimated population of nearly 6.2 million in 2020, and ranked as the nation's 18th most populous state. However, Maryland 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 372,307 young adults (ages 20-24) in 2021. Of the 1.2 million women of childbearing age, 44.4% are White, non-Hispanic, 32.7% are Black, non-Hispanic, 12.2% are Hispanic, and 0.2% are American Indian/Alaska Native. Of the 1.5 million children and adolescents, 40.7% are White, non-Hispanic, 30.6% are Black, non-Hispanic, 16.6% are Hispanic, and 0.2% are American Indian/Alaska Native. Of the 372,301 young adults, 44.7% are White, non-Hispanic, 32.4% are Black, non-Hispanic, 12.7% are Hispanic, and 0.2% are American Indian/Alaska Native (U.S Census Bureau). According to the National Survey of Children's Health in 2020-2021, an estimated 266,095 Maryland children and youth (ages 0-17) have special health care needs. The survey estimated that 22% of children and youth with special health care needs were White, non-Hispanic, 22% were Black, non-Hispanic, 10% were Hispanic, and 21% were Other race, non-Hispanic (NSCH 2020-2021 Survey).[1]

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 home to Johns Hopkins University, which is consistently ranked as one of the nation's top hospitals and several of the best diagnostic centers for developmental conditions in children, including Kennedy Krieger Institute, University of Maryland Division of Behavioral and Developmental Pediatrics, Sheppard Pratt and Mount Washington Pediatric Hospital.

Maryland was one of the initial six 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 (CY2022), there were 1,834,677 Marylanders who were enrolled in Medicaid.[2] During calendar year 2022, 714,292 children and adolescents (ages 0-22) were enrolled in the Medicaid Program at some point during the year. 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 2020, according to the National Vital Statistics System, Medicaid covered hospital delivery costs for 39.2 percent 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. This shortage is exacerbated by the COVID-19 Pandemic and the loss of health care workers due to fatigue and burnout. 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 2020. 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 2022 Kids Count Data Book (Annie E. Casey Foundation) overall ranked Maryland 19 in overall child well-being, which has increased in ranking from 24 in 2020.[3] 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 10.3% in 2021 according to the American Community Survey.[4] The infant mortality rate in Maryland saw declines from 7.4 in 2005 to 6.1 in 2021. However, there was an increase of seven percent from the 2020 rate of 5.7 deaths per 1,000 live births. There remains persistent disparities in infant mortality rates by race/ethnicity. For example, in 2021 the infant mortality rate for Non-Hispanic Whites was 3.7 compared to 9.8 for Non-Hispanic Blacks. In addition, 12.0% of the state's children (ages zero to five) live in poverty[5] and 4.3% of children under the age of 19 (age 0-18) do not have health insurance.[6] 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 Dr. Laura Herra Scott, who was appointed in 2023. 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 reduce health inequities and improve the health and wellbeing of all individuals, families, and communities in Maryland. The vision for the Bureau is that all individuals and families are valued, safe, and informed, with equitable

access to resources and services. The tagline for the Bureau is “Healthy pregnancies, healthy children, healthy families, healthier communities.”

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 three of the four offices of the Maternal Child Health Bureau. These offices include the Office of Family and Community Health Services (OFCHS); the Office of Quality Initiatives (OQI); and the Office of Genetics and People with Special Health Care Needs (OGPSHCN). In addition, Title V funds support the Operations Unit for the Bureau and the Healthcare Systems Coordination and School-Based Health Centers Unit.

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 $5.7 million[7] 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 health outreach specialists, public health 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.

Overall, Title V and the MCHB aims to improve and continuously grow. During 2020-2022, the Bureau and Title V underwent the strategic planning process to identify six strategies to help the Bureau grow operationally. These key strategies are: 1) promoting Diversity, Equity, and Inclusion (DEI) practices and processes, 2) advance system and community focused population-based practice, 3) strengthen internal and external collaborations, 4) increase

operational efficiencies, 5) Build further capacity of the MCH Workforce, and 6) Use Data to inform Action and Decisions. Title V staff incorporates these strategies in the daily operations whether it is to conduct annual DEI Trainings, develop standardized operating procedures, or integrate similar programs (e.g., perinatal care coordination) for further impact.

Maternal and Child Health Needs

Perinatal Health:
In 2021, the Maryland infant mortality rate was 6.1 deaths per 1,000 live births, an increase of seven percent from the 2020 rate of 5.7 deaths per 1,000 live births, and reflecting a 21 percent overall decrease from the average rate of 7.8 deaths per 1,000 live births from 2012-2016. The infant mortality rate for Non-Hispanic Blacks was 9.8, near three times the rate for Non-Hispanic Whites at 3.3.

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 7 FIMR teams as of FY 2022. FIMR not only provides important insight into opportunities for systems improvement, it also serves as a mechanism for local and regional communication, coordination, and collaboration on broader maternal and child health issues.

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 care coordination for 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 CY2022, of which 129 were reviewed by local CFR teams. The leading manner of child fatalities in 2022 was accidents, accounting for 28% of child deaths reviewed, followed by undetermined at 24% of child deaths reviewed. Approximately 34 cases reviewed were Sudden Unexpected Infant Deaths (SUID). Infant safe sleep promotion continues to be a Title V priority.

Child and Adolescent Health:
OFCHS and the School-Based Health Center Unit partner with Medicaid to monitor the percentage of children and adolescents who follow through with well visits. Maryland School-Based Health Centers represent an essential and innovative strategy for improving the health and education achievement of Maryland's children and their families. During FY 2022, there were 95 SBHCs located in 17 of the 24 Maryland jurisdictions. With lead support from OGPSHCN and in collaboration with 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:
The Office of Genetics and People with Special Health Care Needs (OGPSHCN) continues to focus on the core domains for CYHSCN: identification, screening, assessment, and referral; eligibility and enrollment in health coverage, access to care, medical home, community-based services and supports, transition to adulthood, health information technology, and quality assurance and improvement.[8]

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.

Through the Child Medical Services program, which is a payer of last resort, CYSHCN receives coverage for their healthcare. In addition, through partnership with Local Health Departments, community-based organizations and academic and clinical associations, OGPSCHN continues to focus on the national performance measures of medical home and healthcare transition.

COVID -19 Impact:
The COVID-19 pandemic continued to impact the State in 2022. During January 2022, the Governor issued a 30-day state of emergency as COVID-19 was overwhelming normal operations at hospitals. The Department of Health opened 10 COVID-19 testing sites, and in order to increase vaccination rates against COVID, the State provided cash prizes in a campaign called, "VaxCash 2.0 for booster shots." During March 2022, Maryland was seeing a decline in COVID-19 cases at schools, and certain schools provided COVID-19 tests home ahead of spring break. During the spring, Maryland began to see a rise in COVID-19 cases. State and local health departments programs operated in a hybrid capacity during this year. Certain programs such as home visiting still operated in a remote capacity.

During 2022, Title V staff at both the state and local level continued to be deployed to provide assistance related to the COVID-19 pandemic through providing testing, serving on outbreak and contact tracing teams, developing guidance for partners, or providing vaccinations.

Network Security Event Impact

During FY2022, the Department experienced a Network Security Event that resulted in the Department's information and technology systems being taken offline out of an abundance of caution. The event started in December and was confirmed to be as a result of a ransomware attack. This event not only affected the MDH but many of the local health departments who are part of the MDH Information Technology system. The Network Security Event affected operations including accessing fiscal systems as well as essential data systems. For example, data from the Vital Statistics Administration are preliminary.

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[1] Percents do not sum to 100 because each racial category was broken down into CYSHCN and non-CYSHCN (i.e. 22% of white, NH children were CYSHCN and 78% were non-CYSHCN). The survey also noted that counts were too low to break down other NH into American Indian or other racial/ethnic groups.

[2] Maryland Medicaid DataPort. https://www.hilltopinstitute.org/public-dataport/ Accessed 9 June 2023

[3] 2022 KIDS COUNT DATA Book. 2022 State Trends in Child Well-Being. https://www.aecf.org/resources/2022-kids-count-data-bookAccessed 9 June 2023

[4] American Community Survey. Maryland Data Profile. https://data.census.gov/profile/Maryland?g=040XX00US24#income-and-poverty. Accessed 24 July 2023

[5] Anne E. Casey. 2022 Kids County Data Profile. https://assets.aecf.org/m/databook/2022KCDB-profile-MD.pdf

[6] Maryland Coverage Trends. https://kidshealthcarereport.ccf.georgetown.edu/states/maryland/ Accessed 23 July 2023

[7] It includes $4.4 million to all 24 Local Health Departments through core funding, and $1.3 for Child Health Systems Improvement to Baltimore City.

[8] National Standards for Systems of Care for Children and Youth with Special Health Care Needs, Version 2.0 Informational website

III.C. Needs Assessment
FY 2024 Application/FY 2022 Annual Report Update

Dr. Shelly Choo continued as the MCHB and Title V Director during FY 2022, which she began in July 2020. Ms. Alena Troxel continued in her role as Deputy Director which she began in December 2019. Samantha Ritter joined MCHB on December 1, 2021 as the Director of the Office of Family and Community Health Services. Teresa Pfaff served as the Director of the Office of Quality Initiatives (OQI) from September 2021 to September 2022. Alena Troxel served as the Acting OQI Director until NaToya Mitchell started in June 2023. Lauren Whiteman started as the Director of the Office of Genetics and People with Special HealthCare Needs on November 16, 2022, and Jennifer Wilson served as Director of the Maryland WIC program. Paula Reynolds continued her role as the Chief Operating Officer for the Bureau.

The Title V Manager position remained vacant from June 2022 to June 2023. In order to further align with the State's priority of reproductive health, a health policy analyst that focused on clinical women's health was developed and is currently under recruitment.

Data Updates
The following section provides an overview of population level data updates available during the reporting period. The Maryland PRAMS 2021 data has been included in this report, but should be interpreted with caution. Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the CDC defined minimum overall response rate threshold of 50%.

Women's/Maternal Health:

Substance Use/Misuse/Disorder: Due to Maryland Department of Health's network security event, 2021 and 2022 data shared by the Maryland Vital Statistics Administration (VSA) and the Office of the Chief Medical Examiner (OCME) are still preliminary and subject to change. There were 2,581 fatal overdoses due to drugs and alcohol in 2022, a 9% decrease from the 2,824 fatal overdoses reported in 2021. Of the 2022 fatal overdoses, 2,218 (86%) were categorized as opioid-related and 2,051 (79.5%) involved fentanyl. Fentanyl-related deaths decreased 13% from 2,348 in 2021 to 2,051 in 2022. Overdose deaths decreased 10% among males from 2,051 in 2021 to 1,836 in 2022, and 4% among females from 773 in 2021 to 743 in 2022.[1]

Mental Health: According to 2021 Pregnancy Risk Assessment Monitoring System (PRAMS) data,[2] 16.6% of pregnant individuals reported depression three months before pregnancy and 13.7% of pregnant individuals reported symptoms of postpartum depression. During the three months before pregnancy, 29.0% of pregnant individuals reported they had anxiety.

Maternal Mortality and Morbidity: While the report for cases reviewed in FY 2021 is still being finalized due to delays related to COVID-19 and the Department's network security incident, preliminary data demonstrate that there were 31 pregnancy-associated deaths in 2019, resulting in a pregnancy-associated mortality rate of 44.2 deaths per 100,000 live births in Maryland. The 2015-2019 maternal mortality rate (MMR) in Maryland is 17.2 maternal deaths per 100,000 live births, which is a 33 percent decrease from the 2010-2014 rate. The 2015-2019 MMR among Black women is 27.8 maternal deaths per 100,00 live births, which is 58 percent higher than the MMR of White women. The leading cause of pregnancy-related deaths in 2019 were hemorrhage (29 percent of deaths) and non-cardiovascular medical conditions (24 percent of deaths) . The leading cause of pregnancy-associated deaths in 2019 was substance use with unintentional overdose, accounting for 50 percent of these deaths.

Preventive Dental Visits in Pregnancy: According to 2021 PRAMS data,[3] 49.3% of pregnant individuals reported having their teeth cleaned during pregnancy, an increase from 47.0% in 2020.

Smoking in Pregnancy: According to 2021 PRAMS data[4], 8.4% of pregnant individuals reported that they smoked during the three months before pregnancy (down from 10.6% in 2020), 2.9% of pregnant individuals reported that they smoked during the last three months of pregnancy (down from 4.0% in 2020), and 4.4% reported that they smoked postpartum (down from 5.4% in 2020). Due to subpopulation response rates not meeting the lower threshold (30 respondents), further stratification by race/ethnicity or age category cannot be reported. The Healthy People 2030 target is to increase abstinence from cigarette smoking among pregnant individuals to 95.7%; PRAMS 2020 and 2021 data, which include self-reported smoking status during the last trimester of a pregnancy, indicate that Maryland has reached this target.

Perinatal Health of Maryland Women and Infants:

Prenatal Care: The annual percentage of Maryland pregnant individuals who initiated prenatal care during the first trimester was 84.9% in 2021, a 1.3% decrease from 86.0% in 2020, according to PRAMS data[5]. The percentage of non-Hispanic White individuals who initiated prenatal care in the first trimester increased by 2.0% from 94.4% in 2020 to 96.3% in 2021. The percentage of non-Hispanic Black individuals who initiated prenatal care in the first trimester remained comparable from 2020 (85.4%) to 2021 (85.3%). Similarly, the percentage of non-Hispanic Asian individuals who initiated prenatal care in the first trimester remained comparable from 2020 (87.0%) to 2021 (87.7%). However, there was a marked 10% decrease in the percentage of Hispanic individuals who initiated prenatal care within the first trimester from 2020 (68.3%) to 2021 (61.3%).

Infant Mortality: Maryland VSA reported the infant mortality rate in Maryland in 2021 was 6.1 per 1,000 live births, a 7.0% increase from 5.7 per 1,000 live births in 2020, and down from 8.5 per 1,000 live births in 2004. The five leading causes of infant death in 2021 were low birth weight, congenital abnormalities, SIDS, maternal complications of pregnancy, and complications of the placenta, cord, and membranes. These deaths accounted for 58.8% of all infant deaths. Maternal complications of pregnancy include conditions such as premature rupture of membranes and cervical incompetence.

Low Birth Weight: Maryland VSA reported in 2021,8.9% 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 (12.8%) than Non-Hispanic White mothers (6.7%).

Very Low Birth Weight: Maryland VSA reported in 2021, 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 (2.7% Non-Hispanic Blacks,1.0% Non-Hispanic Whites, and1.2% for Hispanics).

Preterm Birth: Maryland VSA reported in 2021, 10.7% of live births occurred before 37 weeks of gestation in Maryland, a 6.0% increase from 10.1% in 2020. Non-Hispanic Black mothers were more likely to have a preterm birth than other races at 13.3%, compared to 9.2% and 10.2% for Non-Hispanic White and Hispanic births, respectively.

Breastfeeding: In 2021, according to PRAMS data,[6] 92.7% of Maryland mothers reported having ever breastfed their babies, a 3.1% increase from 89.9% in 2020. Rates of breastfeeding in Maryland were high across all races and ethnicities ranging from 89.4 for Non-Hispanic Black individuals to 98.7% among non-Hispanic Asian individuals.

Infant Safe Sleep: In 2021, according to PRAMS data,[7] 79.9% of infants were placed to sleep only on their backs, a slight increase of 1.8% from 78.5% in 2020 (NPM 5A). In line with the NPM-5B definition, 33.6% of infants were placed to sleep on a separate approved sleep surface. 58.4% of infants were placed to sleep without soft objects or loose bedding (NPM-5C); in contrast, 34.9% of parents reported that their baby slept with a blanket, 6.3% slept with toys, cushions or pillows, and 11.7% slept with bumper pads. In 2021, 82.6% percent of mothers reported that their baby slept in the same room as the mother.

Child Health:

Mortality: According to Maryland VSA data, in 2021, there were 711 infant and child deaths ages 0 to 18 years old in Maryland. Most of these deaths occurred in infancy - 58.4 percent were under the age of one year. The 2021 child death rate increased by 3.4% compared to 2020. Accidents were the leading cause of death for the 64 children ages 1 to 4 years. Accidents were the leading cause of death for the 100 children ages 5 to 14, followed by neoplasms.

Preventive Health Care: According to CY 2022 Medicaid data, 72.1% of Medicaid enrolled patients who turned 15 months old during 2022 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), 2020-2021, showed that 39.9% of children ages 9 through 35 months received a developmental screening using a parent-completed screening tool in the past year, a slight decrease from 40.3% during the 2019-2020 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 7.1 per 1,000 population in 2022, an increase from 3.5 per 1,000 population in 2020.

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 2021. This represented a 17% increase from the 2020 rate of 7.4 per 100,000 population. The actual numbers of suicides in this age range increased from 28 cases in 2020 to 34 cases in 2021. The suicide rate remained highest for non-Hispanic White teens in 2021 at 16 cases, or 47percent of suicide deaths.

Teen Pregnancy and Reproductive/Sexual Health: Maryland VSA data showed that the adolescent birth rate decreased 49.3% from 22.1 births per 1,000 adolescent females ages 15-19 years in 2012 to 11.2 births per 1,000 adolescent females in 2021. Hispanic females had the highest adolescent birth rate with 30.3 births per 1,000 adolescent females, which was more than double the adolescent birth rate for Black, non-Hispanic females (13.3 per 1,000 adolescent females) and more than six times the adolescent birth rate for White, non-Hispanic females (4.9 per 1,000 adolescent females).

Children and Youth with Special Health Care Needs:

Medical Home: According to the 2020-2021 National Survey of Children's Health, there are an estimated 266,095 children and youth ages 0 to 17 with special health care needs in the state. The survey estimated that 49.5% of these children have a medical home.

Transition to Adult Care: The 2020-2021 National Survey of Children's Health estimated that 16.8% 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:

- Elizabeth Kromm, PhD, MSc serves as the Director of PHPA. Dr. Kromm started on May 10, 2023. Previously, Donna Gugel, MHS, served as the Director of PHPA, but retired January 1, 2023
- Courtney McFadden, MPH, continues to serve 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. From January 1, 2023 to May 9, 2023, Ms. McFadden served as the Acting Director for PHPA.

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.
- Lauren Whiteman, MPH started as the Director of the Office of Genetics and People with Special Health Care Needs and as the State Title V CSHCN Director in November 2022.
- Stacy Taylor, JD 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.
- Samantha Ritter, MPH serves as the Director of the Office of Family and Community Health Services.
- NaToya Mitchell, MA serves as the Director of the Office of Quality Initiatives. Ms. Mitchell started June 14, 2023. Previously Alena Troxel served as the Acting OQI director from September 2022 until June 2023.
- Jessica Raisanen, MSPH serves as the Epidemiology Program Manager within the Office of Quality Initiatives. Ms. Raisanen started April 5, 2023.
- The Title V Manager is currently vacant.
- Bailey House, MPH started as the Children and Youth with Special HealthCare Needs Title V Coordinator on June 14, 2023.

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[1] Source: Opioid Operational Command Center: Maryland Overdose Data Dashboard and Demographic Dashboard. Note: data from 2021 and 2022 are preliminary and subject to change. Accessed 07/07/2023
[2] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.
[3] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.
[4] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.
[5] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.
[6] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.
[7] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.

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

2023 Application/2021 Annual Report – Needs Assessment Update

2022 Application/2020 Annual Report – Needs Assessment Update

2021 Application/2019 Annual Report – Needs Assessment Summary

III.D. Financial Narrative

	2020		2021	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$11,673,326	$11,850,506	$11,673,326	$11,872,645
State Funds	$8,754,995	$8,887,880	$8,754,995	$10,999,716
Local Funds	$0	$0	$0	$0
Other Funds	$0	$0	$0	$0
Program Funds	$0	$0	$0	$0
SubTotal	$20,428,321	$20,738,386	$20,428,321	$22,872,361
Other Federal Funds	$117,178,515	$87,533,536	$118,199,750	$88,972,950
Total	$137,606,836	$108,271,922	$138,628,071	$111,845,311

	2022		2023	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$11,850,506	$12,008,626	$11,981,449	
State Funds	$8,887,880	$10,246,958	$9,023,964	
Local Funds	$0	$0	$0	
Other Funds	$0	$0	$0	
Program Funds	$0	$0	$0	
SubTotal	$20,738,386	$22,255,584	$21,005,413	
Other Federal Funds	$111,489,625	$46,337,136	$123,038,688	
Total	$132,228,011	$68,592,720	$144,044,101	

	2024	
	Budgeted	Expended
Federal Allocation	$12,008,626	
State Funds	$13,554,563	
Local Funds	$0	
Other Funds	$0	
Program Funds	$0	
SubTotal	$25,563,189	
Other Federal Funds	$117,971,841	
Total	$143,535,030	

III.D.1. Expenditures

In FY 2022, the Maryland joint federal-state Title V program expended $22,255,585 for services and activities to promote the health of women, infants, and children including those with special health care needs. Federal expenditures amounted to $12,008,626 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 FY 2022 was met with 33.3% of federal funds expended for preventive and primary care services for children, 41.5% expended for children with special health care needs. Less than ten percent of federal funds were used for Title V administrative costs.

With regards to the MCH pyramid, federal FY 2022 funds supported direct services ($2,798,029), enabling services ($5,412,797), and public health services and systems ($3,797,800).

The $2,798,029 in direct services represents direct medical care for CYSHCN including medical day care, Children's Medical Services, and genetic services. The funds also included direct services provided to pregnant people, and people with infants up to one year through local health department reproductive health clinics.

Enabling service expenditures during FY 2022 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;
- Family Planning Services
- 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 included services for CYSHCN, comprising the aforementioned case management services, linking families with state and local resources for their children, family support and education on navigating health systems, funding to health care institutions to enhance medical home services, 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. In addition, expenditures were used for staff for epidemiology, program planning, policy analysis and planning.

Maryland expended $10,246,958 in matching funds in FY 2022 exceeding its required 1989 Maintenance of Effort match of $8,262,484. Direct services ($5,511,995), enabling services ($2,742,142) and public health services and systems ($1,992,821) comprised the totality of matching fund expenditures.

The direct services include preventive and primary care services for pregnant individuals, mothers, and infants as well services for CSHCN as well as the direct services through the family planning clinics that provide essential care for Maryland residents.

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 individuals and infants and state health department staff who provide epidemiology and data support, surveillance through the Pregnancy Risk Assessment Monitoring System (PRAMS), 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 FY 2024 is $25,563,189, including $12,008,626 in federal funds and $13,554,563 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 FY 2024, it is proposed that federal funding will be distributed accordingly: 34.3% for preventive and primary care for children, 33.5% for CYSHCN, and 5.1 % for administration. Remaining funds 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 $12,008,626 will be distributed as follows: approximately $895,544 for direct services; approximately $6,595,972 for enabling services; and approximately $4,517,100 for public health services and systems.

For FY 2024, nearly $4.5 million 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. In addition, another $1.3 million in federal funding is budgeted to the local health department for primary and preventive child health services, and $85,000 specifically for asthma related activities. 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
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 Postpartum Individuals
Children and Youth with Special Health Care Needs	• Care Coordination for CYSHN • Infants and Toddlers • Lead Case Management

In FY 2024, a total of $4,129,229 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: hearing and vision screening, immunizations, promotion of child development screenings, asthma programming/services, and promotion of access to a medical home.

In FY 2024, a total of $4,025,335 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.

During FY 2024, the $13,554,563 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;
- Perinatal Care Coordination to increase access to Prenatal Care through Thrive by Three legislation;
- Prenatal support groups through Babies Born Healthy grants;
- Child abuse and neglect education and support for health care providers;
- Medical Day Care for CYSHCN which provides funding for medical day care programs for medically fragile infants and young children;
- Family Planning grants to the Family Planning clinics across the state
- 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:
Elizabeth Kromm, PhD MSc, Director
Courtney McFadden, MPH, Deputy Director

Public Health Services:
Nilesh Kalyanaraman, MD, Deputy Secretary

Maryland Department of Health:
Laura Herra Scott, MD, MPH, Secretary

The Title V program is managed by the Title V Manager and the Title V CYSHCN Manager, Bailey House, MPH. The Title V Manager left in June 2022.

Within the Maternal and Child Health Bureau there are four offices:

The **Office of Genetics and People with Special Health Care Needs (OGPSHCN)** is directed by Lauren Whiteman, MPH who 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 course of life.

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 ages 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)** is directed by NaToya Mitchell, MPH, who started in June 2023. Previously, Alena Troxel served as the acting OQI Director from September 2022 to June 2023. 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)** is directed by Samantha Ritter, who started

December 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. Starting in 2023, the office will also develop a comprehensive reproductive health unit and oversee a clinical training program for women's health.

The **Operations Unit** is directed by a Chief Operating Officer, Paula Reynolds, who started September 2021. This office administers grants to the local health departments, federal grants to OFCHS, OQI, and OGPSHCN, and administers contracts and memoranda of understanding. The Office of Operations coordinates with the other four offices on procurements and inventories.

The **Healthcare Systems Coordination and School-Based Health Center Unit** is directed by the Medical Director, Dr. Benjamin Wormser. He is a board-certified pediatrician. The healthcare systems coordination work includes the Perinatal Support Program, Morbidity, Mortality, and Quality Review Committee, the Perinatal Quality Collaborative as well as the Maryland School-Based Health Centers. The Medical Director also oversees the Maternal Mortality Review Team.

The offices and units 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 analyses, program evaluation, and feedback from consumers and 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. These respective bureaus have a variety of programs and populations all with ongoing collaborations with Title V to 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. Rebecca Kemp has been serving as the acting Title V local health department grant monitor.

Title V is well positioned within the state health department to ensure that the funding and the programs are strategically designed, implemented, and 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

Maryland Maternal Child Health Workforce Development

In consideration of the number of existing and emerging health care and public health challenges, the maternal and child health 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 maternal and child health populations.

At the state level, federal Title V funds supported approximately 26 full-time equivalent positions in the Maternal and Child Health Bureau during Fiscal Year 2022. Supported staff include a multidisciplinary team of 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 FY 2024 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.

As several new Title V state staff members have started during the past several years, the Bureau's Operations Unit has developed a standardized onboarding process for new staff. The onboarding process uses a collaborative software platform, called SmartSheets, to outline mandatory departmental trainings, steps to obtain ID badge, printer access, laptop, and any other necessary tasks for onboarding. In addition, a MCHB Internal Resource Center was developed to centralize various resources that include operating procedures, orientation materials, organizational charts, common acronyms used in the Department, and information about committees and workgroups.

In FY 2022 and FY 2023, MCHB and Title V formalized a Bureau Orientation that describes the priority efforts of the Bureau as well as introduction to Maternal and Child Health knowledge base/context.[1] The fundamentals include an understanding on why there is a focus on Maternal and Child Health, the life course model, the socio-ecological model, and the equity framework as well as organizational interagencies partnerships.

To continue professional development, 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 FY 2022, Title V organized key workshops during Black Maternal Health Week that were open to Title V staff and partners. The workshop included presentations "What You Don't Know CAN Hurt You…" and "Your Patients: The Role of Implicit Bias in Birthing and Breastfeeding Support." The workshop was presented by Nekisha Killings, MPH, IBCLC. In addition, a steering committee was established to lead and organize Bureau Month, a series of webinars for all MCHB staff. Topics were selected by all staff through a survey then internal and external speakers were recruited to facilitate. Each webinar session included a team building component led by a Title V staff member. There was a webinar session on diversity, equity, and inclusion led by Patricia Liggins, founder of Birth Supporters United.

Title V staff receive annual training on programmatic and fiscal operations such as contract monitoring, fiscal and budgetary management, and change management. During Bureau Month in FY 2022, specific training on the local health department budget review process was held. This session allowed grant monitors to understand the local health department budget template. In addition, another operations session was held to review the internal

procurement process including competitive funding opportunities and processing contractual paperwork.

During FY 2022, all MCHB staff underwent leadership training, called *Everything DISC (Dominance, Influence, Steadiness, and Conscientiousness).* This training provided a common language for staff to assist in teamwork, communication, and productivity.

Title V staff training needs are assessed twice yearly during performance evaluations. In addition, Title V senior managers regularly meet with Title V staff to provide coaching and mentoring. 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, 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 a disadvantaged 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 can be an impediment. For example, certain job classifications have a state minimum qualification, in which there is no potential substitute. For example, a Program Administrator II classification, which is a common Title V State position, requires six years of professional experience in health services. Three of these years must be in a health services professional clinical or administrative services area. Although behavioral health is considered part of health, work experiences in mental health, development disabilities, or addiction do not qualify as a health service experience.

The delay in hiring has further perpetuated the ability to hire as existing staff need to undertake additional duties, further causing fatigue and wear down. In order to address these barriers, vacancy announcements are shared within peer networks, local health departments, local universities including historically Black colleges and universities (HBCUs) 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 lacking MCH workforce are adult clinical providers for adults with special healthcare needs, mental health care providers, and 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. The Maryland Maternal Health Innovation Program has therefore provided the March of Dimes implicit bias training to hospital employed perinatal providers.

[1] MCH Leadership Competencies. https://mchb.hrsa.gov/programs-impact/focus-areas/building-mch-leaders-mch-workforce/leadership-competencies Accessed 30 June 2023.

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

Family Partnerships

Maryland's Title V program focus on family partnership is addressed through grant funding to external community-based organizations and local health departments and through internal initiatives.

During Fiscal Year 2023, the Office of Genetics and People with Special Health Care Needs developed a competitive-bid opportunity to formalize family partnership with a State Family Lead. The competitive bid process was necessary to develop an objective evaluation process and to compensate a potential person or organization to advise and provide technical assistance to Title V. The awardee selected will also be responsible for conducting focus groups with children and youth with special healthcare needs (CYSHCN) and their caregivers across the state. Focus groups will be representative of Maryland's diverse geographic, racial, and ethnic makeup. The information gathered during those groups will be used to inform Title V and OGPSHCN's future work. During FY 2024, OGPSHCN looks forward to selecting a partner to do further work together on family partnership. During FY 2022 and 2023, OGPSHCN has relied on the Office Deputy Director, Stacy Taylor, to advise and further develop family partnership as well as existing partnerships with various organizations detailed below. Ms. Taylor has extensive experience in developing family partnerships.

In FY 2022, Maryland's CYSHCN Title V Office continued to implement and operate "Strengthening Systems of Care for Maryland's Children and Youth with Special Health Care Needs," a three-year initiative to improve family partnerships and strengthen systems of care. This initiative was a result of a year-long planning process that included multiple "brainstorming" meetings with staff at all levels, consultation with the administration's Office of Procurement, and numerous drafts and revisions. Through a competitive-bid process, applicants selected focus areas. Applicants selecting the "family professional partnership" focus area were required to propose projects ensuring that family members would have a meaningful role in grant-funded activities. Awarded projects not only serve CYSHCN and their families but include families in the planning and implementation of their projects.

The Parent Navigator Program from Children's National Medical Center built upon existing community education programs and developed targeted educational programs for community primary care pediatricians, their staff, and pediatric trainees through a partnership with Children's National's Pediatric Health Network, a clinically integrated network. Parent Navigators are all parents of children being seen at CNMC and within its network. They work directly in the electronic medical record system, which allows for documentation of new referrals, early identification of issues, and easy monitoring of progress and updates on a given issue (which can be viewed by other navigators who may be covering for or assisting the family's primary navigator). The Parent Navigators are employed and trained by CNMC, with a primary requirement of employment being that they are a parent of CYSHCN. Along with 11 other hospitals throughout the nation, CNMC is part of the Parent Mentor Learning Collaborative (PMLC), sponsored by Lucille Packard Children's Hospital Stanford, with a goal of creating a parent mentor program framework to permit implementation in diverse settings, while adhering to a general set of standards across sites.

The Coordinating Center's VIPKids Program convenes a medical home think tank as needed, which is coordinated by the VIPKids Outreach and Resource Specialist and includes interested parents along with the Program Director, the VIPKids Clinical Care Coordinator, pediatric providers, and other professionals at TCC with expertise in care coordination for CYSHCN. The think tank may also invite other subject matter experts as needed to help evolve and develop the program.

Rather than families, the National Alliance to Advance Adolescent Health solicits feedback directly from the pilot population (transitioning youth). The project conducts focus groups with members of the pilot population at each school - led by the University of Maryland's Prince George's School Mental Health Initiative transition improvement team - to elicit their feedback about the transition intervention. They utilize Got Transition's customized Youth Transition Feedback Survey.

Local health departments funded through Title V to support CYSHCN are also partnering with families. The Calvert County Health Department incorporated a peer mentor into its grant activities. Baltimore County Health Department utilizes a client satisfaction survey as a continuous quality assurance tool, assessing client and family satisfaction, measuring program impact, and ensuring best practices are followed by the project. Baltimore County's overall focus is on family professional partnership, which they are advancing through care coordination, education of families, needs assessments through focus groups, education through provider toolkits and expansion of emergency preparedness efforts for CYSHCN. All of these initiatives are reviewed by the aforementioned client satisfaction survey. In addition to service provision to families, the Talbot County Health Department provides family and provider engagement opportunities through the Eastern Shore Consortium of Care. The COC-ES is a broad group of local, regional and state partners, including parents/family members, who meet quarterly to build and strengthen connections, share data and initiatives, identify needs/challenges, and collaborate to resolve issues. Additionally, opportunities to educate and inform group participants on relevant topics from speakers from across the region and state are scheduled.

In FY 2024, OGPSHCN will fund three local health departments to provide care coordination services for CYSHCN. A requirement of the grant is that each awardee's staffing must include a peer mentor, either a caregiver to a CYSHCN or an adult with a special health care need. Not only will this provide a peer to assist the enrolled families, it will also ensure that each local health department has someone with lived experience providing input on its program.

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, 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.

In addition to the above, other county 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 behavioral 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. While many staff were redirected to COVID-19 activities, they also continue to participate in this activity but have often shifted to virtual opportunities.

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

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

Maternal Child Health Epidemiology Workforce

Maryland's Maternal and Child Health Bureau's epidemiology team is housed in the Office of Quality Initiatives. The MCHB staff consists of an Epidemiology Program Manager who serves as the epidemiology supervisor, a high level Epidemiologist III, an Epidemiologist II who focuses on the on the State Systems Development Initiative (SSDI) as well as Sudden Unexpected Infant Deaths (SUID) Initiative, and two contractual epidemiologists who are assigned to the COVID-19 Surveillance for Pregnant Women and Infants project. 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)

State Systems Development Initiative (SSDI)

Since the mid-1990's, Maryland's State Systems Development Initiative has focused on the following: enhance and maintain a strong maternal and child health (MCH) data infrastructure to support Title V needs assessment, planning, implementation, evaluation, and data driven decision-making. The intent is to align with the SSDI Performance Measure structure and goals by supporting essential state MCH data efforts to improve performance measurement, accountability and quality. This program addresses the need for increased state MCH epidemiology capacity for both state and the Title V programs, improved systematic MCH data coordination, and use of data for translation to policy and program development. The program also continues technical assistance for MCH and the Children and Youth with Special Health Care Needs (CYSHCN) Program staff in local health agencies to improve MCH infrastructure, monitoring and evaluation of MCH programs, and activities at the state and jurisdiction level. The SSDI program is housed within the Office of Quality Initiatives (OQI) in the Maternal and Child Health Bureau of the Prevention and Health Promotion Administration (PHPA) at the Maryland Department of Health (MDH).

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. The SSDI program staff are also researching new software and techniques to allow for more rapid dissemination of data and reports. They work closely with the Office of Quality Initiatives to improve the quality of the data collected and used for recommendations in fetal and infant, child, and maternal mortality review programs and in monitoring of Title V national performance measures, national outcome measures, and state performance measures.

There have been 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 and Epidemiology and Laboratory Capacity Project W funds to support an administrative specialist position at Maryland's Vital Statistics Administration to increase data support capacity within the office. Aligned with our project plan, a Memorandum of Agreement was established to use SSDI funds to support an administrative assistant in the VSA to improve MCHB epidemiologist access to birth and death certificate vital statistics data. Using this data, maternal and infant health profiles were created for each jurisdiction in Maryland in 2022.These profiles highlight the local jurisdiction's maternal and infant health risk factors and outcomes as compared to the state of Maryland between the years 2016 and 2020.These will be updated on an annual basis.

Improved access to de-identified birth and death certificate data has continued to be crucial in Title V activities this year. The SSDI team collected, analyzed, and entered data on the outcome and performance measures in support of the State's Title V MCH Block Grant application and annual report. This data has also been integral to developing many goals and objectives for future Title V work, such as developing performance measures for severe maternal morbidity and childhood asthma emergency department visits, as well as Maryland's Statewide Integrated Health Improvement Strategy (SIHIS) and Maternal Health Improvement Strategic Plan (MHIP). 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. A report summarizing BDRIS data is submitted bi-annually to the CDC.
The SSDI team 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. In addition, the team has produced annual legislative reports for both the CFR and

MMR programs. 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.

Activities related to the current plan include continued participation in the CDC SUID and Sudden Death in the Young Case Registry surveillance grant initiative. These Child Fatality Review (CFR) initiatives require regular data analysis and reporting which is directly supported by SSDI funding and further supports Goal 3 of the strategic plan. The acquisition of the infant birth records and BDRIS data file will allow advanced analyses of prenatal factors associated with birth defects.

MCHB epidemiologists have provided ongoing epidemiology data support to offices within Maryland's MCHB this year. Using newborn discharge data, they presented a data analysis to all 32 birthing hospitals in the state on neonatal abstinence syndrome. The MCHB epidemiologists also participated in the CDC's Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) COVID-19 Surveillance project to monitor COVID-19 infection in pregnant people and infants.

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

Other Maternal Child Health Data Capacity Efforts

During the current reporting period, a Social Security Disability Insurance/Title V measure monitoring and tracking system was maintained for use by the Maternal and Child Health Bureau staff. The monitoring system contains data for numerous Title V outcome and performance indicators and many of the SSDI minimum/core indicators, such as low birth weight, preterm birth, infant mortality, and teen births. The data is presented at the race and jurisdictional levels, for years 2010-2020 (where data is available), in an easy-to-use, interactive format that allows staff to print graphs and disseminate needed information. The monitoring system also provides comparisons to United States (US) rates, where available. Additionally, the indicators in the SSDI minimum/core dataset were monitored with the assistance of the Minimum/Core Dataset Implementation Guide and Training Module, to monitor Maryland's progress and compare it with other states.

Aligned with our project plan, a Memorandum of Agreement (MOA) was maintained to use SSDI funds to support an administrative assistant in the Vital Statistics Administration to improve Maternal and Child Health Bureau epidemiologists' access to birth and death certificate vital statistics data.

The annual Maternal Mortality Review Legislative Report for 2021 was completed in July of 2022 and is currently in the final stages of review. The annual Child Fatality Review (CFR) Legislative Report for 2021 was completed in September of 2022 and is also in the final stages of review. Data on child fatality was presented at quarterly Maryland CFR State Team meetings in 2021 and 2022. MCHB Epidemiology staff maintained access to ImmuNet, Maryland's Immunization Information System Database, to allow for access to immunization records for child fatality cases. SSDI staff continued collaboration with the Office of the Chief Medical Examiner to solve issues related to child fatality data collection and dissemination to the state and local teams for analysis. Maryland is also continuing participation in the Centers for Disease Control's Sudden Unexpected Infant Death (SUID) and Sudden Death in the Young (SDY) Case Registry Surveillance grant initiative which started September 30, 2018 and ends September 29, 2023. The final 2020 SUID data was completed and submitted to the CDC in December of 2021.

The MCHB epidemiology team worked with the Maternal, Infant, and Early Childhood Home Visiting program to update their statewide needs assessment. The MCHB epidemiology team provided data on 23 indicators, including preterm birth, low birth weight, infant mortality, prenatal care, maternal education, poverty, unemployment, Medicaid enrollment, and crime. The MIECHV needs assessment was updated in July of 2021, which highlighted the elevated indicators across the state.

The MCHB epidemiology team also worked with the Babies Born Healthy (BBH) Initiative, which aims to reduce infant mortality in Maryland and address the gap of excess infant mortality between Black and White populations. BBH was undergoing a refresh, and the MCHB epidemiology team provided data over from 2010–2019 (most available data at the time) to understand infant deaths, preterm births, low birth rates, and prenatal care access. The information was used to inform jurisdictions to invest to decrease the infant mortality rate.

To understand cannabis use amongst Maryland birthing people, the Maryland Medical Cannabis Commission reached out to the MCHB Epidemiology and Pregnancy Risk Assessment Monitoring System team. Due to a legislatively mandated Maryland Cannabis Use Baseline Study and report (MCUBS), the MMCC requested data that would help them understand the insurance status for those who report marijuana use and assess concurrent use of marijuana during pregnancy. MCHB epidemiology provided the following demographics information: In 2020, the majority of respondents who reported using marijuana were among ages 30-34 (317 respondents). The majority were also White, non-Hispanic (371 respondents), followed by Black non-Hispanic (251 respondents) and Hispanic (205 respondents). In 2020, the majority of respondents who reported using marijuana were covered by insurance supplied by their job (445 respondents) and stated they received breastfeeding information from a breastfeeding/lactation specialist (717 respondents). A large proportion of respondents who reported using marijuana had breastfed at some point (824 respondents). The data helped to inform the development of an informational fact sheet.

In addition, in response to an increased awareness of disability influencing a number of public health outcomes, Maryland's Maternal and Child Health Bureau collaborated with the Environmental Health Bureau to analyze responses to questions of varying topics as they relate to a respondent's disability status. The goal of this project was to understand whether women with any disability responded differently to selected PRAMS questionnaire indicators compared to women without a disability. In the analysis, women with any disability reported having postpartum depression at a rate twice that of women without a disability. A focus brief was developed on on disability for Maryland women giving birth 2019-2020 that described the demographics and responses of birthing people with and without a disability

SSDI is 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 MCHB epidemiologists 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. In 2022, MCHB epidemiologists presented a data analysis on NAS to all 32 birthing hospitals in the State.

In July 2020, the Maryland Department of Health relaunched the Maryland Perinatal-Neonatal Quality Collaborative which is being led by Health Quality Innovators (HQI).The collaborative works with all 32 birthing hospitals in Maryland. The current collaborative focuses on maternal hypertension and newborn antibiotic stewardship. MCHB epidemiologists provided statistics through 2021 Q4 on maternal severe hypertension using inpatient hospitalization data using guidance from the Alliance for the Innovation on Maternal Health (AIM) Program. MCHB epidemiologists provide data support for these efforts using data from HSCRC, VSA, and PRAMS.

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 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. The team has also started initial exploration revising Maryland's definition of SMM given the omission of transfusions in recent HRSA reports. Additionally, MCH epidemiologists have prepared reports on relevant maternal health trends for the Maryland Maternal Health Innovation (MDMOM) program. Participation in this workgroup will continue for the duration of the grant and will support data integration and development of a maternal health dashboard.

In July 2020, MCH was granted funding through the Centers of Disease Control and Prevention to expand surveillance activities to include surveillance of COVID-19 in pregnancy and monitor pregnancy and infant outcomes under Project W: Surveillance and Monitoring of Emerging Infectious Diseases and Other Health Threats to study infants with congenital exposure within the CDC's Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET) approach. Two staff were hired to perform data linkages and conduct medical record abstraction. The epidemiology team developed a detailed data process document outlining the flow of data. The project involves multiple partners, including a health information exchange system, the Chesapeake Regional Information System for our Patients (CRISP) and the Vital Statistics Administration. 2020 and 2021 COVID-19 pregnancies identified using CRISP and the National Electronic Disease Surveillance System (NEDSS) were linked to the VSA live birth files to analyze maternal demographics and prenatal health. Using this linked data, epidemiologists completed a COVID-19 data brief and presentation comparing all live births in Maryland in 2019 to births with a positive test in 2020. Additionally, the team is participating in a SET-NET communications campaign with the American Academy of Pediatrics to communicate relevant findings to pediatricians and pediatric healthcare providers. The epidemiologists complete data tasks required by the CDC such as medical record abstraction and attend programmatic meetings. Epidemiologists complete other data tasks when necessary for program advancement.

SSDI staff are continuing education and staying abreast of current health topics by attending webinars and conferences related to maternal and child health, epidemiology, and health equity. The MCHB epidemiology team plans to attend the 20203 CityMatCH Leadership and MCH Epidemiology Virtual Conference in September 2023.

SSDI staff provided data analysis on maternal and child health indicators to support the Babies Born Healthy program. The program was initiated in 2016 to target jurisdictions with the highest numbers and rates of infant mortality in the state of Maryland. During state fiscal year 2022 (July 1, 2021-June 30, 2022), a refresh of the Babies Born Healthy program was conducted, to focus program priorities on decreasing racial disparities in infant mortality. Additional data analysis was conducted by SSDI staff to identify priority jurisdictions for the new iteration of Babies Born Healthy.

In the spring and summer of 2021, MDH drafted a Maryland Maternal Health Improvement Plan (MHIP) to help improve how agencies, organizations, community groups, and residents work together to reduce maternal deaths and complications in Maryland over the next five years. MCHB epidemiologists provided data analysis related to maternal mortality (MMR) such as rates and disparity metrics. Additionally, data analysis on severe maternal morbidity (SMM) was conducted to include racial breakdowns on SMM rates over a 10-year period with projections through 2026. The epidemiology team assisted with calculating the projected reduction of MMR and SMM over time to reduce racial disparities, particularly among the Black, non-Hispanic population. In 2022, MCHB epidemiologists continued to provide data.

Fetal, infant, and maternal data was used to create maternal and infant health (MIH) profiles for each of the 24 jurisdictions in the state. The profiles summarize maternal and child health indicators for each jurisdiction as well as compare to other jurisdictions and the state overall for 2016-2020. The MIH profiles will help inform jurisdictions of at-risk populations and areas of improvement as related to maternal and infant health. The MIH profiles were disseminated in the fall of 2022 and will be updated on an annual basis.

MCHB epidemiologists have been heavily involved in updating the client visit record (CVR) form that will yield data needed for the Family Planning Annual Report (FPAR) 2.0 collection. Activities include reviewing and comparing currently collected family planning data with data to be collected in FPAR 2.0, revising the current CVR form and sharing it with Ahler's & Associates, the vendor that manages the family planning database system. MCHB epidemiologists will also assist with submission of data to the FPAR 2.0 online database in 2023.

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. In addition, the Maryland Department of Health (MDH or the Department) Office of Preparedness and Response (OPR) coordinates the state's public health and medical response during an emergency. OPR coordinates with local health departments, acute care hospitals, federally qualified health centers, Emergency Medical Services (EMS) and other health care entities. OPR additionally provides tools and resources to Maryland residents, including a Family Emergency Communication Plan that provides families important numbers such as the Maryland Poison Control and assists the family in planning to know the contact information for their doctors, electric companies, gas companies, and pharmacies.

Below are specific examples of Emergency Planning that has, is, and will take place for the Maternal and Child Health Population:

Addressing the Network Security Event from 2022

During FY2022, the Department experienced a Network Security Event that resulted in the Department's information and technology systems being taken offline out of an abundance of caution. The event started in December and was confirmed to be as a result of a ransomware attack.

Immediately, the Continuity of Operations Plan (COOP) for the Prevention and Health Promotion Administration and Title V was implemented. Three essential life-saving programs were identified within the Maternal and Child Health Bureau: Newborn Screening Follow-up, Children's Medical Services, and the Women, Infants, and Children (WIC) services. All three COOP MCHB programs met daily to ensure operations would continue. In addition, all Title V and MCH programs met frequently to determine workarounds to ensure operations would continue.

Newborn bloodspot screening was identified as a priority service and an emergency procurement was enacted to complete screening through an external vendor. For both initial screens (collected just after 24 hours of life) and second screens (usually collected around 2 weeks of age), providers were directed to continue to send specimens to the Maryland State Laboratory for subsequent processing and transportation to the PerkinElmer Laboratory. The Newborn Screening Follow-up team met daily to develop new follow up protocols and to troubleshoot any issues immediately. They also met frequently with the Maryland Laboratory Administration to develop new protocols on shared processes of follow up on laboratory results and how to report abnormal test results to providers. The nurses, who are Title V staff, also communicated with providers about the new protocols and responded to provider questions and concerns on behalf of the State Lab when needed. A clinician letter was prepared and sent to all Maryland clinicians on January 10, 2022 and the Newborn Screening webpage was updated with information for providers related to screening and follow up protocols and procedures to request specimen collection kits.

The Children's Medical Services (CMS) Program team also met daily to plan, implement, and troubleshoot workarounds so enrollment applications, pre-authorization requests and claims for payment could continue and that care for enrolled children and youth with special healthcare needs would not be disrupted. While the CMS Program is still largely paper-based, the Program relies on networked printers, scanners and fax machines. Therefore, CMS was able to secure a non-networked printer to continue printing and scanning letters to families, pre-authorization notifications to providers, and required documentation for claims payment.

The Maryland WIC program partnered with local health departments who were also affected by the Network Security Event to provide guidance to local agencies.

While the aforementioned three programs are specifically noted in the COOP, all Title V programs were affected by the Network Security Event. Although this occurred in FY2022, the security event affected documentation and accessibility of FY 2022 and 2023 data, planning of programs and services for SFY2023 and beyond, including this Title V application, and made even the simplest of daily tasks complex and challenging.

Title V Program staff initially had to rely on personal devices or a "hotelling" space of laptops in the state office building and did not have access to any internal shared network drives. Data analytic programs such as SAS were not able to be used and many state-wide data systems were locked down to MDH contact out of an abundance of

caution. The Title V team developed workarounds to continue providing services. Title V staff re-created documents, re-developed reports, developed, implemented and trained on new operational protocols, and developed and implemented new data collection tools - all while using personal or borrowed equipment. As challenging as the situation was and continues to be, the event offered the opportunity for innovation. For example the Children's Medical Services program reviewed their workflow, particularly how heavily paper-based it was, and looked at ways to automate processes. After a successful pilot, they are now rolling out electronic submissions of applications, pre-authorization requests and claim submissions.

Building Title V Emergency Preparedness Capacity

While the MEMA and OPR conduct statewide emergency planning, MDH increases its workforce capacity to create and contribute to emergency plans, protocols, and procedures. The Department requires all current employees to complete an online Incident Command System (ICS) prep course through the State's online training platform and complete the FEMA IS 100, 700, and 800 courses.

Future Plans

In FY2024 the Office of Genetics and People with Special Health Care Needs (OGPSHCN) will partner with Maryland's, HRSA funded, Emergency Medical Services for Children (EMSC) Program. The programs share many goals around preparing CYSHCN for emergencies. The first activity within this collaboration will be to conduct a webinar for healthcare professionals and families on the American Academy of Pediatrics' Emergency Information Form. The newly updated form provides the families of CYSHCN a way to summarize the relevant medical information for emergency providers and easily communicate it. The partnership between OGPSHCN and EMSC will allow the programs to broaden their reach and impact.

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 partners with federal and state organizations to ensure residents have access to health care services and other needed services. Maryland Title V leads various collaboratives and committees. For a full list, please see the supporting document- **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 health care system by implementing the Alliance for Innovation on Maternal Health (AIM) bundles.
- Maternal Health Improvement Program Taskforce: The Title V manager staffs the TaskForce. This past year, co-chairs were elected. Members developed and implemented a strategic plan to improve the health of birthing people in Maryland.
- Morbidity, Mortality, and Quality Review Committee (MMQRC): Title V staff 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 which includes 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 exchanges, professional societies, hospitals, and more.
- Sickle Cell Steering Committee: The committee is charged with establishing institution and community partnerships; establishing a statewide network of stakeholders who care for individuals with sickle cell disease; educating individuals with sickle cell disease, the public, and health care providers about the state options for care of sickle cell disease; and identifying funding sources for implementing or supporting the actions, studies, policies, regulations, or laws recommended by the committee. This includes funding from both private and state, federal, and local government sources.

Title V MCH-Title XIX Medicaid Inter-Agency Agreement (IAA)

Program Outreach and Enrollment

Title V continues 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 number of uninsured individuals over the past 6 years from 10.3% in 2012 to 6.1% in 2021, and is lower than the national rate of 8.6%.[1] The MD uninsured rate was highest for American Indian and Alaska Natives (24.6% in 2021, an increase from 4.4% in 2019) and Hispanics (21.3% in 2021).[2] The uninsured rate remains highest among 26 to 34 year-olds at 10.6% in 2021.[3] In 2021, birthing people's coverage increased from two months to 12 months postpartum.[4]

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

Health Care Financing

Maryland managed care organizations (MCOs) provide services to Medicaid recipients via a network of licensed/certified healthcare providers. All MCOs must cover basic health care benefits such as primary health, prescriptions drugs, acute and urgent care, family planning, prenatal and postpartum care, vision, and lab services. The nine MCOs include: Aetna, CareFirst Community Partners, Jai Medical Systems, Kaiser Permanente, Maryland Physician Care, MedStar Family Choice, Priority Partners, United Healthcare, and Wellpoint.[5] In FY 2022, nearly 85% of medical assistance participants were enrolled in managed care in FY 2019.[6]

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

Through the Total Cost of Care All-Payer Model contract the State of Maryland has entered with the Centers for Medicare and Medicaid Services, the Maryland Primary Care Program (MDPCP) has been developed. A separate office 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.

Waivers or State Plan Amendments

Home Visiting

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 previous HVS pilot required local lead government entities to provide a local match through an intergovernmental transfer.

The Maryland Health Services Cost Review Commission committed $8 million in annual funding to support Medicaid initiatives to address severe maternal morbidity and pediatric asthma. Therefore, during FY 22 and 23, Medicaid

staff worked on statewide expansion of the Home Visiting Services (HVS) pilot, the Maternal Opioid Misuse model pilot, and Medicaid coverage for doula/birth workers services, HealthySteps, and CenteringPregnancy.

Effective January 13, 2022, Maryland Medicaid expanded coverage for evidence-based home visiting services to all beneficiaries through the state plan amendment. Home visitors associated with the HFA and NFP models.

Doulas/Community Birth Workers

Doulas are trained nonmedical professionals who provide continuous physical, emotional and informational support to birthing parents throughout the prenatal and postpartum periods, including labor and delivery. Coverage of doulas are through a state plan amendment.

The Maternal Opioid Misuse Model

The MOM model provides enhanced case management for pregnant and postpartum individuals with opioid use disorder, including screenings for needs related to social determinants of health and maternal anxiety and depression. The MOM model is authorized under 1115 waiver.

Environmental Case Management & Home Visiting to Address Asthma and Lead Poisoning

In 2017, the Maryland Department of Health was approved by Centers for Medicare and Medicaid Services (CMS) for a Health Services Initiative (HSI) as a Children's Health Insurance Program (CHIP) state plan amendment (SPA). This allowed MDH to create a $3 million home visiting program for children with moderate to severe asthma or lead poisoning who are enrolled in or eligible for Medicaid. The program operates in eleven jurisdictions with a high asthma emergency department visits: Anne Arundel, Baltimore City and Baltimore, Charles, Dorchester, Frederick, Harford, Montgomery, Prince George's, St. Mary's, and Wicomico Counties. Once a child is enrolled, the child's family is eligible for up to six home visits to receive: education and training around reducing home environmental hazards that trigger asthma, durable goods that reduce or eliminate home triggers, and case management in conjunction with the family and primary care provider. The program is one of the first such programs in the country for lead poisoned children. This evidence-based program is built on models emphasizing remediation of environmental factors and include the provision of education and training for parents and of cleaning supplies and equipment to reduce environmental factors such as dust mites or common allergens.

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 Medicaid-operated 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, 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 referrals help to identify and address social needs for birthing people.

Title V staff partners with the Maryland School-Based Health Center Program. Specifically, Maryland Medicaid

supports billing practices of Maryland SBHCs by working to uncollapse Medicaid numbers, decentralize SBHC provider enrollment, and research reimbursement issues such as school health physicals and claims denial.

CenteringPregnancy/HealthySteps

CenteringPregnancy is a program that offers group prenatal care for low-risk pregnancies. Discussion sessions for participants cover medical and non-medical aspects of pregnancy, including nutrition, common discomforts, stress management, labor and birth, breastfeeding, and infant care. HealthySteps promotes positive parenting and healthy development for babies and toddlers and aims to decrease postpartum depression, decrease emergency department use, and increase child vaccination and well-child visits. Medicaid offers enhanced payments to accredited practices offering these services. The CenteringPregnancy and Healthy Steps Initiatives are part of the Statewide Integrated Health Improvement Strategy of the Total Cost of Care and not part of the State Waiver or State Plan Amendment.

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[1] Based on the American Community Survey Data

[2] Based on the American Community Survey Data

[3] Further stratification of the data were not available through the dashboard, https://www.americashealthrankings.org/explore/measures/HealthInsurance/MD?population=uninsured_26_34. Accessed 30 June 2023.

[4] Maryland Department of Health. “Maryland Department of Health announces expanded Medicaid coverage for new mothers.” https://health.maryland.gov/newsroom/Pages/Maryland-Department-of-Health-announces-expanded-Medicaid-coverage-for-new-mothers.aspx. Accessed 19 June 2023.

[5] Based on data from Maryland Medicaid Public DataPort.https://www.hilltopinstitute.org/public-dataport/ Accessed 19 June 2023

[6] Based on data from Maryland Medicaid Public DataPort, https://www.hilltopinstitute.org/public-dataport/ . Accessed 19 June 2023. In CY 2021, 256, 137 individuals had no MCOs out of a total of 1, 734, 087.

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

State Action Plan Introduction

Needs Assessment and State Action Plan
Please see the National Performance Measures for Maryland

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

Please see the State Performance Measures:

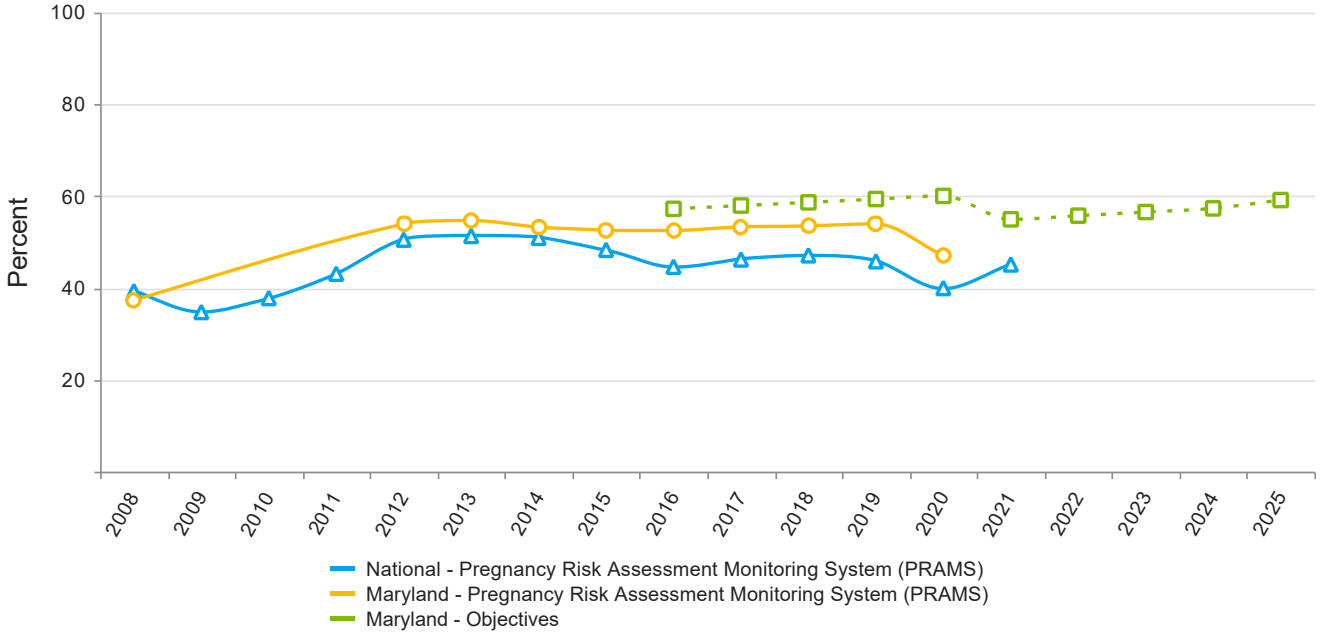
Table 2

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
SPM 5	Percentage of MCHB committees/workgroups that include community members/persons with lived experience	Cross Cutting

Women/Maternal Health

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)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	58.6	59.3	60	54.9	55.7
Annual Indicator	53.3	53.3	54.1	47.0	47.0
Numerator	33,752	33,752	33,888	28,934	28,934
Denominator	63,361	63,361	62,695	61,594	61,594
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	56.5	57.3	59.1

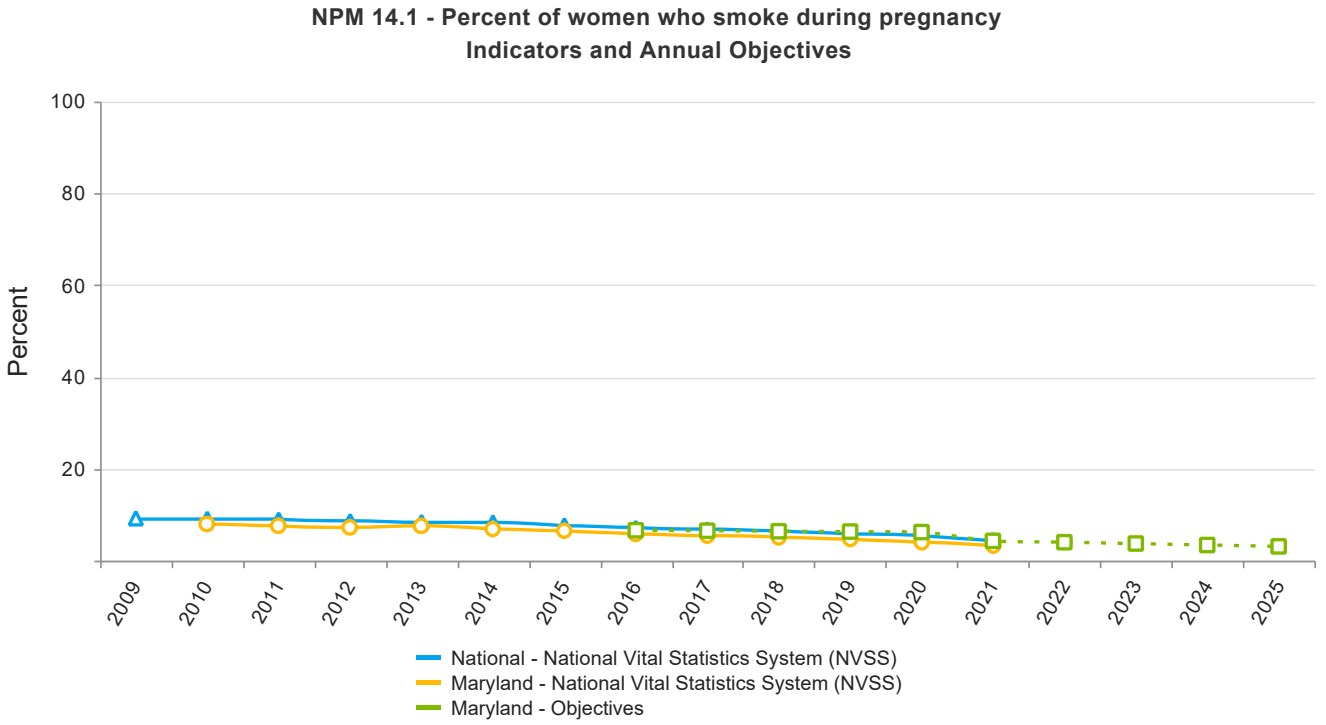
Evidence-Based or –Informed Strategy Measures

ESM 13.1.1 - Percentage of pregnant individuals aged 21 and older on medical assistance in Maryland who receive a preventive dental visit

Measure Status:	Active

State Provided Data				
	2019	2020	2021	2022
Annual Objective			28.4	29.9
Annual Indicator	28.2	28.8	21.6	20.6
Numerator	7,979	8,346	6,666	7,255
Denominator	28,259	28,939	30,925	35,263
Data Source	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report
Data Source Year	CY 2018	CY 2019	CY2020	CY2021
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	31.4	32.5	34.0



Federally Available Data					
Data Source: National Vital Statistics System (NVSS)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	6.5	6.4	6.3	4.4	4.1
Annual Indicator	5.5	5.3	4.7	4.2	3.3
Numerator	3,932	3,719	3,281	2,846	2,262
Denominator	71,324	70,599	69,782	68,236	68,059
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2017	2018	2019	2020	2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	3.8	3.5	3.2

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					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	136	137	139	140	142
Annual Indicator	131	99	86	67	39
Numerator					
Denominator					
Data Source	MDH CTPC Quitline Data	MDH CTPC Quitline Data	Quit Line Data	Quit line Data	Quit line Data
Data Source Year	FY 18	FY 19	FY 2020	FY2021	FY2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	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	2021	2022
Annual Objective			23.9
Annual Indicator	24.1	35.7	27.3
Numerator	334	493	382
Denominator	1,385,375	1,381,029	1,401,834
Data Source	VSA	CDC Wonder using ICD-10 Codes	CDC Wonder using ICD-10 Codes
Data Source Year	2019	2020	2021
Provisional or Final ?	Final	Provisional	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	23.7	23.5	23.3

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	2021	2022
Annual Objective			312.1
Annual Indicator	328.5	381.4	427.7
Numerator	640	690	779
Denominator	19,481	18,090	18,213
Data Source	Health Services Cost Review Commission	Health Services Cost Review Commission	Health Services Cost Review Commission
Data Source Year	2018	2021	2022
Provisional or Final ?	Final	Provisional	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	295.7	279.3	262.8

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 aged 21 and older on medical assistance in Maryland 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 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	

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. Title V programs (e.g., Care coordination, home visiting, and other programs) 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.

Women/Maternal Health - Annual Report

Maryland's priority need for the women's/maternal health domain is "to ensure that birthing people are in optimal health before, during, and after pregnancy." Maryland Title V provided preventive and primary care through direct, enabling, and public health infrastructure services to a variety of women's/maternal health needs in FY 2022.

Services and activities focus on the needs of women and birthing people across the Title V pyramid as outlined by the State Action Plan. Within the maternal health priority area, there are three focus areas in maternal health:

- Focus Area 1: Oral Health measured by the national performance measure (NPM 13.1) of percent of women who had a preventive dental visit during pregnancy.
- Focus Area 2: Substance use prevention and linkages to care and measured with two performance measures:
  - 1) NPM 14.1, percent of women who smoke during pregnancy
  - 2) the state performance measure (SPM 1) of Overdose Mortality Rate for women, ages 15-49.
- Focus Area 3: Reduce rates and eliminate disparities in maternal mortality and morbidity with the state performance measure of reducing severe maternal morbidity rates that aligns with the State Priority that is tied to Maryland' health care financial model called Total Cost of Care.

Focus Area 1: Oral Health

NPM 13.1: Percent of women who had a dental visit during pregnancy. According to Maryland 2021 PRAMS[1] data, 49.3%of mothers had a cleaning during pregnancy, compared with 47% in 2020. The percentage of mothers receiving oral health care during pregnancy in 2021 increased among non-Hispanic Black individuals from 44.3% in 2020 to 46.3%) and among non-Hispanic White individuals (from 53.1% in 2020 to 60.2%). However, the percentage of Hispanic individuals receiving oral health care during pregnancy decreased from 40.0% in 2020 to 31.8% in 2021. Slight increases were seen among mothers (age 20+) with 12 or fewer years of education (37.1% in 2020 to 39.2% in 2021) and among mothers (age 20+) with 13 or more years of education (52.3% in 2020 to 54.5% in 2021). Due to subpopulation response rates not meeting the lower threshold (30 respondents), stratification by age category cannot be reported.

Key partners that work toward improving oral health include the Office of Oral Health (OOH) within the Prevention and Health Promotion Administration, local health departments, and local dental clinics. During FY2022, the OOH shared the updated "Oral Health Care During Pregnancy: Practice Guidance for Maryland's Prenatal and Dental Providers" with community-based organizations, primary care providers, and local health departments. The practice guidelines emphasize that pregnant individuals should make a dental appointment early in pregnancy. In addition, the guidelines share myths versus facts and emphasize important information such as maternal oral health affects future child health. The guidelines also provide information on the oral conditions during pregnancy such as dental caries, pregnancy gingivitis, periodontitis, pyogenic granuloma, and tooth erosions.

In FY2022, Title V funds also supported programming to pregnant people at local health departments throughout the state. A total of 669 pregnant people were referred to dental care by local health departments in FY 2022. The number referred is lower than in FY21 when 1,251 pregnant people were referred and higher than in FY2020 when only 627 pregnant people were referred. However, it is lower than pre-pandemic levels. Of note, for one of the jurisdictions, referrals to Dental care focus on the undocumented and uninsured population. During COVID, the County Dental program experienced numerous challenges including the lack of dentists, hygienists, and dental assistants.

Focus Area 2: Substance Use Prevention and Linkages to Care: This focus area has two performance measures: 1) NPM 14.1, percent of women who smoke during pregnancy and 2) the state performance measure (SPM 1) of Overdose Mortality Rate for women, ages 15-49

Performance Measure 1: NPM 14.1: Smoking during pregnancy*:* In 2020, which is the most available data, Maryland was slightly below the national average for women who smoked during pregnancy, with 4.2% of Maryland women who smoked during pregnancy, compared to 5.5% nationally (National Vital Statistics System).[2] 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 Fiscal Year 2022 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.

In FY 2022, the quitlines enrolled 39 pregnant individuals, which is decreased from FY2021 with 67 enrollments. The decrease is most likely due to decreased funding for outreach and communications available. The Center for Tobacco Control and Prevention is looking to resume further outreach and communications in 24.The Quitline also had 23 participants in the Pregnancy Rewards Programs. The Pregnancy Rewards Program encourages and supports pregnant women that use tobacco to engage in support from the Quitline. This incentive program offers rewards to women who are pregnant and up to six months postpartum who complete a series of calls with a Quit Coach. Eligible callers receive $25 gift cards to Target in four installments, based on a total of ten completed calls (maximum of $100 per participant).

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 FY 2022, 68 individuals were referred to tobacco cessation programs, including the QuitLine. This is a dramatic decrease from FY2020, when a total of 892 prenatal/postpartum people were referred to tobacco cessation programs, including the Quitline above. This has reflected the overall decreases for referral to services due to COVID.

Performance Measure 2: Overdose Mortality Rate for women of reproductive age. (SPM 1)

While overdose mortality rate for women of reproductive age was not a state performance measure during 2016-2020, efforts to prevent overdose deaths are added below to reflect the urgent need to address overdose deaths.

The rate of overdose deaths for women ages 15-49 was 29.7 per 100,000 population in 2020 according to the Maryland Vital Statistics Administration.[3] In Maryland, the number of unintentional drug- and alcohol-related intoxication deaths has decreased from 2020 to 2021.

Preliminary data showed that unintentional overdose was the leading cause of pregnancy associated deaths in Maryland at 38 percent in 2020 (the most recent year data is available from the Maryland Maternal Mortality Review Program). According to the Maryland Behavioral Health Administration, it is estimated that only 21 percent of pregnant people with opioid use disorder received opioid maintenance treatment in 2019, a substantial decrease from 75 percent reported in 2018. This decrease can be explained by multiple factors: Maryland bases this metric on Administrative Services Organization (ASO)-Optum claims data and starting on January 1, 2020, the question, “Are you currently pregnant?” is no longer a mandatory part of the registration process. Additionally, providers have the option to opt out of asking and providing a response to this question. According to Maryland BHA, preliminary data shows that about 80 percent of providers are opting to not answer additional reporting questions. Finally, due to the MDH Network Security incident, there is a delay in data reporting. It is likely that the 21 percent of pregnant people who received maintenance treatment is an underestimate.

Incident characteristics of overdose deaths can be found in the annual Maternal Mortality Review Report, with the latest available report from 2020, which contains data from 2018. In Maryland, from 2010-2018, there were 91 overdose-related pregnancy associated deaths in Maryland, with 75% (n=69) White Non-Hispanic, 20% (n=18) Black non-Hispanic, 3 as other non-HIspanic. On average these overdose deaths occurred 198 days postpartum. Fourteen percent (n=13) had not initiated prenatal care.

The State has developed the Opioid Operational Command Center (OOCC) to coordinate activities to prevent overdose deaths. The OOCC developed an overdose dashboard in 2021 and can be found here: https://experience.arcgis.com/experience/c546d22ec4a946cbb700a282f53c6eb7/

Strategies to decrease overdose fatalities due to unintentional opioid use

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 through the special needs coordinators in the Managed Care Organization.Under the MOM Model, Healthchoice MCOs received a per member, per month (PMPM) payment to provide enhanced case management services, standardized social determinants of health screenings and care coordination, as well as encourage the utilization of prenatal care and behavioral health counseling. In FY2022, the PMPM payments transitioned to the MCH Population Health Improvement Fund, with federal matching dollars authorized under the §1115 HealthChoice demonstration. The St. Mary’s pilot, started in July 2021, continued for an

additional year. The model intends to expand throughout the state, becoming available to all eligible HealthChoice members.

As part of the MOMS Model, the Department, through Maryland Medicaid, partnered with University of Maryland and the Maryland Addiction Consultation Services (MACS) to provide trainings to providers. These trainings encourage the use of buprenorphine for those with opioid use disorder and enrolled 198 practitioners in MACS for MOMs during FY 2021. In addition, there were 44 perinatal calls received through the MACS warmline and they also hosted two webinars with a total of 160 attendees. MACs also launched the MOMS TeleECHO clinic that is held monthly.

Title V Program has been partnering with the Medicaid Maternal Opioid Misuse Model team to expand referrals to the Local Health Departments and Managed Care Organizations through the Maryland Prenatal Risk Assessments (MPRA). Under COMAR 10.09.68.05 the PRA should be completed for Medicaid participants at the first prenatal care visit. Specifically, the Title V Program has emphasized the importance of the PRA during the local health department technical assistance calls. During FY2022, a pilot to integrate the PRA into an electronic format was conducted in the Baltimore metro region. Five clinics were selected to develop the PRA into an electronic format and integrate it into the Electronic Medical Record System. Integration of the ePRA resulted in a 26% increase in total MPRA submissions.

Screening, Brief Intervention, and Referral to Treatment with the Maryland Family Planning Program
The Maryland Family Planning Program (MFPP) values the holistic approach to health service delivery, while noting that family planning service sites often function as the sole source of health care for some populations. Given this, the MFPP expanded services to include the opportunity to identify those with substance misuse and the ability to facilitate a referral for expanded care. The MFPP implemented a comprehensive program-wide training to implement SBIRT (Screening, Brief Intervention, Referral, and Treatment) in FY 2021 and developed a means for data collection for initiative evaluation. SBIRT activities are mandated through policies with the MFPP, as the Title X grantee, while service delivery is provided through collaborations with 22 subrecipients who executed SBIRT through 60 service sites across Maryland..

In FY2022, the MFPP provided services to over 53,000 new and continuing care clients. In that time, there were 113 positive SBIRT evaluations for clients who were referred for further services. 95 were identified as female and 18 identified themselves as male. Of these individuals served, 23 of those with a positive screening, returned to the service site where a referral follow-up was completed. The MFPP subrecipients are tasked with developing resources to support the referral process. The MFPP continues to collect data on screening and referral to treatment in FY23 and has established a continuous quality improvement plan through the quality assurance site review process. It is our goal to continue our partnership with the MDH Behavioral Health Administration to explore other opportunities to expand family planning service delivery with those individuals identified as experiencing substance misuse to reduce barriers to care. Pending the availability of funds, MFPP also intends to provide additional funding to sites to strengthen relationships with substance use disorder treatment centers.

Babies Born Healthy Initiative
During FY 2022, eight sites across seven 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. BBH sites provided care coordination services for high-risk pregnant and postpartum people. All program participants are assessed for resource needs and connected to resources and provided resources on a wide variety of topics, including, but not limited to, WIC and food security, prenatal care, health insurance, and infant safe sleep. BBH sites also provided linkages to care for

further treatment for those who are experiencing substance use or opioid use disorder. Many BBH sites provide extended care coordination for 6 months to a year, for program participants who are experiencing substance and/or opioid use disorder. One BBH site, Anne Arundel County Health Department, provides home visiting and transportation services through their BBH program to program participants experiencing substance use disorder, to address barriers to receiving care and treatment.

Focus Area 3: Reduce rates and eliminate disparities in maternal mortality and morbidity

This focus area is tied to the State Performance Measure (SPM 2) that aims to reduce Black NH to White NH severe maternal morbidity gaps. In addition, this focus area is linked to the national outcome measure (NOM 2) of Severe Maternal Morbidity and NOM 3 of Maternal Mortality. Title V works to achieve this focus area through a lifecourse approach.

As background, this state performance measure is a population health goal tied to Maryland's health care financial model with the Total Cost of Care. As part of the Total Cost of Care, the State proposed to Maryland to focus on population health goals including having goals related to maternal and child health. In FY 2021, Centers for Medicare and Medicaid Innovation (CMMI) approved the State's proposal to focus on Severe Maternal Morbidity and asthma. .

Based on data through October 2022, the State's Severe Maternal Morbidity (SMM) rate was 288.5 events per 10,000 delivery hospitalizations (Health Services Cost Review Commission). This is 18.6 percent higher or 45.4 hospitalizations per 10,000 higher than the 2018 SIHIS baseline. SMM rates were highest among non-Hispanic Black women (405.8 per 10,000) The rate is an increase from the SIHIS baseline of 2018 and 2019.

To understand the root cause of the increase in SMM rates and the impact of COVID in maternal health an analysis was previously conducted by the MCH Epi team on Maryland live births from January 1, 2019 through June 30, 2021. The Alliance for Innovation on Maternal Health (AIM) ICD-10 codes for SMM were used to determine SMM events and the ICD-10 code U07.1 was used to determine a COVID-19 diagnosis during the birth hospitalizations. It was determined that the results of the analysis indicated that COVDI-19 diagnosis contributed to the rising rates of SMM in Maryland birthing people, especially among the Hispanic population. Overall, there was an increase in SMM rate in Maryland by 30% from 226.0 SMM diagnoses per 10,000 delivery hospitalizations in the Q1 period of 2019, to 292.5 per 10,000 in the Q2 period of 2021. When analyzing the increase in SMM rate by race and ethnicity, the largest increase was seen among Hispanic birthing people, at 52% (from 227.4 per 10,000 in 2019-Q1 to 346.3 per 10,000 in 2021-Q2).While the results were analyzed in FY2021 and 2022, the Title V team used this information in FY2022 to provide further information and work with local health departments on their efforts to increase information on COVID vaccinations. This included developing a printable and electronic version of a brochure of *why vaccination for pregnant and breastfeeding people* were important. This brochure was translated into several languages including Spanish, French, Tagalog, Chinese, Russian, and Korean.

To continue the efforts to address the increase in SMM rates in the state of Maryland, through the internship program PHASE (Public Health Applications for Student Experience) a partnership between MDH and Johns Hopkins Bloomberg School of Public Health. MCH PHASE Intern began a literature review to have a deeper understanding of the root causes of the increase in SMM rates. A meeting with the maternal health team in November 2022 helped focus the analysis to three questions:

1) What is the current rate of severe maternal morbidity in the United States?
2) How has the covid-19 pandemic affected maternal health outcomes in the United States?
3) What other initiatives are other states undertaking to address maternal health, specifically severe maternal morbidity?

In December of 2022, the search terms were finalized for the first two questions and inclusion and exclusion criteria were developed. The literature review continued into FY23 and it is expected to result in valuable insights and findings that will contribute to ongoing research and inform decision-making processes.

Strategies to reduce rates and eliminate disparities in maternal mortality and morbidity

Overall, there is a Statewide Maternal Health Improvement Program Strategic and Action plan through the Maternal Health Improvement Task Force that focuses on reducing disparities in maternal mortality and morbidity. Please see the Strategic and Action plan here that uses a life course approach. Please see below for further information on Title V contributions to improve maternal health in the state as well as more information on the Maryland Maternal Health Innovation Program.

Maternal Mortality Review Program

The Maternal Mortality Review Program (MMR Program) reviews all pregnancy-associated deaths (PADs) (deaths during or within one year after the end of a pregnancy from any cause).

Due to delays in receiving data because of the COVID-19 pandemic and the Department's network security incident in December 2021, the analysis of 2020 PADs started later than usual, in Spring 2022. This year was also the first year that the MMR Program utilized the Maternal Mortality Review Information Application (MMRIA) database. MMRIA is built and operated by the Centers for Disease Control and Prevention, to assist MMR efforts and standardize data collected. From a preliminary analysis of 2020 PAD data, behavioral health conditions (which includes substance use disorder and overdose) continue to be the leading causes of death for PADs. We were also able to collect additional information about the impact of the COVID-19 pandemic.

Based on the most recent public data, which is the 2020 report that contains data from 2018, there were 38 pregnancy-associated deaths, resulting in a pregnancy-associated mortality rate of 53.5 deaths per 100,000 live births. Of the 38 pregnancy-associated deaths, 18 were determined to be pregnancy-related, for a pregnancy-related mortality rate of 25.3 deaths per 100,000 live births. Among the 18 pregnancy-related deaths in 2018, the leading causes of death were noncardiovascular conditions, cardiovascular conditions, and suicide, each accounting for three deaths. Homicide, amniotic fluid embolism, and thrombotic pulmonary embolism each accounted for two deaths. The remaining pregnancy-related deaths were single cases of substance use with unintentional overdose, infection, and pregnancy-induced hypertension.

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 pregnancy-related deaths in non-Hispanic Black women was 2.2 times higher than that of non-Hispanic White women.

Further information of the Maternal Mortality Review Report can be found on the Maternal and Child Health Bureau webpage here: https://health.maryland.gov/phpa/mch/pages/mmr.aspx .

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 2022, the Stakeholder group reviewed the results of the 20190 report, and met again to develop their accompanying recommendations. In 2019, the leading cause of PA deaths was substance use/unintentional overdose. Other leading causes included injuries and non-cardiovascular medical conditions. Overall, there continues to be a trend of racial disparities in PR mortality rates for Black pregnant persons compared to White pregnant persons. The Stakeholder group discussed and recommended the need to engage school-based health centers to support adolescent and young adult health. They also further discussed how to improve access to services at the community level, and what programs have been successful. Expanding policies to support birthing people to attend necessary care was discussed, and the group explored models in other states/jurisdictions that might be applicable to Maryland. They also further noted the need to address transportation as a barrier to receiving care, and strategies they have seen used to support patient access.

The Program is also moving towards a multi-disciplinary review team to conduct comprehensive case reviews in line with national best practices for mortality review. In July 2022 the Program released a call for applications to seek additional members to join the Maternal Mortality Review Team (MMRT). We specifically sought members with experience in public health, population health, community birth work, or experiences that would better reflect the experiences of people most impacted by maternal mortality. In Fall 2022 we successfully seated 17 new members, in addition to 16 returning members from the earlier MMR committee. The first MMRT meetings were scheduled for early 2023.

Launching the SIHIS Public Health Funding Initiative

Through HSCRC funding a competitive procurement was pursued to expand evidence-based and promising practice home visiting as well as to increase CenteringPregnancy, a group-based prenatal care program. Evidence-based home visiting programs offer a proven track record in addressing or at least mitigating disparities in healthcare quality and health outcomes by coordinating care, providing education programs, and continuing findings suggest how home visiting can be a mechanism to improve maternal health and reduce maternal morbidity. CenteringPregnancy is an evidence-based model group for prenatal care that brings patients out of the exam room and into a group setting whe they learn from their provider and each other. Below is a description of the sites and home visiting and CenteringPregnancy that were expanded.

Montgomery County Health Department expanded the Babies Born Healthy (BBH) program using the March of Dimes Becoming Mom (BAM) curriculum. BAM improves maternal knowledge through a community-based collaborative model of care, prenatal education and quality prenatal care. BBH will serve approximately 40 high-risk pregnant people beginning at any stage in their pregnancy and follow the mother and infant until the child turns six-months of age in the following high-risk. The program places priority and focus on the following zip codes 20903, 20904, 20906 and 20912 and prioritizes ethnic groups.

Washington County Health Department expanded existing home visiting services through the local program affiliate to Healthy Families America. The program will offer services to 50 additional families starting prenatally over the course of three years and continuing through the child's fifth birthday. Participating families have the option of families to graduate early when the focus child turns three years old and has met the criteria set for graduation by Healthy Families America.

Baltimore Healthy Start (BHS) partnered with Chase Brexton Glen Burnie Health Center to expand home visiting services to postpartum women in Anne Arundel County, particularly in the following zip codes 20724, 21060,21061, 212225, 21226. The program l uses the Great Kids curriculum, designed for home visits beginning in the gestational stage of pregnancy. Families are offered standard BHS case management and care coordination services through th Chase Brexton-based Medication Assisted Treatment for Substance Use Disorder program. The program intends to provide services to 40 additional families annually.

The Family Tree expanded home visiting services in Baltimore City through the new implementation of Parents as Teachers (PAT) model. Home visitors make regular visits from prenatal through kindergarten age. The PAT curriculum focuses on mental health, nutrition, maternal depression, substance use and domestic violence. The program intends provide home visiting services to 20 additional families annually.

Mercy Health Foundation has received funding for FY 2022 and 2023 to implement the CenteringPregnancy mode group prenatal care at their Mead Building location in Baltimore City. The program serves patients from their downtow Metropolitan OB/GYN practice, which serves a high number of individuals that are disproportionately affected by seve maternal morbidity.

Centering Healthcare Institute, Inc. (CHI) received funding in October 2022, to recruit (4) four sites in priority jurisdictions and provide administrative support for the implementation of CenteringPregnancy model of group prenat care, and provide continual technical assistance to sites during their two year implementation phase.

Sexual and Reproductive Health through Maryland Family Planning:
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 61 family planning sites. State Match Title V dollars were used to support the Maryland Family Planning program in FY2021. In May 2019, Maryland withdrew from Title X federal funding in the setting of new restrictions. As of 2021, Maryland has rejoined Title X after earlier restrictions were lifted and the Title X 2021 rule went into effect.

In Fiscal Year 2022, there were a total of 40347 clients and 58302 visits. Overall there was an 18% decrease in the number of clients, and a 14% decrease in visits compared to FY 2021. Of the unduplicated clients seen this reporting period, 26,459 were new clients and 14,478 were continuing clients. This was a decrease from FY2021 with 32,559 new clients (↓ 19%) and 16,881 continuing clients (↓ 14.2%). The decrease is thought to be due to lingering COVID-related impacts.

In FY22, MFPP served 5,478 people who were less than 20 years old. Over sixty 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 Program include: 41.6% Black, 33.1% White, 2.4% Asian, 0.1% American Indian, 25.6% Hispanic origin.

During FY22, many of the MFPP clinics expanded telehealth services adopted during COVID-19. Twelve MFPP agencies were awarded additional federal funds to continue or implement telehealth services in FY23.

Babies Born Healthy Initiative

During FY 2022, eight sites across seven 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. In FY 2022, a total of 1,218 families were enrolled in BBH, and 2,112 families accessed BBH services. There were a total of 516 births among program participants and 10 fetal/neonatal deaths.These jurisdictions were selected to receive funding after 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 FY2022, sites continued to experience challenges due to COVID-19. Many BBH staff are public health nurses in LHDs, and were transitioning back from participating in Maryland's COVID-19 response, to their pre-COVID-19 duties.Families continued to face numerous challenges including job loss and eviction, difficulty in accessing food, loss of childcare, lack of transportation, intimate partner violence, technology limitations, issues in accessing necessary baby supplies, and others.

State Maternal Health Innovation Program

In September 2019, the Health Resources Service Administration awarded Johns Hopkins University (JHU) to participate in the State Maternal Health Innovation Program. The JHU-led initiative, MDMOM, is a 5-year project 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). For the program areas, JHU has partnered with several other organizations, and specifically to coordinate the Maternal Health Improvement Task Force, JHU has partnered with the Department. Title V staff members support the Task Force and their activities.

In FY 2022 the Task Force and Title V staff completed the Maternal Health Improvement Strategic Plan (the Strategic Plan), and identified activities to implement the Strategic Plan. The Strategic Plan process was described in the 2021 report.The Strategic Plan, which was submitted to HRSA in September 2021, has five main focus areas to improve maternal health, particularly in BIPOC populations:

1. Promote Equity and Mobilize Against Racism in Maternal Health
2. Achieve Health (Preconception, Prenatal and Birth, Post Partum, and Interconception Periods) Using the Life Course Model to Support Maryland Birthing People Through Advocacy and Implementation of Effective Policies.
3. Develop Strategies that Acknowledge the Influence of the Social Determinants of Health and Historical Racism to Improve Resiliency for Birthing People, Families, and Communities and to Promote an Optimal Quality of Life.
4. Improve Access and Utilization of Data and Improve Surveillance of Data on Structural Racism and its Impact to Make Informed Decisions.
5. Develop a Maternal Health Provider Workforce that will be Available, Accessible, and that Offers Services Based on the Principles of Cultural Humility, Equity, and Racial Justice.

The Strategic Plan was finalized in November 2021, and published on the MDMOM website. The final version was also shared with the Task Force at the January 2022 quarterly meeting.

In Summer 2022, the Task Force began meeting again in person, starting with a session in June 2022. Members

gathered to further discuss implementation of the Strategic Plan, and how to ensure the Task Force membership represents birthing people across the State. This was further explored at the July quarterly meeting and a September in-person meeting. The Task Force decided to draft a survey, to be distributed through Task Force members to their networks, to better understand who provides services to birthing people. As of September 30, 2022 this survey was in development by the Department in collaboration with the Task Force members and Co-Chairs.

Additionally, the Department was successfully able to establish a mechanism to pay the Co-Chairs for their time related to Task Force activities. This was at the suggestion of the Equity Advisor and members to ensure that community representatives are compensated equitably as other staff members would for serving in this role.

Maryland Perinatal Quality Collaborative

Maryland's Perinatal Quality 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 of best practices.

During 2022, the Collaborative completed two initiatives and transitioned them both to sustainability while planning the next three-year-long projects. The first initiative focuses on improving management of maternal hypertension through implementation of the Alliance for Innovation on Maternal Health (AIM) Patient Safety Bundle. All 32 delivery hospitals in Maryland participated in this collaborative and their work led to a 64.5% relative improvement in the proportion of patients with acute onset of severe hypertension who received treatment within one hour of onset.. The second quality initiative focuses on antibiotic stewardship in the Neonatal Intensive Care Unit (NICU). 26 delivery hospitals in Maryland participated in this collaborative and their work led to 91% of participating hospitals using the Neonatal Early-Onset Sepsis Calculator and significant increases in the proportion of physicians and nursing staff trained in its use.

[1] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.

[2] Please note that access to 2021 data was not available at the time of the submission due to the Network Security Event

[3] Final Data from the Vital Statistics Administration for 2021 are still pending.

Women/Maternal Health - Application Year

Maryland Title V identifies the priority for women's maternal health as ensuring that birthing people are in optimal health before, during, and after pregnancy. Overall in FY 2023, Title V focused on women's health and continued to take a life course approach to understand and address the range of health needs of girls and women across the lifespan.To this end, in FY 2024, Title V will employ the following strategies to improve maternal health outcomes statewide:

Focus Area 1: Oral health: To increase the number of pregnant people receiving preventive dental visits from a baseline of 28% (2019) to over 36% by 2025 (Healthy People 2030 Target: 45%)

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. The ACOG will issue 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 by providing the OOH Resource Guide that contains low cost dental resources in each county, with the goal of increasing access to oral health care for this population. In FY 23, the OOH provided the publication to 630 OB/GYN offices across the state.

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 to Oral Health providers as part of their care coordination.

While Maryland Title V did not transition the Focus Area 1 to a broader NPM of well women visits during FY2023 as the Title V application operates on a five year cycle, Maryland Title V would like to share some of its future plans that highlights women's health during FY 2024. The Secretary of Health has prioritized women's health during FY2023. MCHB and Title V recognizes that as it relates to women's health there are four main strategic opportunities:

1. **Help people realize their sexual and reproductive health goals**. People need access to accurate information and to safe, affordable, culturally-congruent reproductive and sexual health services. People must be informed and empowered to make their own choices including whether or not to have children or not have children. The Maryland Department of Health administers the Maryland Family Planning Program that oversees over 60 clinics across the state to help support the life and health goals of all Marylanders. The Program is undergoing a Statewide needs assessment to better understand access needs, particularly for impacted communities.

2. **Recognize abortion access as fundamentally a health issue.** The American College of Obstetrics and Gynecology,[1] Health and Human Services,[2] the American Academy of Family Physicians[3] recognize that access to abortion is essential to health and healthcare. Owing to a wide range of factors (e.g. interpersonal racism, distance from health care institutions, health insurance status, employment benefits), Black and Indigenous people, immigrants, and rural residents have comparatively limited access to abortion care and other reproductive health services.[4] When people can't prevent or terminate an unwanted or medically risky

pregnancy, can't easily access prenatal care, and live far away from a birthing hospital, clinicians struggle to prevent tragedies and people's health suffer. The Department is implementing the Abortion Clinical Care Training Program. The Program will help expand the number of healthcare professionals with abortion care training, increase the racial and ethnic diversity among healthcare professionals with abortion care education, and support the identification of clinical sites in need of training to increase access to safe abortion care, particularly in marginalized communities.

3. **Eradicate HPV-associated cancers in women and men.** Maryland has the opportunity to eradicate HPV-associated cancers in women and men. Yet too many people are not getting a safe and effective vaccine that prevents six different cancers. In Maryland, approximately 73.8% of girls under age 18 are fully vaccinated against HPV-associated cancers. Nationally, approximately 27% of men and 53.6% of women ages 18-26 are vaccinated. In rural communities, HPV vaccination rates are low, yet incidence and mortality rates of HPV-associated cancers are high. The Maryland Cancer Collaborative is working with the Maryland Chapter of the American Academy of Pediatrics to increase the first dose HPV vaccine rate at 45 provider offices.

4. **Leverage Maryland's unique finance healthcare model, the Total Cost of Care, to evolve our current systems of care and improve health outcomes and eliminate health disparities.** Maryland's Total Cost of Care (TCOC) Program aims to improve quality of care, save healthcare costs, and improve population health. As part of the TCOC, the Maryland Primary Care Program (MDPCP) incentivizes primary care practices and Federally Qualified Health Centers in Maryland to offer advanced primary care services to their patients. While MDPCP currently focuses on the Medicare population, the Program plans to focus on Medicaid recipients in the future. In addition, the Statewide Integrated Health Improvement Strategy (SIHIS) focuses on population health goals such as decreasing Severe Maternal Morbidity and disparities as well as focus on diabetes and opioid use disorder.

Potential Future Objective 1: To increase the number of well-woman visits from a baseline of 73% (2020; BRFSS) to over 78% by 2025.

If the broader national performance measure is approved, the Title V team will continue to work on increasing the number of well-woman visits through partnership. The Title V team and the Maryland Family Planning Program (MFPP) will expand telehealth services in family planning and preventive care services. Maryland Family Planning Services will not only provide family planning services, but also navigate social needs identified through the visits, and link to other primary care providers. For the telehealth expansion, the MFPP will work with 11 local health departments including Baltimore City, Calvert, Carroll, Dorchester, Garrett, Harford, Howard, Prince George's, Somerset, St. Mary's, and Worcester and three non-profit organizations. These efforts promote the goal to increase well women visits as these visits provide preventive care and provide further coordination and referrals to comprehensive primary care visits. During FY2023, the team will begin by assessing existing telehealth resources in local health department family planning sites, identifying needs, barriers and opportunities to enhance services. The collected data will be used to plan and implement a virtual telehealth training and technical assistance program for participating sites. After the training and technical assistance program, MDH will disseminate a comprehensive telehealth toolkit to the 62 MFPP sites, 24 local health departments and all family planning service sites in Maryland.

During the Maryland General Assembly 2021 Legislative Session, Senate Bill 923 was passed that required Medicaid to extend coverage for eligible pregnant individuals with family incomes up to 250% of the federal poverty level (FPL) for one year immediately following the end of the birthing individual's pregnancy. This coverage would include dental care as well as comprehensive medical care. The extended coverage became effective starting April

1, 2022. Title V staff will continue to work with Maryland families to inform them about the extension of the coverage during provision of services such as care coordination and home visiting.

In addition for FY2024, Title V staff will focus on increasing linkages to care, specifically through expanding the Postpartum Infant Maternal Referral Form (PIMR). During FY21 and 22, Title V staff released a PIMR best practices form that reviewed the process of the PIMR. The best practices document explained the purpose of the form, including referring mothers and infants who need additional support and information on community-based services at the local health departments. During the past year, Title V staff piloted the electronic PIMR form in one jurisdictionjurisidction. During the next year, Title V staff will focus on expanding the electronic PIMR through the Regional Information Health Exchange, CRISP.

Care Coordination

Title V staff will continue to improve the quality and expand care coordination at the Local Health Departments to link pregnant and postpartum people to navigate their social needs and to navigate primary care. In FY2022, Title V allowed funding for Local Health Departments, which is mandated by House Bill 314, Laws of 1995 that the Federal Title V Maternal Child Health Block grant must go towards the local health department. Local Health Departments will continue linking pregnant people who are referred through the Maryland Prenatal Risk Assessment and PIMR. Title V has aligned care coordination through the Babies Born Healthy Program, an initiative focused on perinatal care coordination.

Focus Area 2: Substance use prevention and linkages to care through 1) NPM 14.1, percent of women who smoke during pregnancy and 2) the state performance measure (SPM 1) of Overdose Mortality Rate for women, ages 15-49.

Objective 1 for Focus Area 2: To increase the number of women who abstain from smoking tobacco during pregnancy from a baseline of 95.3% (2019) to 96.3% or more (Healthy People 2030).

Smoking During Pregnancy
Referrals to Maryland QuitLine
For Fiscal Year 2023, 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.

In FY2023, the Maryland Family Planning Program will continue to 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.

Objective 2 for Focus Area 2: To decrease the overdose mortality rate for women, ages 15-49 from 24.1 per

100,000 to 22.9 per 100,000 by 2025.

Improve Linkages to Care through Overdose Data to Action
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 (ePRA). During the past year, a pilot project was implemented, the feasibility of implementing an ePRA statewide to increase the number of prenatal clinics referring clients to local health departments for care coordination. During FFY24, Title V staff, in partnership with Medicaid, will begin the expansion of the ePRA statewide. This work will be informed by the lessons learned during the pilot projects in FY22. In addition, Title V will partner with OD2A to expand implementation of an electronic version of the postpartum infant maternal referral form (PIMR), that is used to link birthing people and infants to care coordination at local health departments, statewide. Title V will partner with the State's Health Information Exchange (HIE), called CRISP, to achieve this.

In addition, Title V and OD2A will partner to implement a statewide Perinatal Mental Health Training Hub. The selected vendor will coordinate Hub activities, with the goal of increasing and developing the Perinatal Mental and Behavioral Health workforce in Maryland, to increase linkages to care for pregnant and postpartum people experiencing Perinatal Mood and Anxiety Disorders, and substance use disorder. The vendor will engage with a cohort of public health professionals, including providers of psychotherapy, psychopharmacology professionals, and affiliated professionals such as community health workers, doulas, and peer support specialists, who serve the perinatal population in the target jurisdictions. The applicant will provide opportunities for interprofessional and peer-learning opportunities related to perinatal mental and behavioral health.

Title V will continue to partner with Maryland Medicaid on the Maternal Opioid Misuse Model. Title V staff will continue to serve on the MOM model advisory council. The MOM model advisory council provides input into the model and how to further expand the model in the State. In addition, the Advisory Council will provide input in the partnership with the Maryland Addiction Consult Services.

Focus Area 3: Reduce rates and eliminate disparities in Maternal mortality and morbidity with the state performance measure of reducing severe maternal morbidity rates that aligns with the Statewide Integrated Health Improvement Strategy.

Objective 1 for Focus Area 3: *By 2026, reduce the Severe Maternal Morbidity Rate from a baseline of 242.5 per 10,000 delivery hospitalizations to 197.1 per 10,000 delivery hospitalizations and decrease disparities between Black to White SMM rates by at least 20% .*

Statewide Integrated Health Improvement Strategy (Severe Maternal Morbidity)
Overall, Focus Area 3 is based on the Statewide Integrated Health Improvement Strategy goals. Through an agreement with the Centers for Medicare and Medicaid Innovation (CMMI), the aim of SIHIS is 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.

Overall, as Title V staff will focus on 1) incorporating equity principles into practice either by partnering and working

with more community based organizations 2) shifting committee structures to include people with lived experiences 3) looking for sustainable funding for essential supportive services by partnering with Medicaid.

Maternal Health Innovation Program

In Fiscal Year 2024, the Title V Program will continue to work with the Maternal Health Innovation Program, also called "MDMOM," by Johns Hopkins University, by monitoring the maternal health improvement Strategic Plan (the Strategic Plan). During FY2023, Title V worked with the Task Force to explore how the Strategic Plan could be implemented. The Task Force recommended developing a survey of providers who provide birthing services to individuals in the state. This will help the Task Force better understand the landscape of providers, and identify areas where there are gaps in types of services. The survey will also help the Task Force better connect providers across Maryland. In December 2022 the Department drafted an initial survey, and received feedback from the Task Force members in January 2023. The survey will be implemented among Task Force members' networks in Spring 2023. In FY2024, the Department will work with the Task Force and the contracted Equity Advisor to develop an interactive visualization of the survey results. This is anticipated to be shared publicly at the end of calendar year 2024.

The Task Force will also continue to hone the Strategic Plan to better promote health equity. The Task Force focuses 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 and 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 FY2023 the Task Force will begin updating the Strategic plan objectives and activities using an equity-centered framework[5]. In FY2024, members will finalize their updates to the Strategic Plan, and the Department will assist with preparing an addendum to be included in the published document.

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Statewide Integrated Health Improvement Strategy Funds

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 goes 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. These are services that provide additional support for the most impacted populations and communities. Through partnership with Medicaid, these services can be more sustainable beyond the SIHIS grant fund periods.

A portion of the MCH SIHIS funds went toward grant funds to allow expansion of promising practice programs. For example, while Nurse Family Partnerships and Healthy Families America are the two evidence-based models supported by Medicaid reimbursement, these models are prohibitive in jurisdictions where they have not already implemented the model. The reason is due to start-up costs. For example, starting a Nurse Family Partnership Home visiting program may cost more than $1 million dollars and maintaining fidelity to this model incurs high ongoing costs. During FY 2022, four home visiting sites in priority jurisdictions with elevated SMM events were selected after an open bid procurement. During FY2024, Title V will continue to implement the grant funds and the SIHIS home visiting expansion will begin option year two of SIHIS home visiting expansion services. Below is a summary of the SIHIS home visiting sites: :

Montgomery County Health Department will continue to expand the Babies Born Healthy (BBH) program using the *March of Dimes Becoming Mom (BAM)* curriculum. *BAM* improves maternal knowledge through a community-based collaborative model of care, prenatal education and quality prenatal care. *BBH* serves high-risk pregnant people beginning at any stage in their pregnancy and following the mother and infant until the child turns six months of age.

Washington County Health Department will continue to expand existing home visiting services through the local program affiliate of Healthy Families America. The program offers services to families starting prenatally and continuing through the child's fifth birthday.

The Family Tree *will continue to expand home visiting services in Baltimore City through the Parents as Teachers (PAT) model. Home visitors make regular visits from prenatal through kindergarten age. The PAT curriculum focuses on mental health, nutrition, maternal depression, substance use and domestic violence.*

Baltimore Healthy Start (BHS) will continue to partner with Chase Braxton Glen Burnie Health Center to expand home visiting services to postpartum women in Anne Arundel County. The program uses the Great Kids curriculum, designed for home visits beginning in the gestational stage of pregnancy. Families are offered standard BHS case management and care coordination services through the Chase Brexton-based Medication Assisted Treatment for Substance Use Disorder program.

To expand CenteringPregnancy, an evidence-based model group
for prenatal care that brings patients out of the exam room and into a group setting where they learn from their provider and each other. Mercy Health Foundation was selected as a site to implement the CenteringPregnancy Model during FY2022, and continues to successfully provide services at their Mead Building location in Baltimore City. In FY2023 through a separate procurement, Centering Healthcare Institute, Inc. was selected to provide implementation support of CenteringPregnancy to four (4) additional sites. In FY2024 additional funds will be added to increase the amount of sites by three sites for a total of seven (7) sites

The remaining SIHIS funds 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 FY2024, the Title V program and Maternal and Child Health staff will provide technical support to the expansion programs identified through SIHIS.

Maryland Perinatal Neonatal Quality Collaborative
The Maryland Perinatal Neonatal Quality Collaborative (MDPQC) is focused on addressing maternal hypertension and neonatal antibiotic stewardship. For FY2023, 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 is scheduled for Summer 2022 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 Mortality Review Program
During Fiscal Year 2024, the Maternal Mortality Review Program (the Program) will continue to conduct de-identified, confidential case reviews for all pregnancy-associated deaths to identify factors contributing to these deaths. In

FY23, the Program successfully bidded and awarded a contract for a new administrative vendor. In FY2024, the Program will continue to build on the new vendor's success in establishing more efficient access to medical records, including expanding access to electronic health records.The vendor is also working closely with the Program to request and receive additional non-clinical and social records (i.e. information from local health department care coordination offices) as well as interviews with close family members or contacts. This information will provide increased detail and context for each case that cannot be obtained in the medical records.

Through the support from the Centers for Disease Control and Prevention Enhancing Reviews and Surveillance to Eliminate Maternal Mortality (ERASE MM) program, Maryland moved towards a multi-disciplinary review team in FY23 instead of a predominantly physician-led, medical review team to conduct comprehensive case reviews in line with the national best practices.

In July 2022 the Program released a call for applications to seek additional members to join the Maternal Mortality Review Team (MMRT). We specifically sought members with experience in public health, population health, community birth work, or experiences that would better reflect the experiences of people most impacted by maternal mortality. In Fall 2022 we successfully seated 17 new members, in addition to 16 returning members from the earlier MMR committee.

In FY2024, the Program will continue to recruit for positions that were not filled in FY2023. These include an individual who works with pregnant or postpartum individuals and have expertise in Clinical Social Work, Community Doula Work, Community Birth Work, provision of behavioral health services, or social services such as housing or food insecurity. The Program will also continue to work with the existing MMRT to implement the new MMRIA-informed format of case review, and explore programs to support member wellbeing and self-care.

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 sexual and reproductive health outcomes for men, women and families by improving access to breast and cervical cancer screening, prevention and treatment of sexually transmitted infections, HIV testing and prevention education, infertility and preconception health services, health education and counseling, and referrals to community resources. This program provides access to affordable, broad range of family planning methods to assist individuals with their reproductive life plan, which includes postponing, preventing and achieving pregnancy. a To increase accessibility, the program plans to sustain and expand gains made with their FY23 telehealth Expansion Project. Through training and technical assistance MFPP increased telehealth visits by 37% in FY23. In FY24, the Maryland Family Planning Program will also evaluate SBIRT (Screening, Brief Interventions, and Referrals to Treatment) initiatives implemented in FY23 to improve linkage to substance use disorder treatment and assistance. n addition, the program will continue improving partnerships between substance use disorder clinics and family planning clinics particularly in Western and Northern Maryland. The program's statewide Needs Assessment will provide an opportunity to learn more about the reproductive health gaps among those with substance use disorders. Additional FY24 goals include a focus on addressing clients health needs in order to achieve their reproductive health goals, including improving hypertension screening and management. As all sites have reopened post-COVID, The Maryland Family Planning Program remains committed to providing support to subrecipients as they continue innovative health practices to serve their communities.

[1] ACOG. Facts are Important: Abortion is HealthCare. https://www.acog.org/advocacy/facts-are-important/abortion-is-healthcare Accessed 1 June 2023

[2] HHS. Know Your Rights: Reproductive Health Care. https://www.hhs.gov/about/news/2022/06/25/know-your-rights-reproductive-health-care.html. Accessed 1 June 2023

[3] AAFP. Reproductive and Maternity Health Services. https://www.aafp.org/about/policies/all/reproductive-maternity-health-services.html#:~:text=The%20American%20Academy%20of%20Family,nonevidence%2Dbased%20restrictions%20on%20medical. 1 June 2023

[4] Roberts, D. Killing the Black Body: Race, Reproduction, and the Meaning of Liberty. New York: Vintage, 2014.

[5] https://pubmed.ncbi.nlm.nih.gov/35476759/

Perinatal/Infant Health

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	2021	2022
Annual Objective			93.7	94
Annual Indicator	79.2	93.4	91.6	92.3
Numerator	954	891	854	878
Denominator	1,205	954	932	951
Data Source	VSA	VSA	VSA	VSA
Data Source Year	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	94.3	94.6	95.0

Evidence-Based or –Informed Strategy Measures

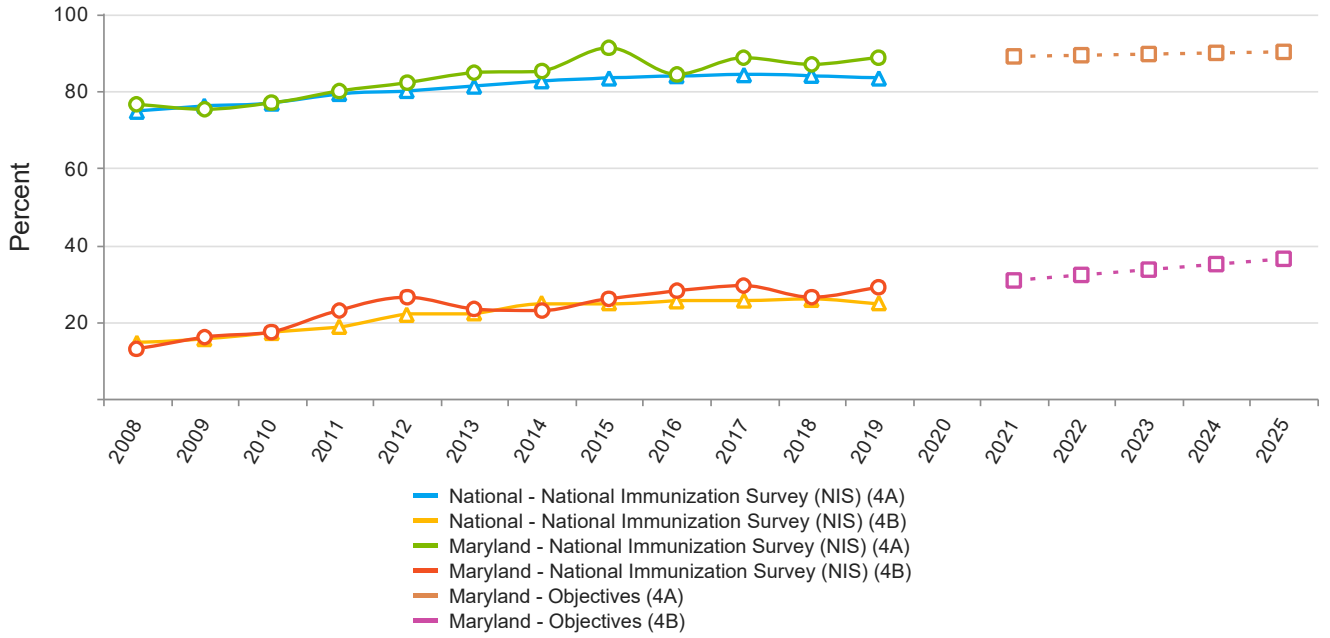
ESM 3.1 - Percentage of Level III & IV Perinatal Referral Centers who received their re-designations based on the 2019 MD Perinatal System Standards

Measure Status:	Active

State Provided Data				
	2019	2020	2021	2022
Annual Objective			93.7	62
Annual Indicator	0	15.4	46.2	53.8
Numerator	0	2	6	7
Denominator	14	13	13	13
Data Source	Program Data	Program Data	Program Data	Program Data
Data Source Year	2019	2020	2021	2022
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	85.0	100.0	100.0

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**	**2021**	**2022**
Annual Objective			88.9	89.2
Annual Indicator	84.1	88.6	86.8	88.5
Numerator	51,263	55,833	59,613	56,625
Denominator	60,967	63,040	68,676	64,001
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2016	2017	2018	2019

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	89.5	89.8	90.1

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

Federally Available Data				
Data Source: National Immunization Survey (NIS)				
	2019	**2020**	**2021**	**2022**
Annual Objective			30.8	32.2
Annual Indicator	28.0	29.4	26.6	28.9
Numerator	16,851	17,961	17,625	17,748
Denominator	60,103	61,137	66,307	61,495
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2016	2017	2018	2019

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	33.6	35.0	36.4

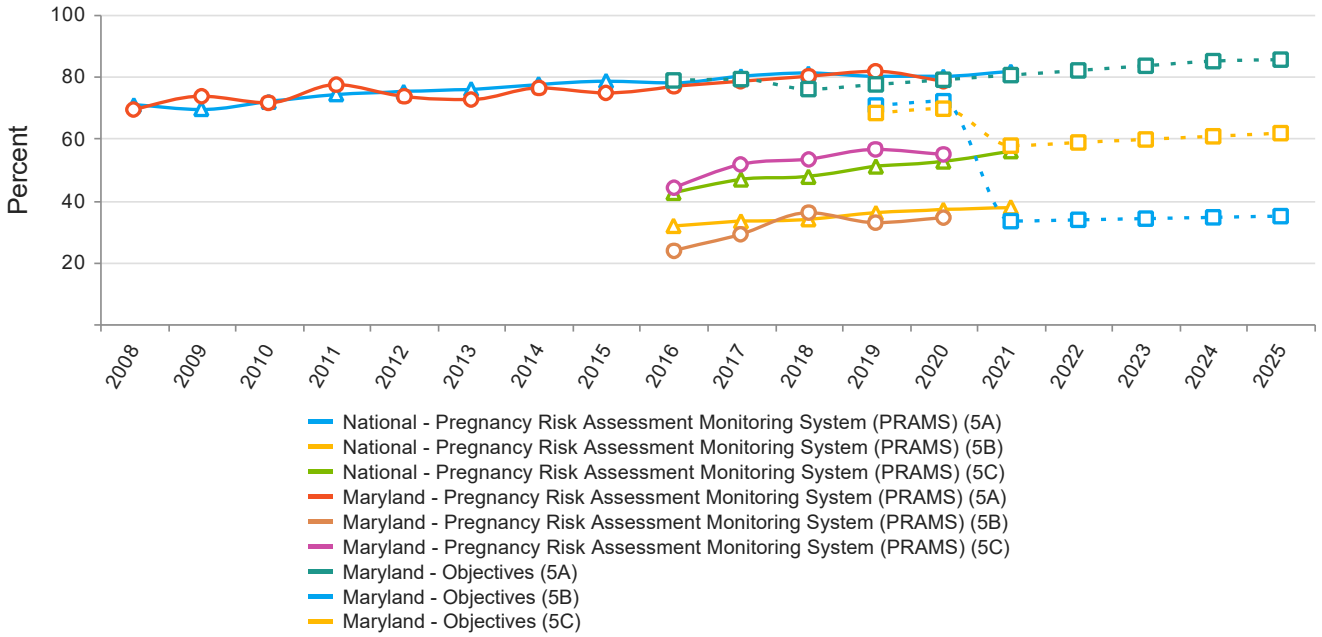
Evidence-Based or –Informed Strategy Measures

ESM 4.1 - Number of birthing hospitals designated as breastfeeding friendly

Measure Status:			Active	
State Provided Data				
	2019	**2020**	**2021**	**2022**
Annual Objective			10	11
Annual Indicator		10	10	10
Numerator				
Denominator				
Data Source		MDH Breastfeeding Policy Committe	MDH Breastfeeding Policy Committee	MDH Breastfeeding Policy Committee
Data Source Year		FY 2020	FY2021	FY2022
Provisional or Final ?		Final	Final	Final

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	12.0	13.0	15.0

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



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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	75.8	77.3	78.8	80.3	81.8
Annual Indicator	78.2	78.2	81.6	78.5	78.5
Numerator	48,293	48,293	50,368	47,476	47,476
Denominator	61,753	61,753	61,754	60,460	60,460
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	83.3	84.8	85.3

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective		70.5	71.9	33.3	33.7
Annual Indicator	29.0	29.0	32.9	34.5	34.5
Numerator	16,948	16,948	19,188	19,974	19,974
Denominator	58,441	58,441	58,412	57,908	57,908
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	34.1	34.5	34.9

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective		68.1	69.5	57.6	58.6
Annual Indicator	51.7	51.6	56.6	55.0	55.0
Numerator	30,441	30,441	32,851	31,754	31,754
Denominator	58,942	58,942	58,015	57,742	57,742
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	59.6	60.6	61.6

Evidence-Based or –Informed Strategy Measures

ESM 5.2 - Number of home visiting or care coordination clients, providers, and other Title V program participants that received infant safe sleep counseling and information

Measure Status:	Active

State Provided Data		
	2021	2022
Annual Objective		
Annual Indicator	6,800	7,552
Numerator		
Denominator		
Data Source	Title V program Data	Title V Program Data
Data Source Year	2021	2022
Provisional or Final ?	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	7,600.0	7,650.0	7,700.0

State Action Plan Table

State Action Plan Table (Maryland) - Perinatal/Infant Health - Entry 1	
Priority Need	
Ensure that all babies are born healthy and prosper 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 Level III & IV Perinatal Referral Centers who received their re-designations based on the 2019 MD Perinatal System Standards	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 prosper 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 prosper 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	Inactive
ESM 5.2 - Number of home visiting or care coordination clients, providers, and other Title V program participants that received infant safe sleep counseling and information	Active

NOMs

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

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

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

Perinatal/Infant Health - Annual Report

Maryland Title V has three priorities for Perinatal Health:

1. Ensure that all babies are born healthy and prosper in their first year
2. Increase the number of infants that are ever breastfed
3. Reduce the number of sleep-related infant deaths statewide.

The Title V program conducted and supported activities to address national perinatal health performance measures in 2021.

Priority 1: Ensure that all babies are born healthy and prosper in their first year

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 2021, the Maryland infant mortality rate was 6.1 deaths per 1,000 live births, an increase of seven percent from the 2020 rate of 5.7 deaths per 1,000 live births, and reflecting a 21 percent overall decrease from the average rate of 7.8 deaths per 1,000 live births from 2012-2016. The non-Hispanic (NH) White infant mortality rate increased by 12 percent from 3.3 (2020) to 3.7 (2021) deaths per 1,000 live births and the Hispanic infant mortality rate increased by 15 percent, from 4.6 (2020) to 5.3 (2021) deaths per 1,000 live births. The NH Black rate decreased by one percent from 9.9 (2020) to 9.8 (2021) deaths per 1,000 live births.

The neonatal mortality rate (deaths under 28 days of age) stayed the same from 2020 to 2021 at 4.1 deaths per 1,000 live births. The rate decreased by one percent among NH Black infants, from 6.8 to 6.7, and increased six percent from 3.5 to 3.7 among Hispanic neonates. The rate increased by eight percent from 2.4 to 2.6 among NH white infants. The statewide post-neonatal mortality (deaths from 28 days through 11 months of age) rate increased by 19 percent, from 1.6 in 2020 to 1.9 deaths per 1,000 live births in 2021. The rate increased 22 percent among NH White infants from 0.9 to 1.1 deaths per 1,000 live births and increased 33 percent among Hispanic infants from 1.2 to 1.6 deaths per 1,000 live births. The postneonatal rate remained the same among non-Hispanic black infants at 3.1 deaths per 1,000 live births. The leading causes of infant death in 2021 were low birth weight (LBW) accounting for 19 percent of losses, congenital abnormalities (17 percent), sudden unexpected infant death (SUID) including Sudden Infant Death Syndrome (SIDS) (12 percent), maternal complications of pregnancy (six percent) and placenta, cord and membrane complications (4 percent). Preliminary data show that there were 74 Sudden Unexpected Infant Deaths in 2021.

Comparing two five-year periods over the last decade (2012-2016 and 2017-2021), the overall infant mortality rate in Maryland has declined by 23 percent. The largest declines in infant mortality over the two time periods were seen in the Eastern Shore area which had a statistically significant decrease of 25.5 percent overall. Cecil and Wicomico counties saw decreases of 15.5 and 22.4 percent, respectively. The National Capital area also saw a significant overall decrease of 24.3 percent in their rate, with Prince George's and Montgomery counties decreasing by 26.8 and 23.0 percent, respectively. The Baltimore Metro Area saw a statistically significant decrease of 22.8 percent overall, with Baltimore City and Anne Arundel County seeing decreases of 22.6 and 37.7 percent, respectively. Rates of infant mortality increased in the Northwest area, with a 9.0 percent increase in Allegany county.
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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 that focuses on maternal and child health, where cases are de-identified to recognize a health disparity in fetal and infant deaths within each jurisdiction. These cases are reviewed to identify preventative measures and action items. Multidisciplinary case

review teams (CRT's) 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 preventable child deaths. FIMR not only provides important insight into opportunities for systems improvement, they also serve as a mechanism for local and regional communication, coordination and collaboration on other MCH issues. In FY 2022, FIMR programs operated in seven of the 24 jurisdictions experiencing the highest number of fetal and infant deaths.

During FY 2022, FIMR process improvements previously identified 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 several jurisdictions, Babies Born Healthy (BBH) staff participated in FIMR and Community Action Team (CAT) meetings, and BBH was also involved in the follow up and outreach process for maternal interviewing. FIMR teams were required to review all cases that were identified as meeting the following criteria: presence of substance use during pregnancy, birth defects or congenital anomalies, racial and ethnic minorities, or coordinate with local Sexually Transmitted Infections/Human Immunodeficiency Virus (STI/HIV) Partner Services to identify appropriate congenital syphilis and perinatal HIV cases. CAT teams were required to address Statewide FIMR recommendations, identify their focus area, and identify three of the following focus areas to align with their recommendations: 1) develop strategies to increase education on safe sleep practices, 2) improving preconception care and early initiation and access to quality clinical care, 3) referral, tracking, and follow-up of high-risk women, and/or 4) systems for treatment and resources related to SUD and substance exposed newborns (SEN).
Community Action Teams (CATs) 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 CATs consists of those with the political will and fiscal resources to create system level changes. These members are able to develop a community perspective on how to best create the desired changes within the community. During FY 2022, Community Action Teams provided recommendations, offered safe sleep resources and personalized messaging to delivering mothers, expanded of home visiting program/services, and offered trainings on birth control options, health department direct services, and high risk pregnancy conditions and severe postpartum warning signs with a goal of improving their ability to serve their clients. Also in FY2022, MCHB began work on several SUID and safe sleep data visualization briefs for dissemination to local health departments and other partners.

Child Fatality Review (CFR):

During FY 2022 MCHB provided Surveillance and Quality Initiatives (SQI) grants to all twenty four jurisdictions to support ongoing Child Fatality Review (CFR) activities, in accordance with the Maryland Health General Article §5-702-704. Both FIMR and CFR team goals align, and there is often overlap in coordination at the local health departments. An annual legislative report is mandated, and includes annual CFR data and the recommendations of the state CFR team. These recommendations are informed by local CFR team goals and findings.

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 preventable child deaths.

Throughout FY 2022, both FIMR and CFR teams continued to readjust to the COVID-19 Pandemic. teams continued to meet via secure virtual meetings, although some teams began transitioning to in-person or hybrid meeting formats. The majority of teams found that virtual meetings improved attendance and availability of members, and many teams were able to add new members that were previously unable to attend in person meetings consistently.

For the NPM 3: Risk Appropriate Perinatal Care, the number of VLBW (very low birth weights, < 1,500g) births at all Maryland hospitals increased slightly from 2020 to 2021, from 932 VLBW deliveries in 2020 to 1,093 VLBW births in 2021 across all hospital levels.

A total of 25,831babies were born at Level I and Level II delivering hospitals in 2021, with 73 of these babies (7.7% of all VLBW births) born at weights less than or equal to 1,500g. There were 42,435 births at Maryland Level III/IV delivering hospitals in 2021, of which 878 were VLBW, making up 92.3% of all VLBW births, This is a slight increase from 2020 with 91.6%.

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, seven (7) are Level I, twelve (12) are Level II, eleven (11) 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 FY21, 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 1,500g 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 2021, the MMQRC reviewed the VLBW data from 2018, and conducted virtual site visits at three Level II hospitals (prioritizing those with higher VLBW deliveries than other Level I and II hospitals). Additional site visits are planned in FY 2023.

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.

The MDPQC Steering Committee was reestablished in August 2020, consisting of physicians, nurses, midwives, and public health experts from hospitals and organizations across the state of Maryland. The Steering Committee, after reviewing relevant data and soliciting hospital input, decided to focus on maternal hypertension and neonatal antibiotic stewardship for our quality improvement topics. The maternal hypertension topic area is being implemented in partnership with the Alliance for Innovation on Maternal Health (AIM). Hospitals were recruited, implementation and data collection plans established, and a kick-off event was held for each topic area (Hypertension on 1/25/21, and Antibiotic Stewardship on 5/7/21). All 32 birthing hospitals were recruited for the maternal hypertension initiative, and 20 hospitals were recruited for the neonatal antibiotic stewardship initiative.

The MDPQC also created a baseline assessment of hospital engagement and readiness, and hospitals continue to submit data to the Collaborative on a quarterly or monthly basis. On the administrative side, a Mission Statement was written, a website created, and a listserv including contacts from all birthing hospitals was launched. Learning events hosted included COVID-19 Information for Birthing Hospitals, Maternal Safety Bundle Implementation, and the first two events of a Respectful Care Webinar Series – “Respectful Care for All Families: Introduction to the Unique Families Program and How it Betters Care for All Patient Populations", and “Respectful Care While Addressing our Implicit Bias”.

Neonatal Abstinence Syndrome (NAS):

Due to the network security incident in Maryland in 2022, the latest available data on neonatal abstinence syndrome is from 2021. The rate of neonatal abstinence syndrome (NAS) among Maryland resident newborns born in Maryland hospitals has decreased 30.2%, from 14.2 per 1,000 newborn discharges in 2017, to 9.9 per 1,000 newborn discharges in 2021 (Case-mix data, Health Services Cost Review Commission). From 2016-2020, 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 a 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.

The Maryland Department of Health led a work group to establish a Statewide definition of Neonatal Abstinence Syndrome. The purpose of this effort is to strengthen and standardize NAS reporting and inform program planning. A multidisciplinary team agreed to the following definition and has communicated the definition to all Maryland birthing hospitals:

- Evidence of maternal use of opioids, benzodiazepines or barbiturates; and at least one of the following:

- Presence of two or more infant withdrawal signs related to NAS
- Birth hospitalization length of stay >three days

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 Fiscal Year 2021, providers from Johns Hopkins Hospital conducted 66 physician and advanced practitioner outreach events and 14 nurse outreach visits. The providers continued to provide technical assistance, education, and case reviews for conditions such as gestational diabetes, antiphospholipid syndrome, and 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. The University of Maryland won a competitive project to take over the Perinatal Support Program beginning in FY 2022.

Babies Born Healthy: In FFY 2022, 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. In FFY 2022, a total of 1,218 families were enrolled in BBH, and 2,112 families accessed BBH services.There were a total of 516 births among program participants and 10 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. In FFY 2022, sites continued to utilize prenatal care groups following research pointing towards their effectiveness in promoting prenatal health and birth outcomes.

During FFY 2022, sites continued to experience challenges due to COVID-19. Many BBH staff are public health nurses in LHDs, and were transitioning back from participating in Maryland's COVID-19 response, to their pre-COVID-19 duties. Families continued to face numerous challenges including job loss and eviction, difficulty in accessing food, loss of childcare, lack of transportation, intimate partner violence, technology limitations, issues in accessing necessary baby supplies, and others.

Priority Area 2: Increase the number of infants who are breastfed

Breastfeeding:
The progress of Priority Area 2 is measured by NPM 4: Percent of infants who are ever breastfed. In 2021, according to PRAMS data,[1] 92.7 percent of Maryland mothers reported having ever breastfed their babies, a 3.1% increase from 89.9% in 2020. Rates of breastfeeding in Maryland were high across all races and ethnicities ranging from 89.4 for Non-Hispanic Black individuals to 98.7% among non-Hispanic Asian individuals.

The Maryland Department of Health's Breastfeeding Policy Committee provides technical assistance to birthing hospitals related to the Maryland Breastfeeding Policy Recommendations. The committee consists of 11 members; 6 MDH staff members including the Title V Manager and 5 birthing hospital representatives. MCHB continues to support all delivery hospitals in the state to become "Maryland Best Practices Hospitals," by either attaining Baby Friendly certification through the Baby Friendly Hospital Initiative (BFHI) or by meeting the ten criteria in the Maryland Hospital Breastfeeding Policy Recommendations. At the implementation of the Maryland Hospital Breastfeeding Policy Recommendations, Maryland had no Baby Friendly designated hospitals. For FY 2021, there were ten that held current designation. Due to the COVID-19 Pandemic, many of the activities of the Breastfeeding Policy Committee were halted including regular committee meetings, redesignation of Baby Friendly Hospitals, updating of training modules, and technical assistance site visits.

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 28,464 (unduplicated) infants during SFY2022 (July 2021-June 2022.) Additionally Maryland WIC staff provided prenatal breastfeeding education to 28,918 unduplicated participants during the same reporting period.

WIC Breastfeeding coordinators started training for their staff on diversity, equity, and inclusion to provide an inclusive environment. In October 2021, WIC Breastfeeding coordinators received a presentation entitled "Equity in Breastfeeding: Voices of Black Mothers." In December 2021, Nekisha Killings, an IBCLC, provided a presentation on breastfeeding and normalizing brown breasts.

Home Visiting: During FY 2021, 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 women to needed community resources such as WIC and breastfeeding. In FY 2021, nearly 3,800 pregnant women enrolled in home visiting services and infants received home visiting services through a local health department. Local health departments reported challenges due to COVID-19 that ranged from local health departments temporarily closing and then adapting to changes after reopening to an overflow of patients in other local health departments that remained open during COVID-19 and the decline in the number served from past years was directly related to COVID-19 closures and restrictions.

Priority Area 3: Reduce the number of sleep-related infant deaths statewide

Promoting infant safe sleep continued to be a priority for Maryland in FY 2020. Progress of infant safe sleep is measured by NPM 5. PRAMS data for 2021[2]0 births indicated that 79.9% of new mothers placed their babies on their backs to sleep (NPM-5A), a slight increase of 1.8% from 78.5% in 2020. This exceeds the Healthy People 2020 target of 75%. The prevalence was highest among NH white mothers (89.6%) and lowest among NH Black mothers (63.5%). Due to subpopulation response rates not meeting the lower threshold (30 respondents), further stratification by age category cannot be reported. In line with the NPM-5B definition, 33.6% of infants were placed to sleep on a separate approved sleep surface. 58.4% of infants were placed to sleep without soft objects or loose bedding (NPM-5C).

In FY 2022, infant safe sleep education was provided to 7,562 families, providers, and other community members through Title V. Jurisdictions such as Baltimore City have a dedicated provider outreach program to inform providers including pediatricians, obstetrics, gynecologists, and the Department of Social Service providers on the importance of focusing on infant safe sleep and the prevention of sleep-related infant deaths.

In addition, through Title V, 5,952 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 FY 2022 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. In FY 2022, Babies Born Healthy (BBH) grantees distributed 623 portable cribs, and SQI grantees distributed a total of 1,274 portable cribs.

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[1] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.

[2] CDC defines the minimum overall response rate threshold as 50% for 2021 PRAMS data. In 2021, Maryland PRAMS had a weighted response rate of 44.1% and thus did not meet the threshold. Maryland PRAMS 2021 data should be interpreted with caution.

Perinatal/Infant Health - Application Year

The Health Resources and Services Administration (HRSA) has identified three National Performance Measures (NPM) for perinatal/infant health: 1) ensuring that higher risk mothers and newborns delivery at hospitals that are able to provide appropriate care (NPM 3); 2) increasing the number of infants who are breastfed and those who are exclusively breastfed through 6 months (NPM 4); and 3) increasing the number of infants placed to sleep on their backs (NPM 5).

To this end, the state of Maryland, as a result of the 2021-2025 Needs Assessment, has identified all three perinatal/infant health performance measures as priorities over the next five years. As part of the objective to improve perinatal/infant health, Maryland will also look to reduce the racial disparities within these performance measures.

Objective 1: Increase the number of very low birth weight babies from 93.4% (Baseline, 2019) to greater than 95% by 2025 will be born in hospitals with the appropriate level of care.

NPM 3: Risk Appropriate Perinatal Care

The strategy selected for this NPM is to continue with the oversight and compliance review of the standardized 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 FY 2024, the MIEMSS Perinatal Advisory Committee will meet quarterly. All Level III and IV Perinatal Referral Center re-designations are up to date, so no further site reviews will occur during FY 2024.

For FY2024, 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 six 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.

During FY2024, Title V will further understand the needs from Level I and II hospitals, Federally Qualified Health Centers (FQHCs), and obstetric care provider practices across the state through key informant interviews and focus groups.

Maryland Perinatal- Neonatal Quality Collaborative

Fiscal Year 2023 will mark 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 program 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 Task Force was convened by the MDH to address the needs of pregnant and postpartum women in Maryland. While the Task Force was previously chaired by the Title V Manager, in order to have a committee led by partners, an election was held to vote for co-chairs. Two co-chairs were elected from a community based organization and another from an academic university. The Task Force developed a statewide strategic plan with five areas of focus: 1) Equity and antiracism, 2) Achieve health using the life course model, 3) Families and Communities, 4) Data, and 5) Workforce. During the next Fiscal Year, Title V will partner with MDMOM and the Task Force to create a resource inventory of maternal health providers and services in Maryland. In addition, TItle V will work with the the co-chairs to continue refining the strategic plan and implementing the outlined activities n through coordination through multiple partners.

Surveillance Quality Initiatives

In FY2024, Surveillance Quality Initiatives (SQI) such as Child Fatality Review (CFR) and Fetal and Infant Mortality Review (FIMR) 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 Fiscal Year 2024 (FY 2024), jurisdictions will continue to address the following priorities as part of their funding:

- Dissemination of information and education on sleep-related infant death and Safe Sleep to reduce sleep-related infant death
- Develop recommendations addressing racial disparities in infant, fetal, and child deaths
- Practices, particularly among communities at highest risk of sleep-related infant death;
- Conduct screening, provide referrals to reduce incidence of substance use disorder and transmission of sexually transmitted infections (STIs) in pregnancy
- Increasing social supports for women during the perinatal and postpartum periods

In addition, jurisdictions will now include a health equity strategy into their program efforts using one of the following priority areas:

- Workforce development
- Analyzing program data by racial/ethnic group to inform program design and to measure progress
- Pursue program or community policy change
- Making data available to your target community
- Engaging community in program development and evaluation

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, our 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 2021, the infant mortality rate in Maryland was 6.1/1,000, representing a 7% increase from the 2020 rate, and a 21% overall decrease from the average of 7.8/1,000 from 2012-2016. Significant racial/ethnic disparities persist and work remains to be done: there was a1% decrease in the non-Hispanic Black infant mortality rate, from 2020 to 2021. Additionally, the non-Hispanic Black infant mortality rate (9.8/1,000) is 2.6 times higher than that of the non-Hispanic White infants (3.7/1,000). There was also an increase in the rate of infant mortality for Hispanic infants, from 4.6/1,000 to 5.3/1,000.

There are currently 7 funded FIMR projects in Maryland, operating in the jurisdictions identified via PPOR analysis as having the highest rates of infant mortality in the state. They include Anne Arundel, Charles, Prince George's, Montgomery, Wicomico, and 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 FY 2024, FIMR CAT teams will be asked to identify gaps and expand interventions to reduce infant mortality, with specific focus on substance use disorder, reducing disparities, and reducing sleep-related infant deaths.

In FY 2024, 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 also look at how a lack of transportation, housing instability, food insecurity contributed to fetal or infant death. In addition, sites will have the opportunity to pilot using the National Center for Fatality Review & Prevention (NCFRP) database to log reviewed case information. Teams will work to identify various findings, recommendations and action steps for improving systems of care for pregnant people 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 use disorder services. A significant part of the review is incorporating the voices of postpartum people who experience a fetal loss in addition to reviewing the medical aspects of the case, with Maternal Interviews being central to the FIMR process. In FY 2024, FIMR teams will focus on Maternal Interviews as a strategy area for quality improvement. FIMR teams will address health equity in their review process and FIMR CAT program to improve health disparities in their local jurisdiction.

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].

Maryland Hospital Breastfeeding Policy

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. During FY24, these state trainings will be updated. They were planned to be updated in FY23, but were unable to do so due to the network security event and the inability to view these modules on the shared drive.

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 and will continue to be available inFY24.

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. These sessions continue to be online. In Fiscal Year 23, these series will be updated. They were not updated in FY22 due to the network security event.

Maryland WIC Program
The Maryland WIC Program continues to be committed to helping families have positive, successful breastfeeding experiences. WIC will continue to provide 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 will continue to provide ongoing one on one support to pregnant and breastfeeding participants.

Objective 3: *Increase the number of babies who are placed on their back to sleep as reported by PRAMS from 78.5% to the Healthy People 2030 target of 88.9%*

NPM 5: Safe Sleep
The Maryland Department of Health will conduct a literature scan, review strategies from other states, and review existing data about infant safe sleep. We will procure a vendor to lead a Statewide infant safe sleep conference in FY2023. This conference will focus on integrating evidence-informed infant safe sleep strategies into practical messaging for a variety of stakeholders. The conference will gather community members with lived experience, community based organizations, local health departments, and other entities to share 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.

Local Health Departments

Local Health Departments through Babies Born Healthy (BBH) and Care Coordination Units will continue to provide information related 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)

During FY24, the new iteration of Babies Born Healthy will be implemented. To develop the new iteration, the Title V team underwent a strategic refresh assessment. This strategic program refresh was informed by a process of assessing the most up-to-date data and evidence and aligning with other major infant mortality initiatives such as the Statewide Integrated Health Improvement Strategy. The refresh process consisted of further examining the following outcome measures to determine jurisdictional priorities: infant mortality rate and numbers by jurisdiction, disaggregated by race and ethnicity, low birth weight, preterm birth weight, access to prenatal care, and other indicators such as social determinants of health indicators and maternal health indicators. Existing programmatic data such as quarterly reports, surveys, and key informant interviews and a scan of evidence-based practices that improve infant health were also reviewed. The renewed focus will be on decreasing disparities, strengthened outcome measures, and building evaluation into the program.

The goal of Babies Born Healthy (BBH) is to identify and link at-risk pregnant people to essential services that have been associated with improved birth outcomes, to decrease disparities in infant mortality, specifically between non-Hispanic Black and non-Hispanic white populations.

In FY 2024, Babies Born Healthy will support the following program areas:

1. Continue Perinatal Care Coordination: BBH will continue to fund Perinatal Care Coordination in eight (8) jurisdictions and specifically with Local Health Departments (LHDs). BBH sites will continue to conduct targeted outreach to engage pregnant people in high-risk neighborhoods in their jurisdiction, and to those who are determined high-risk due to medical or social needs. LHDs will connect clients to medical and social services programs, including establishing a medical home and access to prenatal care. Prenatal care is crucial in preventing pregnancy complications and managing pre-existing and pregnancy-related conditions that could have an adverse effect on both the pregnant person and their infant.[4] Receiving no, or late, prenatal care can result in a number of adverse health outcomes for both the pregnant person and infant, including preterm birth, low birth weight, increased risk of perinatal mood and anxiety disorders (PMADs), severe maternal morbidity, and maternal mortality.[5]Program redesign elements will strengthen care coordination metrics, technical assistance and resources for sites to standardize the sites. Sites will engage with clients who are experiencing PMADs and/or substance use disorder, for a minimum of 6-months postpartum.

2. Initiate a Maryland Doula Training Hub: As part of SIHIS, Maryland Medicaid will reimburse for home visiting and doula provider services. In order to align with Medicaid and SIHIS goals, BBH will support the development of a Doula Training Hub. The Doula Hub will increase the number of doula providers enrolled in Medicaid. Specifically, the Doula hub will facilitate the recruitment, training, and reimbursement of community-based, perinatal doulas, to serve clients in their community during the perinatal period. The hub will provide

technical assistance to participating doulas to become eligible for Medicaid reimbursement for their services. Title V staff has worked closely with Maryland Medicaid to ensure that the Hub is complementary to the new Medicaid benefit that provides Medicaid reimbursement for doula services. Community-based doula programs have been recognized by AMCHP as a best practice, and HRSA is currently funding Community based doula programs under the HealthyStart program as part of their efforts to improve health outcomes before, during, and after pregnancy, and reduce racial/ethnic differences in rates of infant death and adverse perinatal outcomes.[6],[7] Improving access to doula services to high-risk pregnant people can address persistent disparities in health outcomes, while addressing a variety of access needs within a continuum of care framework.

3. Increase the number of CenteringPregnancy sites in Maryland: group prenatal care has been identified as a promising intervention with the best potential to improve maternal and infant health outcomes, and decrease disparities. In Maryland, infants of Black birthing people experience increased rates of infant mortality and preterm birth compared to infants of White birthing people. Additionally, Black birthing people have been found to have nearly twice the rate of severe maternal morbidity (SMM) as compared to White birthing people.The CenteringPregnancy model of group prenatal care is an evidence-based health care delivery model that integrates maternal health care assessment, education, and support. With over 100 published studies and peer-reviewed articles, evidence shows that CenteringPregnancy reduces costs, lowers the risk of preterm birth, closes the disparity gap in preterm birth between Black and White women[8].
4. Build in Evaluation for the BBH Initiative: Additionally, funds will be allocated to support the evaluation of the Babies Born Healthy Program to establish program impact and to inform program evolution in the future

In FY 2024, there will continue to be strong guidelines on how LHD BBH care coordination programs should plan and execute their care coordination services, including guidance on screening, care planning, and engagement. Babies Born Healthy has also been brought into closer alignment with FIMR/CFR programming in order to synergize reports and incidents of deaths and the jurisdictional response to address the causes of death.

[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

[4] What is prenatal care and why is it important? https://www.nichd.nih.gov/. Accessed February 7, 2022. https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care

[5] https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/rural-health/09032019-Maternal-Health-Care-in-Rural-Communities.pdf

[6] The HealthConnect One CommunityBased Doula Program

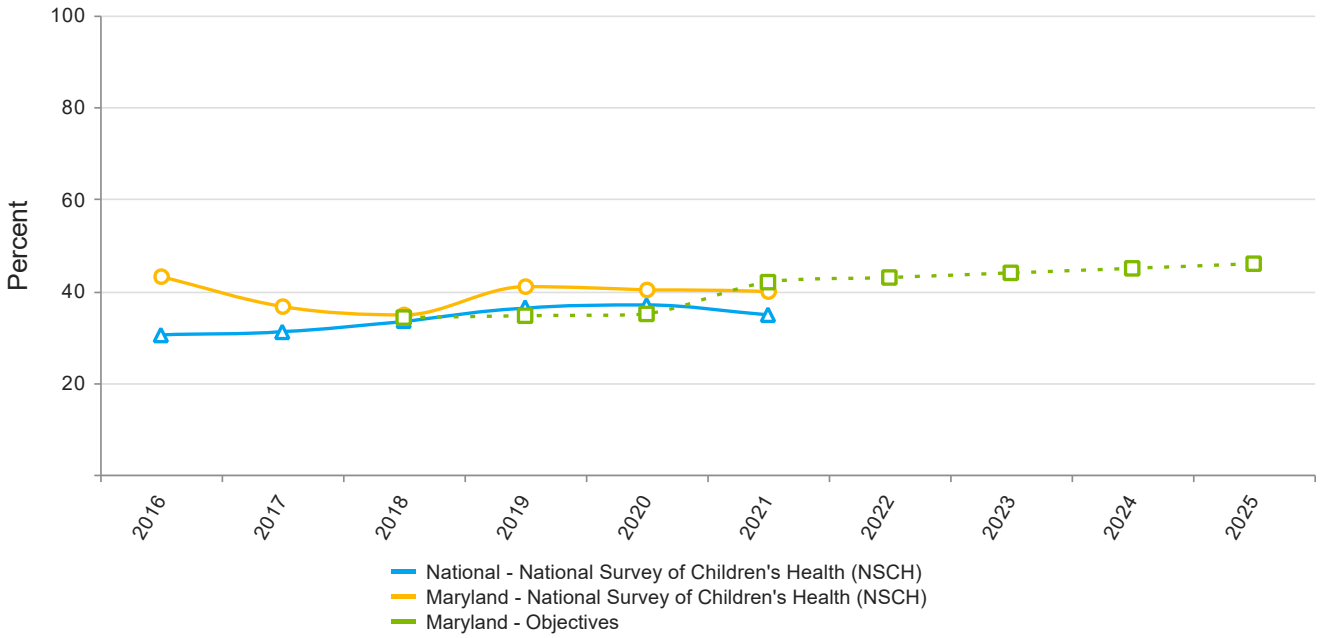
[7] Bohren MA, Hofmeyr GJ, Sakala C, Fukuzawa RK, Cuthbert A. Continuous support for women during childbirth. Cochrane Database of Systematic Reviews 2017, Issue 7. Art. No.: CD003766. DOI: 10.1002/14651858.CD003766.pub6.

[8] https://www.centeringhealthcare.org/why-centering/research-and-resources

Child Health

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)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	34.2	34.6	35	41.9	42.9
Annual Indicator	36.6	34.7	40.9	40.3	39.9
Numerator	49,586	47,097	55,907	57,317	58,486
Denominator	135,327	135,685	136,579	142,190	146,541
Data Source	NSCH	NSCH	NSCH	NSCH	NSCH
Data Source Year	2016_2017	2017_2018	2018_2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	43.9	44.9	45.9

Evidence-Based or –Informed Strategy Measures

ESM 6.1 - Number of parents who receive information/education on the importance of developmental screenings from Home Visiting and Care Coordination Title V providers

Measure Status:	Active

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	1,181	1,201	1,220	1,239	1,259
Annual Indicator	1,035	1,022	749	2,325	5,522
Numerator					
Denominator					
Data Source	MCHB Data	MCHB	MCHB Data	MCHB Data	MCHB Data
Data Source Year	2018	2019	FY 2020	2021	2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	5,600.0	5,650.0	5,700.0

State Performance Measures

SPM 3 - Receipt of Primary Care During Early Childhood

Measure Status:	Active

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	64.6	65.8	67.1	68.2	69.4
Annual Indicator	65.9	67.1	67	71.7	72.1
Numerator	30,621	25,794	24,969	27,940	26,442
Denominator	46,466	38,455	37,253	38,989	36,662
Data Source	Medicaid	Medicaid	Medicaid	Medicaid	Medicaid
Data Source Year	2018 (CY)	2019 (CY)	2020 (CY)	2021 (CY)	2022 (CY)
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	70.6	71.8	73.0

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	2021	2022
Annual Objective			8.5
Annual Indicator	9.2	3.5	7.1
Numerator	10,974	4,213	8,460
Denominator	1,195,993	1,193,543	1,193,543
Data Source	Health Services Cost Review Commission	Health Services Cost Review Commission	Health Services Cost Review Commission
Data Source Year	2018	2021	2022
Provisional or Final ?	Final	Final	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	7.2	6.7	6.2

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 from Home Visiting and Care Coordination Title V providers	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.

Maryland's priority need for the child health domain is "to ensure 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 FY 2022. 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 including local child fatality reviews, access to developmental screenings and medical homes, school-based health services such as hearing and vision screening and referral, behavioral and substance use disorder screening and referral, immunizations, and early intervention services.

National Performance Measure 6 Developmental Screen: According to the National Survey of Children's Health 2020-2021 data, 39.9% 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-care visits by 15 months): Maryland state Medicaid data reported that in FY 2022, 72.1% 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 arm for preventive and primary care services for children. Each of the 24 local health departments receive federal Title V funding through a state core funding process to support direct, enabling, and public health services and systems. In FY 2022, eleven 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 (elementary through high school) 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 speciality care when indicated, linkages to mental health or substance use treatment, and education on secondhand smoke exposure.

For FY 2022, Title V started to see an increase in provision of critical child health services across Maryland. The table demonstrates the number of children served during the start of the COVID-19 pandemic (FY 2020), during the COVID-19 pandemic (FY2021), and later during the pandemic (FY 2022).

Type of Service	Number of Children Served FY 2020	Number of Children Served FY 2021	Number of Children Served FY 2022
Immunizations[1]	16,199	2,934	10,878
Hearing Screen[2]	51,073	4,141	52,728
Vision Screen	46,948	5,091	52,718
School Based Well Visits	20,943	2,509	15,294
Total	135,163	14,675	131,618

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 Unit (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 as the Maryland Health General Article §5-702-704. 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. After each unexpected death, the local CFR teams receive notice from the Office of the Chief Medical Examiner (OCME) of the resident child's (under age 18) death 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, in accordance with the Health General Article.

State CFR efforts to reduce the number of preventable child deaths continued as mandated by the Maryland Legislature. In FY 2022, CFR received 239 referrals from the Office of the Chief Medical Examiner (OCME), and teams reviewed 188 deaths, 79% of all cases referred.

In FY 2022, Title V staff continued to actively participate 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.

The CFR program continues to participate in the ongoing efforts of the CDC Sudden Unexpected Infant Death (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 FY 2022. 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 35 cases entered in the SUID case registry during FY2022, with 29% of cases meeting desired timeliness benchmarks, and over 80% cleaned within 120 days of data entry.

The COVID-19 pandemic proved to be challenging for local CFR programs, with teams being partially or fully detailed to pandemic related duties. Remote reviews positively impacted the local CFR teams as more team members were able to join virtually than in person.

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 Md. Ann. 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 FY 2022, there were 47,258 cases of alleged child abuse and neglect in Maryland. This represents an increase in cases of alleged child abuse and neglect in FY 2020 and FY 2021, but this is likely due to the decreased reporting by school staff in FY2020 and FY 2021 due to school closures due to the COVID-19 pandemic. Data is reported on an annual basis, within the CHAMP Annual Legislative Report.

Multidisciplinary teams (MDTs) are comprised of medical professionals, Child Protective Services staff, law enforcement, mental health providers, forensic interviewers, state attorneys, and victim advocates. They 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 6,000 children each year with 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 FY 2022, 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

In FY 2022, LifeBridge Health continued as the grantee awarded to implement the CHAMP Initiative. In FY 2022, the CHAMP faculty developed a website, Maryland Child Abuse Medical Professionals (https://www.lifebridgehealth.org/main/child-abuse-medical-professionals-champ). The website includes information to support the CHAMP initiative including clinical resources, a list of local CAC contacts, referral guidelines, mental health resources, and resources for professionals and parents. The CHAMP faculty met monthly 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. Through the use of a secure, HIPAA-compliant online

program called XIFIN (Telecam), CHAMP faculty provided case review services to local providers. This platform allows local providers access to consultation services and allows them to upload case information and images to the secure website, accessible only to CHAMP faculty, for review.

In FY 2022, CHAMP held two half-day continuing education events for health care providers to review a variety of child maltreatment topics, including: “Practical Approaches to Caring for Children with Trauma” and “New National Children’s Alliance Medical Standards for Sexual Abuse and Physical Abuse”. Each educational event also included an interactive case review session, where providers presented child abuse cases and participated in a discussion of the case, their evaluations, and findings. 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 particularly helpful for those who practice in lower volume jurisdictions and may not have opportunities to observe and assess less common findings in a clinical setting. CHAMP faculty members also provided quarterly reports on the number of cases reviewed through Telecam.

Medical Evaluation Capacity

Insufficient medical evaluation capacity continues to be a persistent challenge across the State. The CHAMP faculty identified all the medical partners associated with Maryland’s CACs, and continued significant outreach throughout FY 2022 to identify both CACs lacking medical support, and those medical partners who were not yet engaged with CHAMP training and peer review services. Medical staff who serve the CACs include pediatricians, sexual assault forensic nurse examiners, medical directors, and medical representatives for the multi-disciplinary team. The vast majority of centers do not employ their own medical providers. Almost all centers work with local hospitals to provide medical staff on a part-time, as-needed basis. In order to enhance medical evaluation capacity, especially in Southern Maryland, CHAMP faculty have continued outreach to providers in St. Mary’s, Prince George’s and Charles County to recruit medical staff who serve the CACs. CHAMP faculty also purchased a Cortexflo camera for Carroll and Talbot County, to ensure their ability to take evidence grade photographs and videos with secure storage capacity for forensic medical examinations.

Training and Standards

In order to expand access to training, expert consultation and peer review, CHAMP faculty are working to identify ways to collaborate with physicians and nurses from around the state of Maryland. Currently, the majority of our faculty are located in Central Maryland, with one faculty member located on the Eastern Shore and another in Frederick County. CACs in Western, Southern, and Eastern Maryland are often at a disadvantage when it comes to identifying and training new providers. Therefore, it was necessary to improve the quality of virtual training experiences and to reduce barriers to in-person clinical training opportunities. To address this barrier, the CHAMP faculty experimented with a hybrid training for both virtual and in-person attendees.

Accreditation Process

Each year, the Maryland Children’s Alliance (MCA) reaffirms the establishment of their CAC standards to meet national accreditation. These standards include the presence of multidisciplinary teams, cultural competency and diversity, fact-finding forensic interviews, victim support and advocacy for caregivers, a formal case review process, and creating a comfortable, safe, private child-focused setting. Along with MCA, CHAMP faculty have committed to continue 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 gaining National Children’s Alliance (NCA) accreditation. Additionally, CHAMP faculty will continue to assist CACs in meeting newly updated medical evaluation standards.

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 MCA, the CACs, and the CHAMP Faculty to increase collaboration and reduce gaps in the identification and evaluation of victims of child abuse and maltreatment.

[1] This includes the number of immunization records reviewed as well as immunizations provided

[2] This includes children (1-21) who were screened for hearing.

Child Health - Application Year

The state of Maryland identifies the objective for child health as “ensuring all children have the opportunity to develop and reach their full potential.” To this end, in FY 2024, Title V will employ the following strategies to improve child health outcomes statewide:

Local Health Departments: In FY 2024, 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 continue to include hearing and vision screening, school-based health services including well visits, screening and referral for behavioral health and/or substance use, immunizations, and childhood asthma programming. In FY 2024, eleven (11) out of the 24 local health departments will continue on child health services.

Asthma: Beginning in FY 2022, local health departments were able to use Title V funding for the new State Performance Measure related to reducing child asthma ER visits. Addition of this measure/service was 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 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 strategy 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 of ages 2-17 and decreasing the disparities between Black, Non-Hispanic to White Non-Hispanic rates by 30% by 2026.

In FY 2024, local health departments again may use Title V funding for asthma related programming/services including asthma home visiting or asthma school-based management programs (in collaboration with PHPA’s Environmental Health Bureau); providing 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 (CFR): In FY 2024, all 24 jurisdictions in the state will continue to review all OCME-referred unexpected child deaths. In FY 2024, CFR, Fetal and Infant Mortality Review (FIMR) and Babies Born Healthy programs will continue to 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 Sudden Unexpected Infant Deaths (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 as well as the use of the CDC SUID Algorithm during case reviews.

During FY 2024, the State CFR Team will develop an Advanced Secondary Review process for selected CFR cases, upon request of local teams. The purpose of the Advanced Review team is to review cases upon the special request of the local team. The local team may request a secondary review because there was disagreement about the preventability of death.

Local teams will continue to provide letters to birthing hospitals upon review of an infant sleep-related death of an infant born at that hospital, to ensure that there is ongoing engagement around safe sleep education from birthing hospitals. Title V will continue to further develop its Infant Safe Sleep Plan based on the needs from key informant interviews with providers, Local Health Departments, and community-based organizations and from recommendations from the State CFR team. The plan will include updating the Bureau's website with resources for caregivers, providers, Local Health Departments and promoting the use of the Infant Safe Sleep one pager.

In FY 2024, the State team will host their first annual meeting in three years. This will include training and discussions on the CFR process amongst the local teams. It will also include trainings selected by the 24-member State team. In the past, the annual conference had sessions that included topics such as youth suicide prevention and building community partnerships as well as trainings such as Diversity, Equity, Inclusion trainings.

School-Based Health Centers (SBHCs): Maryland's SBHCs represent an essential and innovative strategy for improving the health and educational achievement of Maryland's children and their families. SBHCs are conveniently located where students spend most of their day and can therefore address the unique needs of children and youth through increased access to medical, mental, dental and/or other health related services. As of June 2023, there are 91 SBHCs located in 17 of the 24 Maryland jurisdictions. SBHCs are integrated with Title V-funded programming through shared performance measures, alignment of initiatives across the state, and coordination of services.
The Program has several Strategic Priority Areas including:

1. Build a sustainable financial model for SBHCs that equitably supports their missions
2. Expand comprehensive school-based healthcare services (e.g. preventive, behavioral, and oral health) in historically disenfranchised and underserved communities.
3. Define and standardize the expected quality of care provided by SBHCs in the Maryland SBHC Program.
4. Develop a robust foundation of accessible data that is relevant to SBHC operations, quality of care, educational impact, and value.

In FY 2024, the SBHC program will continue to partner with Medicaid to expand Medicaid claiming for SBHC services and reduce the impact of barriers for SBHCs to bill Medicaid to address Strategic Priority Area 1. The SBHC Program will continue to partner with Medicaid to investigate claim denials from Managed Care Organizations, ensure that all SBHCs use an Electronic Health Record (EHR), and facilitate a connection for each SBHC with CRISP, regional Health Information Exchange. This increased access to high-quality care in communities with high health disparities will support the state's continued journey towards health equity. These efforts will complement the grant funds that are awarded to SBHCs.

In FY 2024, the Maryland SBHC Program will use information gained from a statewide needs assessment conducted during FY 2023, stakeholder input, and best practices collected from existing SBHCs to support the opening of new SBHCs in high-need communities with limited access to healthcare services (Strategic Priority 2). The Program will provide startup grant funds as well as develop tools and provide technical assistance to interested organizations.

The Program will also conduct site visits to review the quality of care provided by SBHCs in the Maryland SBHC program (Strategic Priority 3) and will continue to update the Program's annual survey to collect data that is relevant to SBHC operations as well as education and health impact (Strategic Priority 4).

(CHAMP) Child Abuse Medical Provider Network: In FY 2024, the Child Abuse Medical Provider Network will continue providing services through:

- recruiting and training medical professionals in the area of child maltreatment
- providing ongoing support for medical professionals
- providing support Child Protective Services (CPS), Child Advocacy Centers (CACs), law enforcement, state attorney's offices, pediatric offices, and other professionals

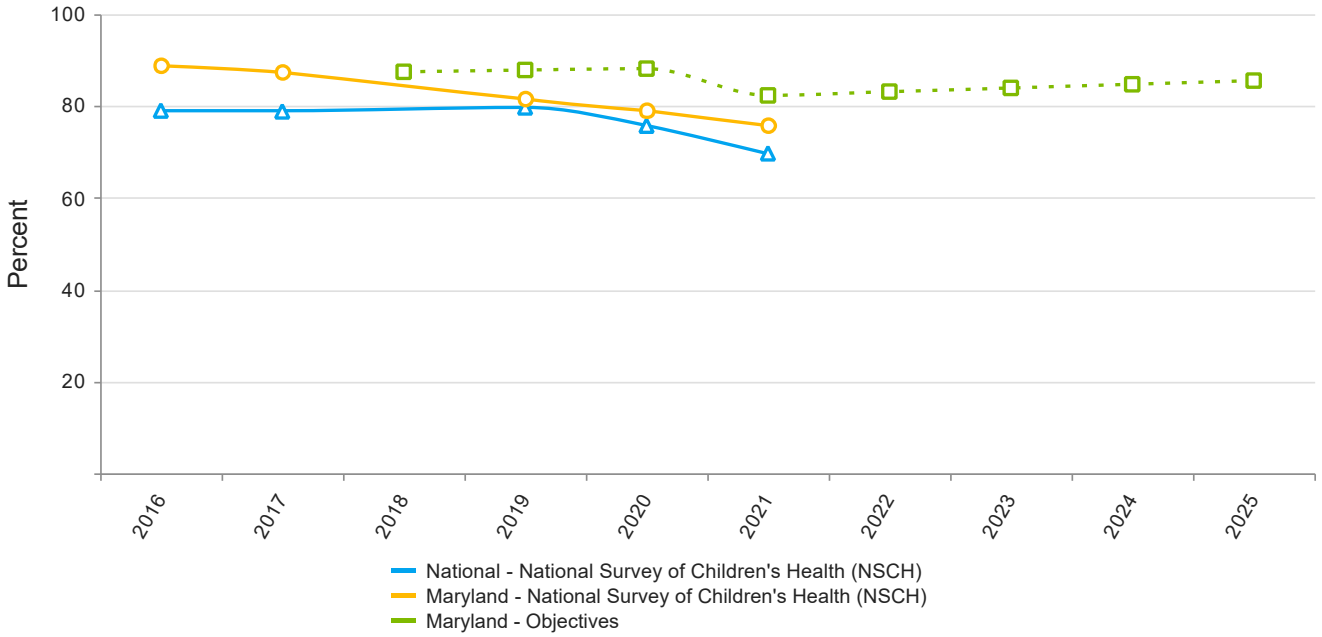
- developing policies and practice guidelines to improve the system's response to children and families with concerns of possible abuse and neglect.

In addition, providers of CHAMP, also known as faculty, will work with Child Advocacy Centers to make sure that they are using a HIPAA-compliant chart review platform when conducting peer reviews.

Adolescent Health

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)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	87.3	87.7	88	82.2	83
Annual Indicator	87.1	87.1	81.4	78.7	75.7
Numerator	386,469	386,469	359,586	355,101	349,202
Denominator	443,800	443,800	441,589	451,033	461,338
Data Source	NSCH	NSCH	NSCH	NSCH	NSCH
Data Source Year	2016_2017	2016_2017	2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	83.8	84.6	85.4

Evidence-Based or –Informed Strategy Measures

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

Measure Status:	Active

State Provided Data				
	2019	2020	2021	2022
Annual Objective			45,000	60,000
Annual Indicator		37,578	798	14,190
Numerator				
Denominator				
Data Source		MCHB Data	MCHB Data	MCHB/Title V LHD Data
Data Source Year		FY 2020	FY2021	FY2022
Provisional or Final ?		Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	75,000.0	90,000.0	110,000.0

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	2021	2022
Annual Objective			8.5
Annual Indicator	9.2	3.5	7.1
Numerator	10,974	4,213	8,460
Denominator	1,195,993	1,193,543	1,193,543
Data Source	Health Services Cost Review Commission	Health Services Cost Review Commission	Health Services Cost Review Commission
Data Source Year	2018	2021	2022
Provisional or Final ?	Final	Final	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	7.2	6.7	6.2

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 health services and 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 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 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

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."

State Performance Measure 4: Decrease the number of asthma Emergency Department (ED) visits from a baseline of 0.3 ED visits per 1,000 for ages 12-17 (2019) to 0.1 in 2026.

During FY 2022, Title V added a state performance measure to align with a State's goal to reduce asthma-related ED visits. 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 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 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.

Asthma: Beginning in FY 2022, local health departments were able to use Title V Core Public Health funding for the new State Performance Measure related to asthma programming. The addition of this measure/service is to align with the Statewide Integrated Health Improvement Strategy (SIHIS). These services include expanding asthma- home visiting, collaborating with providers and the health information exchange in their region, and school based health services to improve asthma health in Maryland.

Title V partnered with the Environmental Health Bureau (EHB), also within the Prevention and Health Promotion Administration (PHPA), to create the Asthma Community of Practice (CoP). The vision for the CoP is that all people and families living with asthma in the state of Maryland receive the best possible care so that asthma does not affect their quality of life, and with the mission of improving practice through information and resource sharing. The Asthma CoP is composed of representatives from local health departments and community organizations such as Green & Healthy Homes Initiatives, Johns Hopkins School of Medicine Department of Pediatrics, local community organizations, and insurers.

National Performance Measure 10- Adolescent Well Visit: According to the National Survey of Children's Health 2020-2021 data, 75.7% of adolescents ages 12 to 17 received a preventive medical visit in the past year.

In FY 2022, Maryland Title V provided funding to local health departments to address adolescent health needs. Additionally, MCHB's Office of Family and Community Health Services (OFCHS) administered the Maryland Optimal Adolescent Health (MOAHP), Personal Responsibility Education Program (PREP), and the Sexual Risk Avoidance Education Program (SRAE) grants focused on adolescent reproductive health/wellness.

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. While in FY2021, school-based health services were dramatically affected by the COVID-19 pandemic, services increased in FY 2022. During FY 2022, there were 15294 number of middle school children who received school services and 14190 number of high school children who received school services, compared to a total of 798 students served in FY 2021.

In addition, Maryland Title V and initiatives within MCHB supported adolescents by providing family planning services. During FY 2022, 939 adolescents received a comprehensive reproductive health exam. Additionally, 759 adolescents received counseling for behavioral health and substance use, and 61 adolescents received a referral for care or treatment through a partner focusing on substance use and behavioral health. Through Title V funds and through Title V matching funds, the Maryland Family Planning Program provided services to 5,292 individuals who were less than 20 years old. This represented 13.7% of the total clients served by the Maryland Family Planning Program.

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), (re-branded as True You Maryland), is a collaborative effort between Healthy Teen Network, Johns Hopkins University Center for Adolescent Health, local health departments and school and community-based programs in 6 rural jurisdictions. True You Maryland programs have been established in Allegany, Dorchester, Somerset, Washington, Wicomico and Worcester counties. 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 True You Maryland program 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 FY 2022, approximately 1,384 youth were served by the program. Local True You Maryland programs provided training for county health education teachers in 4 counties and worked to get the Positive Prevention Plus (3Ps) evidence-based curriculum approved for implementation by local county school boards. Each county also formed local systems teams, which are composed of a variety of stakeholders including, but not limited to, health department and school system staff, medical professionals, parents, youth, educators, social service organizations, law enforcement, child welfare agencies, businesses, faith-based and youth serving organizations.

Each local program has formed a youth advisory board to ensure that youth voice plays a critical role in the local priorities set forth by the program and that the program activities are relevant and responsive to the needs of county youth.

Program challenges included school scheduling disruptions due to COVID-19, the reassignment of some local health department staff to COVID-19, and delays in approval of the Positive Prevention Plus (3Ps) curriculum by local school boards.

PREP: Title V 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 program 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 access school based reproductive health services, sexuality education (comprehensive and abstinence-based) and production and dissemination of adolescent health data briefs.

PREP program implementation occurred in 8 jurisdictions across the state, including Allegany, Anne Arundel, Baltimore City, Dorchester, Prince George's, Washington, Wicomico, and Worcester counties. PREP's sub-grantees provided services to 1,102 youth through various evidence-based curricula, outreach, and supportive program activities in community and faith-based organizations and local health departments. PREP programs were implemented in a variety of settings across the state including a YMCA, county high schools and churches.

PREP also funded Project KISS (Keeping It Safe Sexually), a college-based peer educator training model through a collaboration of MDH, University of Maryland Eastern Shore, and Salisbury University. In FY 2022, Project KISS provided training for 16 peer educators. This training equips peer educators with the skills required to provide reproductive health education to fellow students on campus. Approximately 1,094 students were seen between the two campuses. Project KISS also supports health screenings; 65 students received HIV testing.

The COVID-19 pandemic impacted recruitment and engagement efforts, and the number of students enrolled in the program decreased.

SRAE: The Sexual Risk Avoidance Education (SRAE) program is implemented in 7 jurisdictions through local health departments in Baltimore City, Caroline County, Garrett County, Somerset County, Washington County, Wicomico County, and Worcester County as well as two community-based organization grants. The community based grants were awarded to the YMCA of Cumberland in Allegany county and Community Builders, Ltd, a youth service organization that operates in Prince George's County. The community partners were selected through a competitive bid process.

The SRAE program approach is guided by a Positive Youth Development Framework which teaches self-regulation, healthy relationship skills, goal setting, and risk reduction strategies related to sexual coercion, dating violence, illicit drug use, and underage drinking to middle and high school age students. In FY 2022, schools across the state began to return to in person instruction which enabled many programs to resume in person implementation. In FY 2022, 2,088 students participated in programmatic activities statewide. This was an increase from FY 2021, when 1,372 students participated.

Specific program activities in FY 2022 included youth summer camps, virtual and in-person parent education workshops, community service projects and a Parent-Child cookout for 8th graders transitioning to high school and their parents.

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 FY 2024, Title V will continue to employ the following strategies to improve adolescent health outcomes statewide:

SPM 4: Decrease the number of asthma Emergency Department (ED) visits from a baseline of 0.3 ED visits per 1,000 for ages 12-17 (2019) to 0.1 in 2026

Asthma Collaboration: Beginning in FY 2022, local health departments were able to use Title V funding for the new State Performance Measure related to asthma programming; this measure/service was added to align with the Statewide Integrated Health Improvement Strategy (SIHIS).These services include expanding home visiting to address asthma, collaborating with providers and the health information exchange in their region, and school based health services to improve asthma health in Maryland.

As background for 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 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 a Memorandum of Understanding (MOU) that required Maryland to provide a proposal SIHI 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 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.

Title V partnered with the Environmental Health Bureau (EHB), also within the Prevention and Health Promotion Administration (PHPA), to create the Asthma Community of Practice (CoP), whose vision is that all people and families living with asthma in the state of Maryland receive the best possible care so that asthma does not affect their quality of life, and with the mission of improving practice through information and resource sharing. The Asthma CoP is composed of representatives from local health departments and community organizations such as Green & Healthy Homes Initiatives, Johns Hopkins School of Medicine Department of Pediatrics, local community organizations and insurers. For FY 2024, Title V will continue to partner with the EHB to host the (3) three additional Asthma CoP meetings with the purpose of:

1. Serve as a forum to exchange best practices and information regarding asthma treatment management and prevention
2. Improve collaboration among stakeholders involved in asthma care
3. Ensure that Marylanders with asthma get the best possible care and access to prevention services.

MDH received feedback on the State’s Action Asthma Plan (AAP) through the Asthma CoP and the 2023 Maryland Asthma Summit, held in person and virtually on May 18, 2023. In FY2024, Title V and EHB will continue efforts to

complete quality improvement for the AAP that will improve the design and use of the AAP used across Maryland. In FY 2024, local health departments can continue use Title V funding on asthma related programming/services, including asthma school based management programs (in collaboration with EHB); provide health care education opportunities on asthma management; develop 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 providers, and specialists.

NPM 10: 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 accordance with House Bill 1148/Senate Bill 830, the administration of the Maryland School-based Health Center Program transferred from the Maryland State Department of Education to MCHB effective July 1, 2022. The mission of the Maryland SBHC Program is to promote and improve the health and safety of all Maryland residents through disease prevention, access to care, quality management, and community engagement. It accomplishes this by providing enhanced health care services in partnership with schools, fostering an essential and innovative strategy for improving the health and educational achievement of Maryland's children and their families. SBHCs are conveniently located where students spend most of their day and can therefore address the unique needs of adolescents through increased access to medical, mental, dental and/or other health related services.

There are currently 95 SBHCs located in 17 of the 24 Maryland jurisdictions which serve over 28,000 students each year. The Bureau supports these SBHCs through annual grants, which are typically combined with local funding to fully support the provision of care. During FY 2023, the Bureau worked to develop a strong foundation for the Maryland SBHC Program. This included revising the Standards for SBHCs in the Maryland SBHC Program (the first update since 2016), hiring 3 new staff members to the Bureau, initiating a learning collaborative among the SBHCs to ensure they have electronic health record access to CRISP, and revising the storage and presentation of the Program's data. The Maryland SBHC Program also conducted a statewide needs assessment to inform the Program's strategic priorities, growth, and structure. The assessment included an analysis of the status of existing SBHCs in Maryland, geographic areas with high health or educational disparities that may benefit from establishing new SBHCs, and recommendations for the development of a SBHC funding allocation that considers health equity, the community's level of need, the paucity of specific services, and the future sustainability of SBHCs.

In continued efforts to improve access to quality care and collaboration of State programs, SBHCs will be integrated with Title V-funded programming through shared performance measures, alignment of initiatives across the state, and coordination of services. For example, a required performance measure for the FY 2023 SBHC grants was the number of patients referred to a local asthma home visiting program. This performance measure was further supported by providing technical assistance about the asthma home visiting program to SBHC clinicians. Fourteen SBHCs also serve as Maryland Family Planning/Title X Program subrecipient sites.

In FY 2024, the Maryland SBHC Program will continue to develop its equitable funding formula, informed by the Statewide Needs Assessment, while also building infrastructure to support new SBHC Sponsoring Organizations that are opening SBHCs in high need communities.

Other adolescent health programs that will continue to be supported by Title V funded staff in FY 2024 include:

True You Maryland (formerly the Maryland Optimal Adolescent Health Program): In July 2020, the MCHB

Office of Family and Community Health Services (OFCHS) was awarded a three year federal teen pregnancy prevention grant. Project funds have been distributed to grantees to deliver evidence-based comprehensive sexuality education programs to teens aged 14-19 living in areas of the state with high rates of teen birth and sexually transmitted infections; Allegany, Washington, Dorchester, Somerset, Wicomico, and Worcester counties.

To date, 1,900 young people have participated in the evidence-based program. Similarly, the project has engaged over 4,100 youth, 230 caregivers, and 4,500 community members across the state of Maryland through outreach, parental engagement, and connections to related health services.

The team was recently awarded a five-year cooperative agreement to continue current work and expand reach through Title X family planning clinics, SBHCs, and community organizations. The team looks forward to leveraging the program to increase referrals to preventive health services, including well visits.

Personal Responsibility Education Program (PREP): In FY 2024 PREP will continue to provide comprehensive sex education in seven (7) counties throughout the state. Youth will receive PREP education in middle, high school, foster care homes and detention centers across the state. Additionally, activities will include a college-based Peer Educator model implemented on the campuses of the University of Maryland Eastern Shore and Salisbury State University. Local health departments will continue to collaborate with faith-based and community organizations, as well as schools, to implement PREP, which should reach a minimum of 1700 youth and 160 parents/caregivers with a combination of evidenced based curriculum instruction, parent education, and enrichment programs.

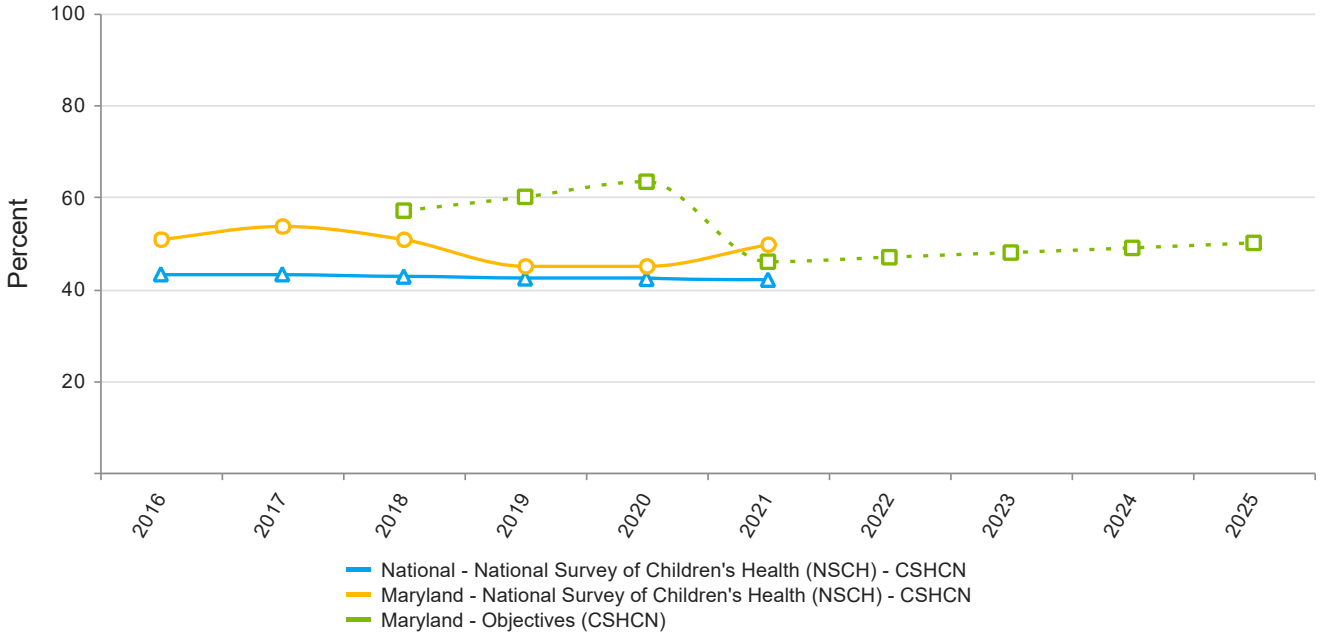
Sexual Risk Avoidance Education (SRAE): In FY 2024 Maryland will continue to provide SRAE to middle and high school students across the state through curriculum implemented through local health departments and community partners in health classes, on campus after school programs, and in community settings. The SRAE program will continue to reach a minimum of 500 youth and 100 parents/caregivers in 7 counties with a combination of curriculum instruction, parent education, and enrichment programs. Ongoing topical training and professional development will be provided to meet the needs of program staff as a means to enhance their work.

Children with Special Health Care Needs

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					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	57	60	63.3	45.9	46.9
Annual Indicator	53.4	50.6	44.9	44.9	49.5
Numerator	137,990	130,334	117,076	122,840	131,816
Denominator	258,184	257,564	260,596	273,531	266,095
Data Source	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year	2016_2017	2017_2018	2018_2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	47.9	48.9	50.0

Evidence-Based or –Informed Strategy Measures

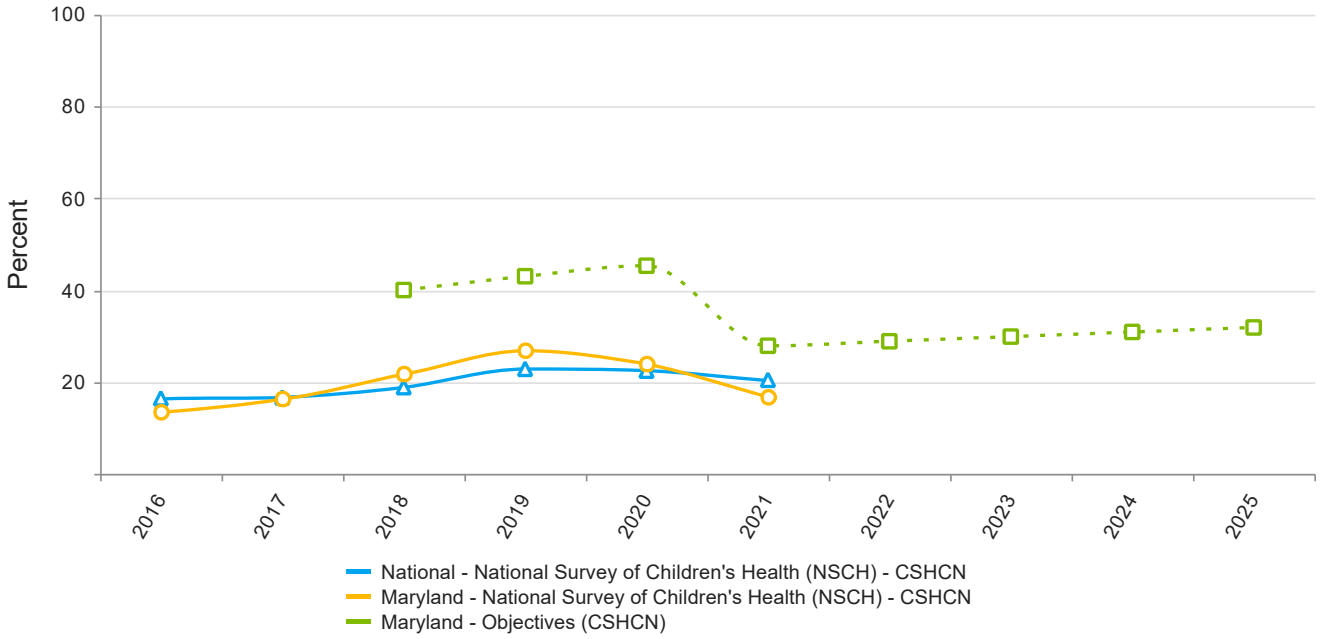
ESM 11.1 - Number of CYSHCN who receive patient and family-centered care coordination services

Measure Status:	Active

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	61	5,300	5,400	5,500	5,600
Annual Indicator	5,362	5,770	1,463	1,502	756
Numerator					
Denominator					
Data Source	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data
Data Source Year	FY 18	FY 19	FY 2020	FY 2021	FY2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	1,500.0	1,600.0	1,650.0

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



NPM 12 - Children with Special Health Care Needs

Federally Available Data					
Data Source: National Survey of Children's Health (NSCH) - CSHCN					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	40	43	45.3	27.9	28.9
Annual Indicator	16.2	21.6	26.9	23.8	16.8
Numerator	21,034	28,923	31,754	28,346	21,768
Denominator	129,507	133,731	118,003	119,301	129,340
Data Source	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year	2016_2017	2017_2018	2018_2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	29.9	30.9	31.9

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					
	2018	2019	2020	2021	2022
Annual Objective	61	62	63	64	65
Annual Indicator	5,697	1,308	416	81	184
Numerator					
Denominator					
Data Source	OGPSHCN	OGPSHCN	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data
Data Source Year	FY2018	FY 2019	FY 2020	FY 2021	FY2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	66.0	67.0	1,300.0

State Action Plan Table

State Action Plan Table (Maryland) - Children with Special Health Care Needs - Entry 1	
Priority Need	
To improve the health of children and youth with special health care needs through early identification, comprehensive, and coordinated care, and to support their successful transition to adult health	
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 proportion of children and adolescents with special health care needs who receive care in a family-centered, comprehensive, and coordinated system.	
Strategies	
1. Increase access to care coordination services. 2. Identify opportunities with MD's health information exchange to collect utilization data and analyze it to identify family centered medical home (FCMH) needs. 3. Improve access to information about FCMH resources and services through OGPSHCN newsletter. 4. Ensure care coordination service providers emphasize the benefits of a FCMH. 5. Ensure input on work from diverse stakeholders and persons with lived experience through family professional partnership grants and Maryland CYSHCN Advisory Council. 6. Improve the health literacy of all public facing materials. 7. Collaborate with Genetic Centers who serve Maryland families. 8. Ensure that children with sickle cell disease (SCD) are enrolled in a FCMH through the SCD Follow up Program and in collaboration with the SCD Steering Committee Members. 9. Identify an AMCHP Family Delegate to provide feedback on work and improve enrollment in a FCMH. 10. Conduct provider trainings on FCMH.	
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

To improve the health of children and youth with special health care needs through early identification, comprehensive, and coordinated care, and to support their successful transition to adult health

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 proportion of adolescents with and without special health care needs who have received the services necessary to make transitions to adult health care.

Strategies

1. Ensure transition-age CYSHCN enrolled in the OGPSHCN care coordination services have a healthcare transition (HCT) plan. 2. Identify potential partnership opportunities with MD's health information exchange to collect HCT data on CYSHCN and analyze it to identify needs regarding HCT. 3. Improve access to information about HCT resources and services for both families of CYSHCN and stakeholders through the OGPSHCN Newsletter. 4. Ensure input on OGPSHCN work from a diverse group of stakeholders and persons with lived experience through Family Professional Partnership request for applications and the Maryland CYSHCN Advisory Council. 5. Improve the health literacy of all public facing material for the OGPSHCN. 6. Provide HCT information to transition age youth with sickle cell disease. 7. Identify an AMCHP Family Delegate to provide feedback on OGPSHCN's work from a person with lived experience to solicit input on improving HCT. 8. Conduct provider training on HCT.

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

Children with Special Health Care Needs - Annual Report

Maryland's priority need for the Children and Youth with Special Health Care Needs domain is "to improve the health of children and youth with special health care needs through early identification, comprehensive, and coordinated care, and to support their successful transition to adult health care."

Services and activities focused on the needs of Children and Youth with Special Health Care Needs (CYSHCN) are outlined in the State Action Plan.

In FY2022, Maryland's Title V Program continued to structure activities around the six core outcomes developed in 2008 by HRSA's Maternal and Child Health Bureau (MCHB) for CYSHCN including:

- Family Professional Partnership
- Medical Home
    - Measured by NPM 11 - percent of children with and without special health care needs, ages 0 through 17 who have a medical home.
- Adequate Insurance
- Early and Continuous Screening
- Easy-to-Use Services and Supports
- Youth Transition to Adult Health Care
    - Measured by NPM 12 - percent of adolescents with and without special health care needs, ages 12 through 17, who receive services to prepare for the transition to adult health care.

The leading implementer to improve CYSHCN Health, the Office of Genetics and People with Special Health Care Needs (OGPSHCN), is housed in the Prevention and Health Promotion Administration's Maternal and Child Health Bureau. The five programs within OGPSHCN include:

- Children's Medical Services
- Early Hearing Detection and Intervention
- Newborn Screening Follow-Up and Critical Congenital Heart Disease Surveillance
- Operations and Support
- Systems Development, which includes
    - Birth Defects Surveillance
    - Sickle Cell Disease Long-term Follow Up
    - CYSHCN Title V Block Grant Coordination
        - Grants to local health departments, community-based non profit organizations, and academic clinical centers
        - Internal projects

This reporting period was a tumultuous time for OGPSHCN. Not only were all public health programs and staff still dealing with the impact of COVID-19, both professionally and personally, but in December 2021 the Maryland Department of Health experienced a devastating and far-reaching network security event that had a significant impact on multiple OGPSHCN programs. As a result, the Office of Genetics and People with Special Health Care Needs focused on activating the Continuity of Operations Plan (COOP) due to the Network Security Event. This event was far reaching and required many staff to maintain life-saving activities. Nevertheless, OGPSHCN served 17,380 CYSHCN and their families through Title V-supported programs and efforts in FY2022 This figure reflects counts of unduplicated children and/or families served through direct health care services or enabling services.

Title V-supported programs include partnerships with and funds provided to local health departments, community-

based non profit organizations, and academic clinical centers to provide services and supports in fulfillment of the six core outcomes. FY 2022 grantees are listed in Table 1 below.

Table 1. FY 2022 OGPSHCN Grantees

Grantee	Focus Area(s)	Project Description
Children's National Medical Center Parent | Navigator Program	Family Professional Partnership, Easy to Use Services and Supports	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, Easy-to-Use Services and Supports	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, Easy to Use Services and Supports	Expand on the VIPhysicians&Kids, which received OGPSHCN funding in FY 2020 and FY 2021) 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.
Baltimore County Health Department	Family Professional Partnership, Easy to Use Services and Supports	Improve family professional partnerships in 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	Medical	Coordinate with the Calvert County Behavioral Health Services to

County Health Department	Home, Easy to Use Services and Supports	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.
Montgomery County Health Department	Easy-to-Use Services and Supports	Supports a caseworker with the Care for Kids program to assist families with Children's Medical Services applications and ongoing communication.
The Arc Montgomery County	Easy to Use Services and Supports	Supporting the Karasik Family Infant & Child Care Center, a fully inclusive child care program for children 6 weeks to 10 years old with and without special health care needs and disabilities.
Children's National Medical Center, Division of Genetics and Metabolism	Early and Continuous Screening	Supporting operation of the Genetics and Newborn Screening Follow-up program.
Johns Hopkins University, McKusick-	Early and Continuous Screening	Providing genetic services through The Johns Hopkins University Department of Genetic Medicine

Nathans Institute of Genetic Medicine		
Kennedy Krieger Hospital-Biochemical Genetics Laboratory	Early and Continuous Screening	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	Early and Continuous Screening	Provide diagnostic and long-term follow-up for CYSHCN identified by newborn screening.

Focus Area 1: Family Professional Partnership

Family Professional Partnership is addressed more generally in section IIIE2bii, however, it is also one of the identified six core outcomes for CYSHCN.

OGPSHCN is working 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.

More specifically, several grantees listed in Table 1 focused on Family Professional Partnership in their work Some highlights include:

Arc Montgomery County operates the Karasik Family Infant & Child Care Center, a fully inclusive child care program for children 6 weeks to 10 years old with and without special health care needs and disabilities. Communication and collaboration are key elements and top priority with families of enrolled children, including communication on health guidance and updates during the height of COVID-19 and ongoing, virtual educational and training opportunities, and monthly Parent Advisory Committee meetings. Information was sent from the Center using multiple modalities, including handouts, email, telephone, and the Bloomz app. Satisfaction Surveys are distributed semi-annually to all families

Baltimore County Health Department identified Family Professional Partnership as a focus area after the Title V needs assessment indicated that only 69.3% of families were engaging in Family Professional Partnerships. The grant-funded project utilized multiple strategies, including hiring a “family navigator,” conducting focus groups, holding provider drop-in meetings, conducting parent and provider education opportunities, introducing emergency preparedness education, engaging in community events, and more. The project also developed a Family Professional Partnership Survey to solicit feedback and reports a 100% return rate with all surveys indicating satisfaction.
The project reported 161 children and youth receiving care coordination services; 209 referrals to appropriate

educational, informational, and referral sources, 32 providers having been given educational materials on Family Professional Partnerships and 90 families having been given educational materials on Family Professional Partnerships.

During previous grant cycles, OGPSHCN provided funding to coordinate a 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 worked to create systems of care that promote optimal health, functioning, and quality of life for Maryland CSHCN and their families. Membership in the CoC was open to anyone with an interest in improving the systems of care and family members were particularly encouraged to join. While the original CoC is no longer meeting, the Eastern Shore CoC, supported by the grant-funded **Talbot County Health Department** is still a powerful tool for collaboration in this region.

Talbot County Health Department also developed and implemented a tiered approach to care coordination services to create a systematic transition of competencies to families of CYSHCN and the Medical Home. In response to the 2020 OGPSHCN Request for Applications requiring that proposed projects focus on population-based services and infrastructure-building services, Talbot County devised a plan to identify families with the highest need for intervention and implement a tiered system of family education. In FY2022, Talbot LHD served 126 CYSHCN utilizing this tiered approach.

Finally, the Parent Navigator Program at **Children's National Medical Center** in Washington DC 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 FY2022, Parent Navigators provided support and assistance to the families of 72 CYSHCN.

Internally, 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 the 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 Disease Treatment and Demonstration Project) 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.

Additionally, the OGPSHCN Deputy Director served as a mentor to participants in the Family Leaders cohort of the Association of Maternal and Child Health Programs (AMCHP) Leadership Lab from Mid-October 2021 thru May 2022.

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 the 2022 Family Voices Leadership Conference, the 2022 AMCHP Conference and multiple other webinars and workshops.

Focus Area 2: Medical Home

Measured by NPM 11 - percent of children with and without special health care needs, ages 0 through 17 who have a medical home - a medical home is an approach to providing comprehensive and high quality primary care. A medical home should be accessible, family-centered, continuous, comprehensive, coordinated, compassionate and culturally effective.

The National Survey for Children's Health reported in their 2020-2021 data that 49.5% of children ages 0-17 with special health care needs have a medical home, compared to 46.8% of children ages 0-17 without special health care needs.

The Medical Home and Health Care Transition Coordinator retired from the Department in September 2021, creating an opportunity to review internal structure, priorities and practices. Several organizational positions were changed and/or realigned to better deliver on State Action Plan deliverables. As a result, for FY2022, efforts to increase the percent of children having a medical home rested almost entirely on grant-funded projects.

Calvert County Local Health Department implemented an intensive case management model 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. Additionally, this LHD proposed resource assistance and case management on an as needed basis, including educating families in the benefits of a patient-centered medical home, for CYSHCN from birth to age 12 not currently being case managed by another source. Combined, the project provided services to 51 CYSHCN.

The Coordinating Center (TCC) expanded on the grant-funded VIPhysicians&Kids program, an exclusive, medical home service for families with CYSHCN. Patients of pediatric practices enrolled in VIPhysicians&Kids have access to the VIPhysicians&Kids Care Team which supports the development of a shared care plan that is centered on achieving personal goals. Through agreements with several practices around the state, the program served a total of 185 unduplicated CYSHCN.

Through implementation of the aforementioned triage system,**Talbot County Local Health Department,** implemented a tiered system of determining family/CYSHCN needs and providing care coordination services based on identified level of need, while beginning the process of educating and assisting families to manage care coordination independently. The Children with Special Health Care Needs (CSHCN) Screener© - developed by the Child and Adolescent Health Measurement Initiative (CAHMI) - was used to identify level of need. The CHSCN Screener© is a five item, parent survey-based tool by which children are identified on the basis of experiencing one or more current functional limitations or service use needs that are the direct result of an on-going physical, emotional, behavioral, developmental or other health condition. The county also made use of the KS-CYSHCN "Holistic Care Coordination[1]" model to assist families in navigating health care systems by first assessing individual needs, then tailoring support to meet those needs. A portion of the funding to Talbot County LHD focuses on regional infrastructure building, regional consultations and special projects, including support for the aforementioned Eastern Shore CoC. In FY2022, a total of 126 CYSHCN were served,

Already noted within the Family Professional Partnership section, **The Arc Montgomery County** Karasik Family, Infant & Child Care Center (KFICCC) is a fully inclusive child care program for children 6 weeks to 10 years old with and without special health care needs and disabilities which provides child care, 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.

While other grantees did not specify Medical Home as a primary area of focus, arguably all grantees are working toward components of the Medical Home model.

Children's National Medical Center supports the Medical Home 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 FY2022,144 families were served through the Parent Navigator and Complex Care Programs.

OGPSHCN also continued to provide funding for clinical genetic services to the University of Maryland at Baltimore, Children's National Medical Center, John Hopkins University, and the Kennedy Krieger Institute Biochemical Genetics Laboratory. These genetics services are provided, in furtherance of medical home concepts, 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 FY2022, 7,494 children and their families received clinical genetic services.

Focus Area 3: Adequate 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.

During the Maryland COVID-19 Pandemic State of Emergency, no child was disenrolled from the CMS Program as a result of the Governor's Executive Order extending eligibility. Existing enrollees remained eligible until 30 days after termination of the State of Emergency. The state of emergency terminated on July 15, 2021, thus the eligibility extension ended on August 15, 2021. At the outset of FY2022, the CMS program reviewed eligibility renewal for approximately 470 CYSHCN.

Aside from the initial eligibility recertification resulting, in FY2022, the CMS Program processed 535 applications, determined that 278 CYSHCN were eligible for services (141 new enrollees and 137 renewal enrollees), and paid for services for an average of 248 CYSHCN. Relative to FY2021, these figures represent about a 100 percent increase in applications, a 34 percent increase in eligible CYSHCN, but a decrease in CYSHCN served. In addition to the fee-for-service payment structure, the CMS Program also purchased health insurance for 37 of the eligible children.

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.

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.

The CMS Program is the costliest program within OGPSHCN, and FY2022 proved true to that rule. Extended eligibility secondary to the COVID-19 Pandemic State of Emergency resulted in the highest number of children enrolled in CMS since its inception. The range of diagnoses enrolled children have results in variable treatment plans and medication costs, making it challenging to predict annual allocation amounts even when not in a state of emergency. The cost of one prescription for one child can conceivably deplete the entire budget. CMS, OGPSHCN and MCHB leadership engaged in several 'brainstorming' sessions in FY2021 and 2022 to discuss strategies for cost containment. OGPSHCN contacted The Catalyst Center to discuss opportunities for technical assistance or other support. Unfortunately, competing priorities stalled those conversations, but that is something we hope to pursue in the future.

Focus Area 4: Early and Continuous Screening

Newborn Screening (NBS)

FY22 represents a challenging time for newborn screening in Maryland. The first half of FY 22 proceeded as normal, but the aforementioned network security incident in December 2021 presented multiple challenges to the newborn screening program. The initial predictions indicated that the Maryland State Newborn Screening Laboratory would be able to restore normal operations in a few weeks to a month following the incident. However, these predictions were inaccurate, and the laboratory was not operational for the remaining balance of FY22. The MD laboratory was unable to
resume normal operations until 7/25/2022.

The newborn screening follow-up staff continued to provide follow-up services to MD infants despite obstacles, which at times seemed insurmountable. Initial follow-up efforts were documented on worksheets filed in folders within Google drive accessed using personal devices because state-issued desktop and laptop computers previously on the network could not be utilized. After it was determined that the follow-up data management system would remain inaccessible for a longer period of time than anticipated, a new data management system was created using REDCap. After an initial adjustment period, this data management system provided better day to day management and surveillance of cases generated as a result of out of range newborn screening results. Creation of the REDCap management system also provided a back-up database for documentation if future issues arise with our current database management system and will be incorporated into the Continuity of Operations Plan (COOP) for newborn screening follow-up.

The newborn follow-up database system houses contact information for approximately 1500-2000 provider offices throughout the state, so this contact information was not available during the network security incident. The loss of this information was particularly challenging in the early days of the incident. However, the nurses were able to obtain contact information for most of the provider offices through Google or by calling the birth hospitals for provider phone numbers. Our electronic fax number was affected by the network security incident as well, but management was able to facilitate using Right Fax through email in an expedient manner. Our email system is supported through Google so it was unaffected by the incident. The loss of our contact information highlights another area that needs to be addressed in the COOP for newborn screening follow-up.

The use of an external laboratory to process the samples and report the out of range results presented challenges to the NBS follow-up staff. Namely, the workflow of the contracted laboratory varied greatly from the MD laboratory. Our laboratory has a daily run from each of the sections within the laboratory and reports all the results from each section concurrently. The only exception being Fridays when there are two runs from each section. The contracted laboratory has longer operational hours with specimens

still being analyzed up until 02:00. In addition, the contracted laboratory provides newborn screening services for multiple states and jurisdictions so the daily volume of specimens results in the necessity for the contracted laboratory to operate on a more continual basis throughout each work day so there was no regular pattern of reporting out of range results from each section. The out of range results are reported to genetic counselors employed by the contracted laboratory who then contact the contracted
entity's follow-up personnel to provide the results. There appeared to be inconsistency among the genetic counselors as to when results were reported. Often, 15 to 20 results were reported at once without organization as to type of out of range result which presented a challenge to the staff. These batches of results were reported two or 3 times a day, sometimes after 17:00.

In addition to the workflow issues, obtaining demographic data for the specimens presented an unusual challenge and resolution of this challenge was never completely accomplished. The MD laboratory accessioned the specimens daily according to their usual methodology and requested the contracted laboratory to use the previously assigned accession numbers which correlated to the lab slips. The contracted laboratory did not have a data field for the entry of this accession number and utilized the filter paper number from each lab slip as the identification number. A copy of each lab slip accompanied the specimens for data entry by the contracted laboratory. The contracted laboratory did not have enough resources to completely fill in the demographic data on each specimen. The minimum data required to analyze the specimen was entered, and the results returned to the state with only this minimum demographic data and filter paper number, and unfortunately not in the same order as they were received. Correlating results with lab slip information at the state laboratory was a difficult challenge in which the state laboratory staff had to manually look for lab slips from multiple days in order to find the correct lab slip associated with the filter paper number of the out of range result. After a few weeks into the incident, the state laboratory developed a packing slip for each specimen shipment including both the MD accession number and the filter paper number which greatly reduced the time needed to locate the associated lab slip.

Minimum demographic data entry by the contracted laboratory created other issues as well. Repeat specimens were not linked to initial specimens. Maryland performs two newborn screens. The first being obtained at greater than 24 hours of age and after the infant has received 24 hours of feeding, and the second at 10-14 days of age. If certain results are WNL, particularly enzymatic testing, on the first screen, then they are not tested on the second screen. Without linkages, all specimens were being tested for all analytes, resulting in an increased number of false positive results which generally occur as a result of exposure to environmental conditions. Additionally, the contracted laboratory performs only delta f508 DNA testing for cystic fibrosis on the initial specimen and then runs their full cystic fibrosis DNA panel on the second specimen if the immunoreactive trypsinogen remains elevated. However, since specimens were not linked, both MD specimens were only tested for delta f508 resulting in more recommendations for sweat testing. Lack of appropriate linkages of specimens also hampered efforts by the nurses to locate results of requested repeat specimens in response to an out of range result.

In May 2022, the state laboratory information management system, StarLIMs, was accessible through an internal network within the state laboratory building. Prior to this time, there was no access to cases in the follow-up management database opened prior to December 2021. Resolution of the majority of these cases was obtained by using a laptop connected to an outside internet source and searching the contracted laboratory's result portal to determine if the case is resolved. Other cases were resolved by contacting the appropriate referral center, and some cases, mostly hemoglobinopathies, remain unresolved at this time, although efforts to resolve them are continuing.

Uploading results from the contracted laboratory and completion of demographic data in order to resolve linkage issues remains an ongoing task therefore the total number of babies screened in CY22 is difficult to accurately ascertain for this report. The demographic data for all babies born between 1/1/2022 and 7/23/2022 at the outside

laboratory was downloaded from their system, which consisted of approximately 87,000 records. In Maryland, filter paper numbers for newborn specimens start with a N and for a S for subsequent specimens. Elimination of the filter paper numbers starting with S and then using birth date, and time when available, estimates that 37,193 newborns received one newborn screen in the timeframe during which the external lab was performing the screening. The total number of babies screened by the MD lab for the remaining portion of CY 22 is noted to be 31,527. Combining the number of babies screened by the outside laboratory and the number of babies screened by the MD laboratory indicates a total of 68,720 babies were screened in 2022. The total number of births reported for CY 22 in Maryland is 65,552. The total number of babies screened exceeds the total number of reported births. This discrepancy is most likely related to the challenges previously discussed concerning limited demographic data utilized by the outside laboratory as well as some babies who had a newborn screening specimen collected by a pediatrician in Maryland but were born in a neighboring state. A total of 9 refusals were received in CY22 with 4 of these babies receiving screening after the initial refusal. The number of refusals remains consistent with previous years.

The total number of babies requiring follow-up services for metabolic newborn screening in CY22 is 2,876 babies, which is almost 1000 more than CY21. This increase can partially be attributed to the aforementioned increase in cases reported from the contracted laboratory related to screening both specimens as initial specimens. Another reason for this increase is attributed to the state laboratory resuming operations at the end of July 2022. There has been a significant increase in out of range results from the mass spectrometry laboratory related to a requirement to use a non-derivatized method of eluding the blood instead of the previous derivatized method. This change in operation has resulted in an inability to separate some of the analytes, resulting in isobars, and creating an issue in establishment of cut-offs for these isobars, as well as some of the other analytes. Monthly meetings have been established with the geneticists, NBS follow-up staff and the laboratory to discuss referrals and number of false positive results in an effort to determine better cut-offs using this new methodology which will result in less false positive results and ultimately reduce unnecessary stress on families in the newborn period.

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 with screening and/or documentation of results and outcomes of actions taken secondary to a failed screen. In CY22, there were 65,555 reported births in the OZ database that are listed as eligible for CCHD screening and 58,852 babies reported as being screened for CCHD. The combined screening rate for the state is 90.5%, which is an increase over the CY21 screening rate of 84.5% but improvement is still needed. The same team of nurses that provide follow-up services for metabolic newborn screening also provide surveillance for the CCHD screening program. Although CCHD screening surveillance is conducted in OZ which is on an external network, the ability to provide surveillance in this reporting period was adversely affected by the aforementioned network security incident and increased workload related to the metabolic newborn screening program.

Of the 58,852 babies reported as screened in CY22 for CCHD, 124 babies were reported as failing the screening but no further documentation provided as to outcome of 14 of the cases, 9 cases had ECHOs with no results noted but 1 of these babies was transferred to tertiary care hospital and 1 failed screen was related to delayed transition and 1 was attributed to the presence of a pneumothorax. Additionally, there are 39 babies in which a critical congenital heart defect was reported, 35 of which were identified as being diagnosed prenatally or clinically prior to screening, but the remaining 4 cases are not clearly identified as failed pulse oximetry screens.

A more robust monitoring system is needed for the results of CCHD screening in order to obtain more timely information related to outcomes of ECHOs and to monitor the use of Physician Override by the birth facilities. The

Physician Override category was developed for babies who may not receive a pulse oximetry screening secondary to findings on a prenatal ultrasound or for babies who may require urgent intervention clinically prior to the screening. Upon review of cases assigned to this category, it was
noted 341 babies were placed into this category with 297 of these cases indicating that ECHO was already planned. Concentration on review of cases in this category should provide additional insight regarding the interpretation of this category by the birth facilities and facilitate targeted education to reduce the number of babies that are identified as Physician Override. The program is currently interviewing for an administrative aide who can facilitate monitoring for CCHD screening results and
requesting follow-up information such as discharge summaries or ECHO reports from the birth facilities for failed CCHD screens or those identified as Physician Override. Educational efforts focused on documentation in all areas of the screening process would be beneficial, especially encouraging entry of the actual pulse oximetry readings to support the documentation and outcomes of the screening.

Sickle Cell Disease Follow-up Program

In Maryland, long term follow-up is conducted for infants identified as having a hemoglobinopathy with a sickle component by the Sickle Cell Disease Long-Term Follow up Program. Historically, cases have been followed through five years of age, however, expansion of this program is currently underway to continue follow-up activities up to 18 years of age, beginning with infants born in 2013. Follow-up activities include initially contacting the family to ensure the infant is receiving care through a primary care provider and hematologist and receiving penicillin prophylaxis. Educational material is mailed to the family. Community resources are provided to families that need assistance. Annual updates are requested from the primary care provider and hematology center to monitor each child's immunization status and frequency of illness/hospitalization. If a child falls out of care, efforts are made to bring the child back into care through phone contact or community resources such as local health departments or special needs coordinators. FY2022, 342 children were being followed in the program.

Early Hearing Detection and Intervention (EHDI)

The Maryland Early Hearing Detection and Intervention (EHDI) Program, housed within OGPSHCN, provides surveillance and follow up to ensure newborns and infants receive a newborn hearing screening and recommended follow up, including referral to early intervention services, when appropriate. During FY2022 there were 65,725 births reported to the Maryland EHDI OZ Systems database. Sixty-four thousand six hundred and fifty-seven (64,657) newborns were documented as screened. Of the newborns screened, 63,697 passed the newborn hearing screen; 1,551 infants missed or did not pass their inpatient screen; 97 were identified as deaf or hard of hearing and documented as referred to early intervention services; 870 infants (437 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 337 infants whose files are still open and unresolved as of this writing. CY19 LTF/D was 27.12%, CY20 LTF/D was 30.9% and CY21 LTF/D was 37.65%.

Follow up for newborn hearing screening suffered during the last few years. The program was greatly impacted by the ongoing COVID-19 pandemic which resulted in closures and reduction of services. These changes occurred at various times throughout the reporting period and included facility closures, reduced appointment availability, and reluctance of parents to take infants out for testing. Impacts were still being felt into the latter part of FY2022 and have included staff shortages, delays in hearing screening and follow up appointments.

Additionally, the aforementioned network security incident impacted the ability of follow-up coordinators to perform. Out of an abundance of caution, MDH servers were taken offline and staff were instructed not to use MDH-owned equipment, including laptops and mobile phones. WiFi access while in the MDH building was also terminated.

Access to the MD EHDI Newborn Screening Database was not affected and information could be entered by provider offices, but MD EHDI staff had to use personal devices until the Department could procure and distribute laptops for the entire staff of thousands. Some MD EHDI staff did not have personal devices suitable for this type of work. While in the broader sense, the MD EHDI program was operational with modifications, follow up was significantly delayed at a time when staff shortages left no cushion for additional delays. A year later, the impact of the security event was still being felt throughout the Department.

Staff vacancies and recruitment challenges also resulted in challenges to the program. One follow-up coordinator ended her contractual term in October 2021.The senior full-time follow up coordinator retired in early December 2021. In March 2022, the MD EHDI Program Manager left the Department. The remaining follow-up coordinator resigned in August 2022.

During this time, OGPSHCN and MCHB leadership began an assessment of program staff and operations to improve efficiency and effectiveness and focus on EHDI system level improvements. The network security incident and pandemic highlighted deficiencies in several areas. Given the external challenges of COVID, the network security event, challenges in recruitment and management of the program, an emergency contract was pursued for follow up services. A major shift is that the Program will focus on systems level oversight and improvement rather than delivering the services day-to-day.

Birth Defects Reporting and Information Systems (BDRIS)

In FY2022, the BDRIS program continued to use the OZ Systems database to monitor birth defects. Hospital site visits normally conducted on-site and in collaboration with the CCHD surveillance program chief and the EHDI Program audiologist to reinforce appropriate screening and reporting procedures were moved to a virtual platform subsequent to the COVID-19 pandemic. These site visits are opportunities to ensure appropriate and effective use of the data system and to increase reporting compliance rates generally and are useful to obtain documentation of the protocols being used by birth facilities for CCHD screening in particular. Questions regarding the OZ database were also addressed on an individual basis as needed. The program also continued to send out letters and fact sheets to families with infants identified as having a birth defect. In FY2022, 1,180 babies were identified via the birth defects reporting system and linked to resources.

Focus Area 5: 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. Much like Family Professional Partnership, this is not a separate outcome, but is a foundational approach to designing and implementing all projects and programs.

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.

OGPSHCN continued the regional liaison relationship with Talbot County Local Health Department on the Eastern Shore of Maryland in FY2022. 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 to identify and share information about community-based services throughout the state.

To further support collaboration amongst programs serving CYSHCN around the state, OGPSHCN initiated routine grantee meetings, inviting all awardees from the competitive RFA to participate in learning and sharing sessions. Through this venue, OGPSHCN grantees can also learn about additional resources and opportunities for collaboration.

Internal Case Presentation and Training opportunities

In previous application years, it was noted that OGPSHCN staff would continue to identify opportunities for cross-program integration with a focus on how grant activities might act in synergy with internal 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 the families we serve.

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

Focus Area 6: Health Care Transition

Measured by NPM 12 - percent of adolescents with and without special health care needs, ages 12 through 17, who receive services to prepare for the transition to adult health care - health care transition is, quite simply, moving from pediatric care to adult care. While simple to define, it is not simple to achieve.

The National Survey for Children's Health reported in their 2020-2021 data that 16.8% of adolescents age 12-17 with special health care needs received services necessary to make transitions to adult health care, compared to 16.4% of adolescents age 12-17 without special health care needs.

As previously noted, The Medical Home and Health Care Transition Coordinator retired from the Department in September 2021, creating an opportunity to review internal structure, priorities and practices. Several organizational positions were changed and/or realigned to better deliver on State Action Plan deliverables. As a result, for FY2022, efforts to increase the percent of children receiving services to prepare for the transition to adult health care rested almost entirely on grant-funded projects. The FY2020 Request for Application resulting in only one applicant that identified Health Care Transition as a primary focus area.

The **National Alliance to Advance Adolescent Health** was a new grantee for OGPSHCN in FY2021 and continued its work in FY2022. During Year 1 of the 3-year grant, the project customized and piloted mental health

transition tools produced by The National Alliance to Advance Adolescent Health/Got Transition and the University of Maryland's Prince George's School Mental Health Initiative (PGSMHI) transition improvement team. During this reporting period (grant year 2), the project partnered with University of Maryland school-based mental health services and launched a Baltimore City School Mental Health Initiative (BCSMHI) transition pilot. The transition tool was disseminated to high school students in six Baltimore City schools. This is a very exciting project as it reflects innovation taking place in Maryland that will help advance health care transition on a national level. As part of the pilot project(s), National Alliance has developed a customized HCT readiness assessment for the mental health space, a customized post-graduation wellness plan, and created a "Finding an Adult Mental Health Care Provider" resource, all of which are available on the Got Transition website.

The Parent Navigator Program at **Children's National Medical Center** in Washington DC 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 FY2022, Parent Navigators provided health care transition specific information and support to the families of over 80 CYSHCN. In response to the FY2020 RFA guidance to focus on building capacity and strengthening systems, the Program developed and implemented community education programs and materials and develop targeted health care 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)

Other areas of note:

Emergency Preparedness

In addition to other identified focus areas, Baltimore County Health Department focused on emergency preparedness for families of CYSHCN in FY2022. The program worked with clients to ensure that children and youth with special healthcare needs have emergency preparedness plans in place that are accessible and feasible in the case of emergencies. In FY2022, 69 Baltimore County families with CYSHCN have established emergency preparedness plans in place.

Workforce Development

In FY2022 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.

Additionally, OGPSHCN has prioritized the professional development of existing staff. Through a structured calendar of meetings for all staff and selected staff groupings, along with an intentional increase in learning opportunities, OGPSHCN hopes to keep staff engaged and coordinated, and continue to build capacity to serve effectively.

As previously noted, Fiscal Year 2022 was a tumultuous time for the Office of Genetics and People with Special Health Care Needs. In that time, five staff members left the Department from OGPSHCN, including the aforementioned Medical Home and Health Care Transition Coordinator, one of two EHDI follow-up Coordinators, the Children's Medical Services Program Chief, the Early Hearing Detection and Intervention Program Chief, and the Office Director.

Staff departures, recruitment challenges, the network security incident, ongoing stress from COVID, all combined to wreak havoc on the ability to perform even routine tasks. These challenges also created opportunities to assess programs for effectiveness and efficiency, to develop modernized systems, and to focus on systems-level improvements.

[1] Holistic Care Coordination

Children with Special Health Care Needs - Application Year

The Office of Genetics and People with Special Health Care Needs (OGPSHCN) administers Title V funds specific to children and youth with special health care needs (CYSHCN)

In 2008, HRSA's Maternal and Child Health Bureau (MCHB), together with its partners, identified six core outcomes to promote the community-based system of services mandated for all children with special health care needs under Title V. These outcomes gave a concrete way to measure our progress in making family-centered care a reality and in putting in place the kind of systems all children with special health care needs deserve. The six core outcomes were:

- Families of children and youth with special health care needs partner in decision making at all levels and are satisfied with the services they receive;
- Children and youth with special health care needs receive coordinated ongoing comprehensive care within a medical home;
- Families of CSHCN have adequate private and/or public insurance to pay for the services they need;
- Children are screened early and continuously for special health care needs;
- Community-based services for children and youth with special health care needs are organized so families can use them easily;
- Youth with special health care needs receive the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.

In previous years, OGPSHCN/Maryland Title V CYSHCN has used these six core outcomes as a framework for activities and for the 2021-2025 MCH Block Grant needs assessment reporting cycle, Maryland 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” as a continued State Priority. However, those six core outcomes have been revised and updated over the years. Beginning with the FY2022 annual report and moving forward through FY2024 and beyond, we will incorporate the four critical areas of the Blueprint for Change into our application and report revised and updated outcomes will be discussed. The critical areas are health equity, family and child well-being and quality of life, access to services, and financing of services. The critical areas under the Blueprint for Change are all related to the NPMs that OGPSHCN has chosen to address: NPM 11 Medical Home and NPM 12 Healthcare Transition.

Health Equity

The Blueprint for Change’s vision for health equity is that, “All CYSHCN have a fair and just opportunity to be as healthy as possible and thrive throughout their lives, without discrimination, and regardless of the circumstances in which they were born or live.” In FY24 OGPSHCN intends to use many of its initiatives to work towards health equity for Maryland CYSHCN.

Care Coordination for CYSHCN- In FY24 OGPSHCN is launching a new Care Coordination program for local health departments (LHDs). In the past, OGPSHCN has funded a variety of programs that work to improve the life of CYSHCN. The new funding cycle is utilizing a prescriptive approach to care coordination and is limited to local health departments to offer more uniform services across the state. This will ensure that CYSHCN, regardless of geographic location, have access to the same type of care coordination services.

Children’s Medical Services (CMS)- The Children’s Medical Services program will continue to serve as a payor of last resort for CYSHCN in Maryland who are underinsured or uninsured. Nearly all enrollees in CMS are undocumented immigrants and that is why they are unable to obtain other insurances. The CMS Program ensures

that all children, regardless of immigration status, have access to medical care.

Family Professional Partnership- OGPSHCN released a request for applications (RFA) in FY24 that will work towards furthering family professional partnership within the office. The RFA requires that the awardee hold eight focus groups across the state to identify the needs of CYSHCN. To ensure that the focus groups are representative of the state as a whole, there several stipulations within the RFA,including:

- Requiring one group in each of the state's 5 geographic regions
- One focus group conducted in Spanish
- One focus group with adolescents or your adults with special health care needs to understand the needs of those transitioning from pediatric to adult care
- One focus group on emergency preparedness for CYSHCN
- Focus groups must be representative of the demographic makeup of the state

Maryland CYSHCN Advisory Council (MCAC)- In FY24, OGPSHCN will form the Maryland CYSHCN Advisory Council which will consist of health care providers, local health departments, nonprofit organizations, caregivers of CYSHCN, people with special health care needs, and other stakeholders who serve CYSHCN. The charge of this group will be to identify needs of CYSHCN and their families and brainstorm solutions to those needs. Members for the Advisory Council will be invited from across the state, but there will be a focus on achieving diverse representation by race, ethnicity, gender, geographic region, education, and socioeconomic status. By convening a broad group of stakeholders, OGPSHCN will be able to ensure that its work addresses the needs of all Maryland CYSHCN.

OGPSHCN Newsletter- OGPSHCN will be launching a quarterly newsletter in FY24 to share information, resources, and updates with both professionals working with CYSHCN and caregivers to CYSHCN. By sharing information directly with families we will ensure equitable access to information. OGPSHCN will share information and a signup sheet on its website and encourage other stakeholders to share the newsletter within their networks.

Partnership with the Emergency Medical Services for Children (EMSC) Program- OGPSHCN has begun to collaborate with the Maryland EMSC Program to work collectively towards improving emergency preparedness for CYSHCN. OGPSHCN and EMSC have many shared goals and will combine forces on projects in FY24 to achieve those goals. The first one of those projects will be a webinar on the American Academy of Pediatrics (AAP)' Emergency Information Form, which is detailed below.

Provider Education - In FY24, OGPSHCN is launching a provider and family webinar series to ensure equitable access to information and provide training as needed. Webinars will minimally take place on a quarterly basis and will be marketed to all providers who interact with CYSHCN, as well as their caregivers. The initial webinar will focus on the AAP's updated Emergency Information Form. This form allows families to ensure that emergency providers have the relevant information for their CYSHCN in the instance of a medical emergency. The webinar will increase awareness of this underutilized tool.

Sickle Cell Disease (SCD) Follow-Up Program- OGPSHCN's SCD Follow-Up program works to ensure equitable access to high-quality, evidence-based medical care for all individuals living with SCD in Maryland. Currently, all SCD speciality clinics in the state are located in central Maryland and individuals living in remote areas are not afforded the same high-quality care. OGPSHCN recently applied for the Centers for Disease Control and Prevention's (CDC) SCD Data Collection Program to improve data collection efforts around SCD. Through this program, OGPSHCN will be able to identify areas where individuals with SCD reside and target resources for them.

Family and Child Well-Being and Quality of Life

The Blueprint for Change's vision for family and child well-being and quality of life is that, "the service system prioritizes quality of life, well-being, and supports flourishing for CYSHCN and their families." All of the program's within the OGPSHCN are working to improve the well-being and quality of life for Maryland's CYSHCN.

Birth Defects Reporting and Information System (BDRIS)- BDRIS collects data on Marylanders born with birth defects and reports that information biannually to the CDC. Besides surveillance, the program also provides information to the families on the baby's specific birth defect. In FY24, OGPSHCN will revise the information sent to families. Instead of mailing what is likely duplicative medical information and explanations, OGPSHCN will instead provide resource sheets specific to the birth condition.

Additionally, all of OGPSHCN's follow-up programs will spend FY24 working to identify modern ways to reach families. All of the follow-up programs in the Office currently mail letters or make phone calls to families. Phone calls and letters are no longer the best modality for conducting outreach. OGPSHCN will work to identify other solutions other state programs may be using, as well as identify successful strategies from other states.

Care Coordination for CYSHCN- The new Care Coordination programs will require that LHDs work to develop individualized care plans with each enrolled family. The families will develop shared goals with a nurse and peer navigator. The goals will be monitored for progress and work towards improving caregiver capacity and improving overall well-being and quality of life. OGPSHCN will work with grantees to identify any technical assistance or training needs to achieve these goals.

Children's Medical Services (CMS)- CMS works towards improving well-being and quality of life by providing access to needed specialty care for CYSHCN without health insurance. CMS will continue to provide these services in FY24.

Early Hearing Detection and Intervention (EHD)- The EHDI program works to identify infants who are deaf or hard of hearing through newborn screening. The goals of the EHDI program are to screen all babies by 1 month of age, diagnose a child as deaf or hard of hearing by 3 months of age, and enroll in early intervention by 6 months of age. If deaf or hard of hearing children are enrolled in early intervention by 6 months of age, they can develop language (of any modality) on par with children who are not deaf or hard of hearing. By achieving the goals of the EHDI program, the well-being and quality of life of deaf or hard of hearing children is improved.

As mentioned above, the EHDI program is one of OGPSHCN's programs that would benefit from a modern approach to outreach and the program will work towards that in FY24. The EHDI program is also working to form partnerships with birthing providers who deliver outside of hospitals to ensure screening occurs and to develop educational videos for both families and providers.

Family Professional Partnership- As described above, the Family Professional Partnership RFA OGPSHCN is releasing in FY24 will conduct focus groups with CYSHCN and their caregivers. The information gathered from those groups will inform OGPSHCN's work and identify ways to improve well-being and quality of life.

MCAC- As described above, feedback from the MCAC will be used to inform OGPSHCN's work and identify ways to improve well-being and quality of life.

Newborn Metabolic Screening and Critical Congenital Heart Disease Screening- The Newborn Metabolic Screening (NBS) and Critical Congenital Heart Disease (CCHD) screening programs within OGPSHCN work to identify newborns with inborn errors of metabolism, certain genetic disorders, and CCHD. By identifying these diseases at

birth, OGPSHCN can ensure prompt referral to specialty care and early, sometimes life-saving, treatment. In FY24, the NBS and CCHD teams will continue their follow-up work. The program will also work with specialty centers across the state to refine laboratory cutoffs for the screening tests to minimize unnecessary referrals.

Partnership with EMSC Program- As described above, OGPSHCN has begun a partnership with Maryland's EMSC program. We will combine our efforts in FY24 to improve emergency preparedness for Maryland's CYSHCN. Even with the best health care possible, many CYSHCN will still require some emergency care. By improving care and providing better preparation for families, OGPSHCN can reduce caregiver burden and stress.

Provider Education- As mentioned above, OGPSHCN is launching a provider training series in FY24. Initially, the series will consist of webinars on a variety of topics. Topics may be identified by the office, through the focus groups, through the MCAC, or through provider surveys. By increasing health care provider education and training on CYSHCN, OGPSHCN can help to ensure high-quality care for CYSHCN, which will improve well-being and quality of life.

SCD Follow-Up Program- The SCD follow-up program works to improve well-being and quality of life for Marylanders living with SCD by providing educational materials, provider education, and follow-up to ensure children are receiving appropriate care. OGPSHCN works with the Statewide Steering Committee on SCD to identify other needs for the SCD Community and offer support where possible.

Access to Services

The Blueprint for Change's vision for access to services is that, "CYSHCN and their families have timely access to the integrated, easy-to navigate, high-quality health care and supports they need, including but not limited to physical, oral, and behavioral health providers; home and community-based supports; and care coordination throughout their life."

Care Coordination for CYSHCN - The new Care Coordination program detailed above will work to improve access to services. The grantees will screen enrollees, identify needed services, and make appropriate referrals. The grantees are also required to maintain a current resource directory which they can utilize to provide access to needed services.

Children's Medical Services (CMS)- CMS provides access to care by paying for speciality services for CYSHCN who are underinsured or uninsured. CMS will continue to provide this service in FY24.

Genetic Center Grantees- OGPSHCN funds the four genetic centers who provide services to Maryland children. The genetic centers are funded to provide follow-up services to babies with out-of-range newborn screening results. This ensures appropriate follow-up care is available to all newborns with out-of-range newborn screening results. The genetic centers will continue to be funded in FY24.

Provider Education- As detailed above, OGPSHCN will be launching a provider education program in FY24. By improving provider education around CYSHCN, OGPSHCN believes this will increase provider capacity in caring for CYSHCN.

Financing Services

The Blueprint for Change's vision for financing of services is that, "health care and other related services for CYSHCN and families are financed in ways that support and maximize an individual's values and choice in meeting needs."

Children's Medical Services (CMS)- The CMS Program ensures that Maryland's most vulnerable CYSHCN, those without health insurance, are still afforded access to care. In FY24, the CMS program will continue to pay for specialty care for CYSHCN without health insurance. The program will also work to improve operational efficiency through the development of standardized procedures.

In FY24 OGPSHCN will continue its long standing commitment to improving the lives of Maryland's CYSHCN through continuation of its existing programs, modernization of its efforts, and the launch of several new initiatives. By establishing the Maryland CYSHCN Advisory Council and conducting focus groups, OGPSHCN is excited to incorporate a larger, more representative lived experience voice into its work.

Cross-Cutting/Systems Building

State Performance Measures

SPM 5 - Cross-Cutting Measure: Percentage of MCHB committees/workgroups that include community members/persons with lived experience

Measure Status:	Active

State Provided Data		
	2021	2022
Annual Objective		
Annual Indicator	18.2	30
Numerator	2	3
Denominator	11	10
Data Source	Title V program data	Title V program data
Data Source Year	2021	2022
Provisional or Final ?	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	27.0	36.0	45.0

State Action Plan Table

State Action Plan Table (Maryland) - Cross-Cutting/Systems Building - Entry 1
Priority Need
Ensure that MCHB policies and processes are centered on equity and anti-racism principles
SPM
SPM 5 - Cross-Cutting Measure: Percentage of MCHB committees/workgroups that include community members/persons with lived experience
Objectives
To increase the percentage of MCHB committees/workgroups that include community members/persons with lived experiences from a baseline of 18% to at least 50% by 2025.
Strategies
1) Continue to convene the MCHB Equity Work Group, 2) Facilitate a webinar and/or training related to disparities in maternal and child health, which will be open to internal and external stakeholders, 3) Conduct an internal assessment of family engagement using an evaluation tool, 4) Work towards stakeholders of committees/workgroups represent racially, ethnically, and geographically diverse communities (ex. FIMR Teams) through assessment and creation of tools/guidance/templates that support the development of committees/workgroups that are diverse , 5) Recruitment and onboarding of an Advanced Health Policy Analyst and Outreach Manager. A part of this person's role will convene the MCHB Equity workgroup to help implement a plan to help Title V further focus on equity, 6) request grantees to disaggregate data by race and ethnicity to better understand health disparities, 7) Participate in the Root Causes of Health Initiative (ROCHI), an initiative led by the Institute for Healthcare.

Cross-Cutting/Systems Builiding - Annual Report

Maryland's identified priority need for cross cutting/systems building is "to ensure that Maternal and Child Health Bureau (MCHB) policies and processes are centered on equity principles." This is a new priority area proposed for FY2023 to reflect the State's Title V effort on equity.

During Fiscal Year 2022, the State Title V staffed the Bureau's Equity Work Group and built upon the work that was accomplished in its first year by selecting a set of specific goals and priorities, and developing a work plan for the year. Previously, the Equity Work Group conducted an assessment of knowledge, skills, and opportunities from Bureau Members. Findings of the assessment revealed that providing additional training about equity and eliminating health disparities would be helpful as having subrecipients focusing on eliminating health disparities and focusing on partnering more with community based organizations would help the Bureau work towards equity.

The goals that were selected were part of the larger Bureau-wide strategic planning process. The first goal was to Improve how equitable practices and policies are implemented to affect the lives of the communities served by MCHB, and the second goal was to strengthen the anti-racist policies and practices within the Bureau. The Equity Workgroup then brainstormed potential activities in the following categorical areas of training, data, policy/procurement, partnerships and communications. The Equity workgroup then voted on potential areas to prioritize for the Bureau and for Title V.

In FY 2022, various workgroup members participated in the Root Causes of Health Initiative (RoCHI), an initiative led by the Institute for Healthcare Improvement and the National Association of Chronic Disease Departments and championed by the Department's Prevention and Health Promotion Administration (PHPA). Participation in the learning collaborative initiative was an identified priority of the workgroup. The Maternal Mortality Review Program (the Program) was selected to participate in RoCHI on behalf of the Bureau. The Program and Title V staff went through the process of analyzing the equity of reach and equity of impact of the Program's committee membership.. The Program at that time was in the middle of a transition to diversify its membership. This was done by assessing their program demographic data through a voluntary member survey, and comparing it to statewide and jurisdictional race/ethnicity estimates. Through this project the Program was able to assess where there are gaps in member representation, and will use that information to inform future recruitment outreach efforts. This work was a significant step in ensuring that committees, workgroups, and stakeholder groups across the Bureau represent racially, ethnically, and geographically diverse communities, and represent the populations that the groups are serving. The RoCHI initiative is now expanding to other programs in the Bureau, and the Program will serve as a peer guide to those programs.

The workgroup also read *Not in My Neighborhood: How Bigotry Shaped a Great American City.* to enhance the group's learning. The book led to robust discussion by the workgroup members.

Members of the equity work group continued to update the recruitment dissemination list for Title V recruitment postings. The dissemination list includes Historically Black Colleges and Universities, organizations who serve people with disabilities, as well as other academic universities. The dissemination list was provided to supervisors to ensure that open recruitments are shared broadly with the organizations on the dissemination list. Through the Equity workgroup, activities related to equity continued to be tracked within the Bureau.

In addition, the State Title V staff and staff across the Bureau implemented a more inclusive and equity-focused interview format that was recommended by the Equity WorkGroup. During FY2022, all recruitments within the Bureau incorporate the interview panel sharing their pronouns and asking the applicant if they would be willing to share their pronouns. Title V staff also continue to include their pronouns in the signatory line of their emails.

Title V staff also organized key workshops during Black Maternal Health Week that were open to Title V staff and community partners. The workshops included: *What you don't know CAN hurt you and your patients: The role of implicit bias in birth and breastfeeding support*, presented by Nekisha Killings, MPH, IBCLC and *Patients as Partners in Maternity Care: Baltimore Mothers Speak About Their Birth Experiences*, presented by Teneele Bailey, MBS.

During the first workshop, participants learned how to both identify and dismantle the subconscious impression and beliefs about their patient and program population base to better provide empathic and impactful care. During the second workshop, participants learned about birthing experiences through the lens of women who have recently experienced giving birth in today's health care system. There were 49 attendees for the first workshop and 58 attendees for the second workshop.

As part of Title V staff's participation in the Maternal Health Improvement Program or MDMOMs, Title V staff continued to work with the selected equity advisor, Dr. Kanika Harris, of the Bizzell Group. Dr. Harris continued to provide strategic

guidance prior to and during the Maternal Task Force meeting to ensure inclusivity and equity was centered in the work of the task force.

Members of the Equity Workgroup also contributed to Bureau Month, which is an opportunity for team building and professional development throughout the month. The Equity Workgroup recommended a development training called, “Everything DiSC.” The trained allowed team members to identify their own preferences and tendencies in the workplace, including how they relate to others in their office and program teams. During the session that occurred in April 2022, Bureau staff had the opportunity to meet in small groups and discuss their DiSC profiles, and how what was learned in the training can be applied to building more collaborative and effective teams in the workplace.

Other Cross- Cutting Initiatives

Development of the Bureau’s Operational Strategic Plan
The Bureau continued to prioritize its operational strategic planning process. During 2022, the Bureau hired a contractor to provide technical support to develop its operational strategic plan. The vendor held Office-level discussions and focus groups to develop a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis and to develop key priorities. The vendor also led key informant interviews and focus groups with external stakeholders such as local health departments, grantees, families, and other State Agencies to gather feedback on goals, priorities, challenges and opportunities. The Bureau established a Steering Committee to help adapt its mission, vision and value statements and held a two-day workshop with the MCHB leadership team to distill strategic priorities and objectives. The Steering Committee presented progress on our strategic plan at each all staff meeting throughout the year and presented the final mission, vision, values, and strategic priorities.

As operations and administration plays a large part in the Bureau and the Title V program, the Bureau continued to prioritize the strategic priority of *increasing operational efficiency*. The Bureau developed guidance for the annual local health department (LHD) grantee process in FY22, when none previously existed. Bureau leadership reviewed LHD applications across programs to standardize the application process to grantees. A standardized operating procedure (SOP) was created, which reviewed the steps and deadlines for LHD awards. The Bureau also held a training for all staff to review the steps in the process and to answer questions.

In the past, budgets within the Department were requested to be completed with limited time for input and review. Often, the turnaround for such documents was less than a week. During FY2022, the Bureau began to anticipate the annual request from the Fiscal team, and created a duplicate copy of the required submission early. By starting a month in advance, the Bureau’s program team could input their information and allow sufficient time for other staff to review. This proactive process has also decreased errors in the creation of the fiscal budget.

Cross-Cutting/Systems Building - Application Year

Maryland's identified priority need for cross cutting/systems building is "to ensure that Maternal and Child Health Bureau (MCHB) policies and processes are centered on equity principles." This was a new priority area proposed for FY 2023 to reflect the State's Title V efforts on achieving equity.

State Title V staff started an internal equity workgroup that initially focused on developing shared language, definitions, and understanding within the Bureau, discussing and planning ways to strengthen partnerships and collaborations, using data and information systems to strengthen equity, influence policy and strategic resources where there is an impact to promote an equity and anti-racist lens. Representatives from each office joined the internal working group that started December 2020. Since then, the Title V staff have met monthly.

The Equity Workgroup has developed priorities that it will focus on in FY2024 that will support cross cutting/systems building within the bureau. The groups goals are as follows:

- Develop shared language, definitions, and understanding within the Bureau (including a guidelines for for inclusive language to be used for reports and grants)
- Facilitate a webinar and/or training related to disparities in maternal and child health, which will be open to internal and external stakeholders.
- Conduct diversity, equity, and inclusion training for all MCH Bureau staff (requiring all staff to participate in at least one training per year)
- Update and disseminate an MCH Bureau-wide procurement list with relevant minority owned businesses and community based organizations for use by all staff (ongoing)

For FY 2024, to continue with focusing on equity, Title V staff and the Bureau of Maternal and Child Health Staff will continue to convene the MCHB/Title V Internal Equity Group. Title V staff, through the Equity Workgroup will facilitate a webinar and/or training related to disparities in maternal and child health, which will be open to internal and external stakeholders. One of the measures that Title V staff will review is to see how many staff have undergone Diversity, Equity, and Inclusion (DEI) training with the goal that 100% of all staff have undergone training by 2025.
Starting in FY 2021, Title V staff organized key workshops during Black Maternal Health Week that were open to Title V staff and partners. This was part of the Maternal Health Improvement Program (MDMOMs Initiative). The workshops included: *What you don't know CAN hurt you and your patients: The role of implicit bias in birth and breastfeeding support*, presented by Nekisha Killings, MPH, IBCLC and *Patients as Partners in Maternity Care: Baltimore Mothers Speak About Their Birth Experiences*, presented by Teneele Bailey, MBS. In FY 2024, Title V will continue to plan to organize workshops during Black Maternal Health Week working with external partners.

In FY2024, Title V staff will work to ensure stakeholders of committees/workgroups represent racially, ethnically, and geographically diverse communities (e.g., FIMR Teams) through assessment and creation of tools/guidance/templates that support the development of committees/workgroups that are diverse. During FY2022 and 2023, the Maternal Mortality Review Program will continue to develop the Program to become a multi-disciplinary review team in alignment with national best practices. Previously, the committee was predominantly a physician-led medical review team.

Title V staff will continue to assess its funding and work towards open competitive procurements to allow various organizations to apply for funding. Of note, a significant portion of federal Title V funds go towards local health departments as core public health funding for essential maternal and child health infrastructure. House Bill 314, Laws of 1995 defined core public health services to include: Communicable Disease Control, Environmental Health, Maternal and Child Health, Family Planning, Wellness Promotion, Adult Health and Geriatric Services, and Administration. As a result of House Bill 314, a significant amount of funds from the Maternal Child Health Block grant must be allocated to the local health departments for maternal and child health-related activities. These

essential activities include addressing elevated lead levels, care coordination for pregnant individuals and infants, home visiting, school health services, hearing screens and vision screens.

Other Cross-Cutting Initiatives

For FY2024, the Bureau will continue to assess opportunities to implement the Operational Strategic Plan. During FY2023, the Strategic Priorities were adjusted based on feedback from staff and external partners. Building workforce capacity and using data to inform actions were added as focus areas.

The strategic priority areas include:

- Promote DEI Practices and Processes
- Advance System and Community focused, population-based practices
- Strengthen Internal and External Collaborations
- Increase Operational Efficiencies
- Build Further Capacity of the MCH Workforce
- Use Data to Inform Action and Decisions

During FY2024, the Bureau will continue to build further objectives and prioritize which objectives to obtain. For example, to build the capacity of the MCH Workforce, the Bureau will continue to host trainings and also develop a more formal partnership with the MCH Workforce Navigator

The Bureau will continue to increase operational efficiency by looking at ways to automate processes when possible. During FY2023, the Chief Operating Officer developed an electronic invoice mechanism that would allow for automated tracking of expenses.

III.F. Public Input

The FY2023 Application/FY2021 Annual report was posted for public comment after submission to HRSA. Specifically, the report was posted on the Maternal and Child Health Bureau's Title V webpage. Stakeholder groups, including local health department grantees were alerted to the posting and provided a direct link.

Previously, while there were several comments received, the year before, due to the Network Security Event, few comments were received. Many local health departments stated that they were focused on operating without access to their internal files or electronic medical records due to the Network Security Event. Local Health Departments were also navigating additional processes set forth by the department such as the Strategic Data Initiative (SDI) that provided an additional level of review of Data Use Agreements.[1]

However, there was feedback for Maryland Title V for certain programs in preparation for FY 2024. Please see below.

After conducting a needs assessment for the Office of Genetics and People with Special Health Care Needs (OGPSHCN), stakeholders appreciated that the Office focused on developing centralized care coordination with local Health Departments for FY 2024; however, partners wished additional funds were available for continued grant funding with private non-profit organizations. Other stakeholders wanted to crosswalk previous Maryland Title V CYSCHN grantee's care coordination work with other existing care coordination systems from the Managed Care Organization and Behavioral Health Administration to ensure there was no duplication. The Maryland Title V team reviewed and the care coordination services addressed gap services by addressing social needs.

Stakeholders from the Council of Advancement of School-Based Health Centers recommended that funding from Title V could be further used to Maryland School-Based Health Centers, and also suggested incorporation of School-Based Health Centers with other Title V initiatives. The Maryland School-Based Health Center Program was transferred from the Maryland State Department of Education to the Maryland Department of Health during FY 2023 as a result of state legislation. While the Maryland Title V does not have additional federal funding for the Maryland School-Based Health Center Programs, all 24 local health departments have the option to use their core public health funding to provide school health services.

Last Year, Maryland Title V wanted to explore using a broader National Performance Measure for Women's Health, and received feedback in support. However, Maryland Title V decided to wait until the next reporting period to incorporate broader National Performance Measures.

After submission of the Application/Annual Report to HRSA and following our Annual Review, the FY 2024 Application/FY 2022 Annual Report will be posted to the Title V webpage on the MDH website. This webpage allows visitors to leave public comments. The website link will be disseminated to local health departments and other maternal and child health stakeholders for feedback. 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.

[1] Further information can be found here: https://health.maryland.gov/iac/Pages/sdi.aspx

III.G. Technical Assistance

The Maryland Title V team continued to engage in technical assistance (TA) from the National Center for Education in Maternal and Child Health. The National Center provided information on other states working to improve maternal health, specifically on severe maternal morbidity (SMM). The National Center also provided further consideration in focusing on the contributing factors for SMM including maternal age, pre-pregnancy obesity, and pre-existing conditions. The information assisted in assessing the various Title V programs, and will be used in review of the Maternal Health Improvement Program Task Force Strategic and Action Plan.[1]

After feedback from the last Title V review site visit, the Maryland Title V team learned more about the workforce training opportunities and pathways available in the National Center for Education in Maternal and Child Health. Maryland Title V learned that other states have also experienced staffing transitions and were also looking to provide standardized orientation and training. The Maryland Title V team learned about the Workforce Navigator that is competency-based learning, which allows staff to learn about transferable skills such as communication, equity, systems-approach to policy. Maryland Title V plans to further assess and to structure using the Workforce Navigator in staff orientation.

Given that the Maryland Department of Health's Network Security Event and staffing transitions delayed work with the Title V team, Maryland Title V will focus on continuing with health equity technical assistance and the development of a Title V data system, as well as workforce retention.

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[1] The Strategic and Action Plan can be found here.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - MD_MOU_Medicaid.pdf

V. Supporting Documents

The following supporting documents have been provided to supplement the narrative discussion.

Supporting Document #01 - Attachment_Partnerships_Collaboration_and_Coordination.pdf

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - Title V MDH Org Charts 22-24.pdf

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Maryland

	FY 24 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 12,008,626	
A. Preventive and Primary Care for Children	$ 4,129,229	(34.3%)
B. Children with Special Health Care Needs	$ 4,025,335	(33.5%)
C. Title V Administrative Costs	$ 602,002	(5.1%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 8,756,566	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 13,554,563	
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)	$ 13,554,563	
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)	$ 25,563,189	
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)	$ 117,971,841	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 143,535,030	

OTHER FEDERAL FUNDS	FY 24 Application Budgeted
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,817
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 176,592
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) American Rescue Plan (ARP)	$ 164,516
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	$ 7,712,013
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 3,691,732
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 103,906,272
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 149,481
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	$ 634,744
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 908,968
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Preventing Maternal Deaths: Supporting Maternal Mortality Review Committees	$ 307,698
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Hearing Detection and Intervention (EHDI) State Programs	$ 219,008

	FY 22 Annual Report Budgeted		FY 22 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 11,850,506 (FY 22 Federal Award: $ 12,008,626)		$ 12,008,626	
A. Preventive and Primary Care for Children	$ 3,790,573	(32%)	$ 4,145,601	(34.5%)
B. Children with Special Health Care Needs	$ 4,375,345	(36.9%)	$ 4,857,633	(40.4%)
C. Title V Administrative Costs	$ 461,752	(3.9%)	$ 407,993	(3.4%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	$ 8,627,670		$ 9,411,227	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 8,887,880		$ 10,246,958	
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)	$ 8,887,880		$ 10,246,958	
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		$ 22,255,584	
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		$ 46,337,136	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 132,228,011		$ 68,592,720	

OTHER FEDERAL FUNDS	FY 22 Annual Report Budgeted	FY 22 Annual Report Expended
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > Sexual Risk Avoidance Education (SRAE)	$ 849,070	$ 652,813
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 935,663	$ 757,210
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 160,020	$ 173,138
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Sudden Unexpected Infant Death (SUID) Case Registry Program	$ 75,000	$ 47,202
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	$ 7,497,371
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000	$ 38,467
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	$ 235,000	$ 65,437
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 4,000,000	$ 3,924,756
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 96,237,166	$ 31,557,401
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > State Optimal Adolescent Health Program	$ 1,414,194	$ 1,623,341

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**Federal Allocation, B. Children with Special Health Care Needs:**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: The FY22 Annual Report Expended (the value in Line 1B, Children with Special Health Care Needs, Annual Report Budgeted) is more than 10% of the Annual Report Budgeted. This is because a larger amount of Title V direct funds were expended for Children Medical Services.	
2.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: The value in Line 1C, Title V Administrative Costs, Annual Report Expended is less than 10% of the Annual Report Budgeted. This discrepancy is due to staffing vacancies leading to decreased Administrative Costs for FY22.	
3.	**Field Name:**	**3. STATE MCH FUNDS**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: The value in Line 3, State MCH Funds, Annual Report Expended is less than 10% of the Annual Report Budgeted. The discrepancy is due to the fact for FY24, there will be additional state funds through the Thrive by Three initiative and to account for the State's increases in salaries (e.g. COLAs) .	
4.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: Due to the network security event, there has been a delay in posting of expenditures.	
5.	**Field Name:**	**Other Federal Funds, Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention**
	Fiscal Year:	**2022**

	Column Name:	**Annual Report Expended**
	Field Note: Due to the network security event, there has been a delay in posting of expenditures and Local Health Department reconciliations.	
6.	**Field Name:**	**Other Federal Funds, US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: Due to the network security event, there has been a delay in posting of expenditures and Local Health Department reconciliations.	

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 24 Application Budgeted	FY 22 Annual Report Expended
1. Pregnant Women	$ 1,734,812	$ 1,409,506
2. Infants < 1 year	$ 1,517,248	$ 1,187,893
3. Children 1 through 21 Years	$ 4,129,229	$ 4,145,601
4. CSHCN	$ 4,025,335	$ 4,857,633
5. All Others	$ 0	$ 0
Federal Total of Individuals Served	$ 11,406,624	$ 11,600,633

IB. Non-Federal MCH Block Grant	FY 24 Application Budgeted	FY 22 Annual Report Expended
1. Pregnant Women	$ 5,374,172	$ 3,781,830
2. Infants < 1 year	$ 2,105,451	$ 1,155,833
3. Children 1 through 21 Years	$ 2,295,451	$ 2,353,298
4. CSHCN	$ 900,000	$ 400,000
5. All Others	$ 2,879,489	$ 2,555,998
Non-Federal Total of Individuals Served	$ 13,554,563	$ 10,246,959
Federal State MCH Block Grant Partnership Total	$ 24,961,187	$ 21,847,592

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

None

Data Alerts: None

Form 3b
Budget and Expenditure Details by Types of Services

State: Maryland

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY 24 Application Budgeted	FY 22 Annual Report Expended
1. Direct Services	$ 895,554	$ 2,798,029
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 0	$ 45,982
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 895,554	$ 2,752,047
2. Enabling Services	$ 6,595,972	$ 5,412,797
3. Public Health Services and Systems	$ 4,517,100	$ 3,797,800
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		$ 376,788
Physician/Office Services		$ 1,372,784
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 464,625
Dental Care (Does Not Include Orthodontic Services)		$ 0
Durable Medical Equipment and Supplies		$ 209,805
Laboratory Services		$ 0
Other		
Purchase of Care		$ 98,032
Genetic Services		$ 275,995
Direct Services Line 4 Expended Total		$ 2,798,029
Federal Total	$ 12,008,626	$ 12,008,626

IIB. Non-Federal MCH Block Grant	FY 24 Application Budgeted	FY 22 Annual Report Expended
1. Direct Services	$ 3,779,489	$ 2,955,998
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 2,879,489	$ 2,555,998
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 900,000	$ 400,000
2. Enabling Services	$ 4,835,723	$ 2,742,142
3. Public Health Services and Systems	$ 2,059,861	$ 1,992,821
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		$ 2,555,998
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 Day Care		$ 400,000
Direct Services Line 4 Expended Total		$ 2,955,998
Non-Federal Total	$ 10,675,073	$ 7,690,961

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

1.	**Field Name:**	**IIA. Federal MCH Block Grant, 4. Physician/Office Services**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: Includes expenditures from CMS and LHD Title V/Family Planning Services	
2.	**Field Name:**	**IIB. Non-Federal MCH Block Grant, 4. Physician/Office Services**
	Fiscal Year:	**2022**
	Column Name:	**Annual Report Expended**
	Field Note: Direct services through family planning services	

Form 4
Number and Percentage of Newborns and Others Screened Cases Confirmed and Treated

State: Maryland

Total Births by Occurrence: 65,552 **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	65,552 (100.0%)	1,925	164	164 (100.0%)

Program Name(s)				
3-Hydroxy-3-Methyglutaric Aciduria	3-Methylcrotonyl-Coa Carboxylase Deficiency	Argininosuccinic Aciduria	Biotinidase Deficiency	Carnitine Uptake Defect/Carnitine Transport Defect
Citrullinemia, Type I	Classic Phenylketonuria	Congenital Adrenal Hyperplasia	Critical Congenital Heart Disease	Cystic Fibrosis
Glutaric Acidemia Type I	Glycogen Storage Disease Type II (Pompe)	Guanidinoacetate Methyltransferase (GAMT) Deficiency	Holocarboxylase Synthase Deficiency	Isovaleric Acidemia
Long-Chain L-3 Hydroxyacyl-Coa Dehydrogenase Deficiency	Medium-Chain Acyl-Coa Dehydrogenase Deficiency	Methylmalonic Acidemia (Cobalamin Disorders)	Methylmalonic Acidemia (Methylmalonyl-Coa Mutase)	Mucopolysaccharidosis Type I (MPS I)
Mucopolysaccharidosis Type II (MPS II)	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			

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	65,552 (100.0%)	25	3	3 (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 provide education and assistance through transition into adulthood. In FY 2022, 322 children were being followed in the program.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	**Field Name:**	**Core RUSP Conditions - Total Number Receiving At Least One Screen**
	Fiscal Year:	**2022**
	Column Name:	**Core RUSP Conditions**

Field Note:
Due to the Network Security Event, the number to aggregate total number of screens was challenging. The statewide system, Starlims, was not available. The number is based on what was available through Starlims.

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 2022

Form 5a – Count of Individuals Served by Title V
(Direct & Enabling Services Only)

		Primary Source of Coverage				
Types Of Individuals Served	(A) Title V Total Served	(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	7,129	39.0	0.0	58.0	3.0	0.0
2. Infants < 1 Year of Age	16,348	0.0	39.0	58.0	3.0	0.0
3. Children 1 through 21 Years of Age	158,888	0.0	32.0	63.0	4.0	1.0
3a. Children with Special Health Care Needs 0 through 21 years of age^	7,056	0.0	32.0	65.0	3.0	0.0
4. Others	42,524	14.0	0.0	79.0	7.0	0.0
Total	224,889					

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	68,285	Yes	68,285	100.0	68,285	7,129
2. Infants < 1 Year of Age	65,098	Yes	65,098	100.0	65,098	16,348
3. Children 1 through 21 Years of Age	1,604,593	Yes	1,604,593	100.0	1,604,593	158,888
3a. Children with Special Health Care Needs 0 through 21 years of age^	334,237	Yes	334,237	100.0	334,237	7,056
4. Others	4,493,942	Yes	4,493,942	40.0	1,797,577	42,524

^Represents a subset of all infants and children.

Form Notes for Form 5:

None

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2022**
	Field Note: Pregnant people receiving services though Title V funded programs including Local Health Department, Child Health System Improvements, BBH, Family Planning Clinics	
2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2022**
	Field Note: ** Includes all Newborn Screenings, local health department data for Title V programs providing home visits, case management for elevated blood levels, immunizations, home birth certification, and health education for parents and linkages to primary care.	
3.	**Field Name:**	**Children 1 through 21 Years of Age**
	Fiscal Year:	**2022**
	Field Note: *** Children receiving services through LHDs including school-based health services and family plannign Clinics	
4.	**Field Name:**	**Children with Special Health Care Needs 0 through 21 Years of Age**
	Fiscal Year:	**2022**
	Field Note: *** CYSHCN receiving services through grantees of OGPSHCN and LHDs	
5.	**Field Name:**	**Others**
	Fiscal Year:	**2022**
	Field Note: ****** Others receiving services through family planning clincis	

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women Total % Served**
	Fiscal Year:	**2022**
	Field Note: Pregnant individuals delivering at hospitals that are participating in the Maryland Perinatal Collaborative, Babies Born Healthy program, local health department home visiting program, PRAMS, and perinatal Regionalization guidelines who focus on all pregnant people in Maryland.	
2.	**Field Name:**	**Infants Less Than One Year Total % Served**
	Fiscal Year:	**2022**
	Field Note: Number reflects the efforts of newborn screening and early hearing detection which reaches 100% of infants in Maryland	
3.	**Field Name:**	**Children 1 through 21 Years of Age Total % Served**
	Fiscal Year:	**2022**
	Field Note: Represents efforts of local health departments from direct and enabling services, communication health campaigns, vision and hearing screenings, immunizations, and injury prevention. Child Fatality Review has also developed recommendations for children ages, 1-17.	
4.	**Field Name:**	**Children with Special Health Care Needs 0 through 21 Years of Age Total % Served**
	Fiscal Year:	**2022**
	Field Note: Represents direct, enabling, and population bases services through CYSHCN through complex care, navigation services, training/education, accessing medical homes, care coordination, genetic services, medical services, follow-up to newborn screening, birth defects, sickle cell program, early intervention for hearing, resource locator, adult transitions through OGPSHCN, local health departments, and Title V grantees	
5.	**Field Name:**	**Others Total % Served**
	Fiscal Year:	**2022**
	Field Note: Overall, these numbers represent health education sessions for providers, parents, local health departments, communications, as well as direct and enabling services from local health departments and other programs.	

Data Alerts: None

Form 6
Deliveries and Infants Served by Title V and Entitled to Benefits Under Title XIX

State: Maryland

Annual Report Year 2022

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	68,266	28,112	20,378	13,159	83	4,465	0	1,691	378
Title V Served	68,266	28,112	20,378	13,159	83	4,465	0	1,691	378
Eligible for Title XIX	46,517	10,220	17,613	5,722	104	2,323	120	0	10,415
2. Total Infants in State	66,594	25,132	19,779	13,795	124	3,833	40	3,891	0
Title V Served	66,594	25,132	19,779	13,795	124	3,833	40	3,891	0
Eligible for Title XIX	36,770	7,052	11,147	3,978	122	1,675	83	0	12,713

Form Notes for Form 6:

Due to the Network Security Event, there were delays in the data. The data from the VSA are preliminary, and Maryland Title V was not provided NH Asian, American Indian/Alaska Native or Hawaiian/PI from the VSA. There is a discrepancy with the data regarding eligible for Title XIX. The data source is from Medicaid.

Field Level Notes for Form 6:

1.	**Field Name:**	**1. Total Deliveries in State**
	Fiscal Year:	**2022**
	Column Name:	**Total**
	Field Note: The data source is from the VSA, 2021 Annual Report. Due to the Network Security Event, this is preliminary data. Of note, Maryland's VSA combines Non-Hispanic Asian with Native Hawaiian or Other Pacific Islander.	
2.	**Field Name:**	**1. Title V Served**
	Fiscal Year:	**2022**
	Column Name:	**Total**
	Field Note: Title V works with every infant through public health infrastructure (e.g., planning epidemiology), EHDI, NBS follow up, Perinatal Quality Collaborative, and home Births.	
3.	**Field Name:**	**1. Eligible for Title XIX**
	Fiscal Year:	**2022**
	Column Name:	**Total**
	Field Note: Pregnant women enrolled in Medicaid, Medicaid 2021 data	
4.	**Field Name:**	**2. Total Infants in State**
	Fiscal Year:	**2022**
	Column Name:	**Total**
	Field Note: Population age <1, NCHS Single Race Population Estimates, 2021.This is single race instead of bridged race estimates which may explain some differences between 2020 and 2021 numbers. Bridged race was discontinued after 2020	
5.	**Field Name:**	**2. Title V Served**
	Fiscal Year:	**2022**
	Column Name:	**Total**

	Field Note: Title V works with every infant through public health infrastructure (e.g., planning epidemiology), EHDI, NBS follow up, home birth certification	
6.	**Field Name:**	**2. Eligible for Title XIX**
	Fiscal Year:	**2022**
	Column Name:	**Total**
	Field Note: Medicaid 2021 data	

Form 7
State MCH Toll-Free Telephone Line and Other Appropriate Methods Data

State: Maryland

A. State MCH Toll-Free Telephone Lines	2024 Application Year	2022 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"	Maryland HealthChoice	Maryland HealthChoice
4. Contact Person's Telephone Number	(800) 456-8900	(800) 456-8900
5. Number of Calls Received on the State MCH "Hotline"		1,755

B. Other Appropriate Methods	2024 Application Year	2022 Annual Report Year
1. Other Toll-Free "Hotline" Names	n/a	
2. Number of Calls on Other Toll-Free "Hotlines"		
3. State Title V Program Website Address	https://health.maryland.gov/phpa/mch/Pages/titlev.aspx	https://health.maryland.gov/phpa/mch/Pages/titlev.aspx
4. Number of Hits to the State Title V Program Website		45,628
5. State Title V Social Media Websites	n/a	n/a
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
Title	Director, Maternal and Child Health Bureau
Address 1	201 W Preston St
Address 2	3rd floor
City/State/Zip	21201 / MD / 21201
Telephone	(443) 571-3424
Extension	
Email	shelly.choo@maryland.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Lauren Whiteman
Title	Director, Office of Genetics and People with Special Health Care Needs
Address 1	201 W Preston St
Address 2	4th Floor
City/State/Zip	Baltimore / MD / 21201
Telephone	(410) 767-5642
Extension	
Email	Lauren.Whiteman@Maryland.gov

3. State Family 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

4. State Youth Leader (Optional)	
Name	
Title	
Address 1	
Address 2	
City/State/Zip	
Telephone	
Extension	
Email	

Form Notes for Form 8:

None

Form 9
List of MCH Priority Needs

State: Maryland

Application Year 2024

No.	Priority Need
1.	Ensure that all babies are born healthy and prosper in their first year
2.	Ensure that adolescents age 12-17 receive comprehensive well visits that address physical, reproductive, and behavioral health needs.
3.	To improve the health of children and youth with special health care needs through early identification, comprehensive, and coordinated care, and to support their successful transition to adult health
4.	Ensure that all birthing people are in optimal health before, during, and after pregnancy
5.	Ensure that all children have an opportunity to develop and reach their full potential
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
7.	Address the racial disparities in Severe Maternal Morbidity rates among Black NH and White NH
8.	Ensure that MCHB policies and processes are centered on equity and anti-racism principles

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 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
2021	76.6 %	0.2 %	50,409	65,810
2020	75.1 %	0.2 %	49,581	65,990
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

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
2020	90.8	3.7	600	66,091
2019	79.3	3.5	517	65,195
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
2017_2021	22.0	2.5	77	349,738
2016_2020	17.8	2.2	63	354,589
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**
2021	8.9 %	0.1 %	6,080	68,251
2020	8.5 %	0.1 %	5,792	68,521
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**
2021	10.7 %	0.1 %	7,296	68,242
2020	10.1 %	0.1 %	6,941	68,524
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**
2021	28.6 %	0.2 %	19,502	68,242
2020	27.4 %	0.2 %	18,765	68,524
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
2021/Q1-2021/Q4	1.0 %			
2020/Q4-2021/Q3	1.0 %			
2020/Q3-2021/Q1	2.0 %			
2019/Q4-2020/Q3	2.0 %			
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
2020	6.4	0.3	442	68,749
2019	6.2	0.3	439	70,383
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
2020	5.7	0.3	393	68,554
2019	5.8	0.3	410	70,178
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
2020	4.1	0.3	282	68,554
2019	3.9	0.2	274	70,178
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**
2020	1.6	0.2	111	68,554
2019	1.9	0.2	136	70,178
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
2020	259.6	19.5	178	68,554
2019	260.8	19.3	183	70,178
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
2020	80.2	10.8	55	68,554
2019	74.1	10.3	52	70,178
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
2020	6.7 %	1.0 %	4,131	61,487
2019	7.7 %	1.0 %	4,852	62,661
2018	8.7 %	1.1 %	5,591	64,037
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
2020	11.6	0.4	776	66,664
2019	12.4	0.4	811	65,634
2018	12.7	0.4	877	68,983
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
2020_2021	10.1 %	1.2 %	126,069	1,250,649
2019_2020	11.3 %	1.3 %	141,990	1,260,919
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**
2021	16.0	1.6	106	663,910
2020	15.0	1.5	99	660,668
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
2021	31.6	2.0	249	788,727
2020	33.2	2.1	251	755,284
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
2019_2021	7.3	0.8	84	1,150,310
2018_2020	7.6	0.8	87	1,138,999
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
2019_2021	8.3	0.9	96	1,150,310
2018_2020	8.1	0.8	92	1,138,999
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
2020_2021	20.0 %	1.3 %	266,095	1,329,504
2019_2020	20.5 %	1.4 %	273,531	1,331,754
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
2020_2021	13.5 %	2.2 %	35,976	266,095
2019_2020	18.3 %	3.1 %	49,950	273,531
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
2020_2021	2.4 %	0.5 %	27,397	1,119,473
2019_2020	3.0 %	0.8 %	34,572	1,143,062
2018_2019	3.1 %	0.9 %	35,921	1,156,312
2017_2018	2.0 %	0.6 %	22,126	1,132,008
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

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
2020_2021	9.3 %	1.0 %	103,435	1,113,628
2019_2020	9.1 %	1.1 %	103,332	1,135,411
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
2020_2021	58.8 %	4.8 %	99,249	168,690
2019_2020	55.7 %	5.0 %	87,278	156,698
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
2020_2021	93.3 %	0.9 %	1,238,318	1,327,568
2019_2020	94.2 %	0.8 %	1,254,834	1,331,754
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
2020	17.0 %	0.2 %	5,970	35,210
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 <20 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**
2021	15.9 %	0.5 %	36,214	227,091
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**
2020_2021	20.3 %	2.4 %	120,714	593,521
2019_2020	16.7 %	2.3 %	99,293	593,904
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**
2021	4.3 %	0.3 %	58,783	1,360,210
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
2018	75.4 %	2.2 %	55,000	73,000
2017	75.4 %	2.4 %	55,000	73,000
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
2021_2022	73.3 %	1.4 %	929,071	1,266,731
2020_2021	70.1 %	1.1 %	885,932	1,263,811
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
2021	85.5 %	1.6 %	325,551	380,788
2020	83.1 %	1.9 %	314,970	378,813
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
2021	89.5 %	1.4 %	340,692	380,788
2020	90.2 %	1.5 %	341,560	378,813
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
2021	93.7 %	1.1 %	356,645	380,788
2020	94.0 %	1.1 %	356,030	378,813
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**
2021	11.3	0.2	2,174	193,085
2020	13.1	0.3	2,431	185,978
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
2020	14.3 %	1.5 %	8,840	61,648
2019	15.6 %	1.5 %	9,718	62,162
2018	16.1 %	1.5 %	10,296	63,824
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
2020_2021	2.5 %	0.5 %	33,104	1,316,151
2019_2020	2.3 %	0.5 %	30,088	1,319,601
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 %	0.5 %	22,648	1,338,569
2016	1.3 %	0.5 %	17,042	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 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	2021	2022
Annual Objective			93.7	94
Annual Indicator	79.2	93.4	91.6	92.3
Numerator	954	891	854	878
Denominator	1,205	954	932	951
Data Source	VSA	VSA	VSA	VSA
Data Source Year	2018	2019	2020	2021
Provisional or Final ?	Final	Final	Final	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	94.3	94.6	95.0

Field Level Notes for Form 10 NPMs:

1.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**

Field Note:
Due to the Network Security Event, data for 2021 have been delayed

NPM 4A - Percent of infants who are ever breastfed

Federally Available Data				
Data Source: National Immunization Survey (NIS)				
	2019	**2020**	**2021**	**2022**
Annual Objective			88.9	89.2
Annual Indicator	84.1	88.6	86.8	88.5
Numerator	51,263	55,833	59,613	56,625
Denominator	60,967	63,040	68,676	64,001
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2016	2017	2018	2019

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	89.5	89.8	90.1

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**	**2021**	**2022**
Annual Objective			30.8	32.2
Annual Indicator	28.0	29.4	26.6	28.9
Numerator	16,851	17,961	17,625	17,748
Denominator	60,103	61,137	66,307	61,495
Data Source	NIS	NIS	NIS	NIS
Data Source Year	2016	2017	2018	2019

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	33.6	35.0	36.4

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	75.8	77.3	78.8	80.3	81.8
Annual Indicator	78.2	78.2	81.6	78.5	78.5
Numerator	48,293	48,293	50,368	47,476	47,476
Denominator	61,753	61,753	61,754	60,460	60,460
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	83.3	84.8	85.3

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**	**2021**	**2022**
Annual Objective		70.5	71.9	33.3	33.7
Annual Indicator	29.0	29.0	32.9	34.5	34.5
Numerator	16,948	16,948	19,188	19,974	19,974
Denominator	58,441	58,441	58,412	57,908	57,908
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	34.1	34.5	34.9

Field Level Notes for Form 10 NPMs:

None

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

Federally Available Data					
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective		68.1	69.5	57.6	58.6
Annual Indicator	51.7	51.6	56.6	55.0	55.0
Numerator	30,441	30,441	32,851	31,754	31,754
Denominator	58,942	58,942	58,015	57,742	57,742
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	59.6	60.6	61.6

Field Level Notes for Form 10 NPMs:

None

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)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	34.2	34.6	35	41.9	42.9
Annual Indicator	36.6	34.7	40.9	40.3	39.9
Numerator	49,586	47,097	55,907	57,317	58,486
Denominator	135,327	135,685	136,579	142,190	146,541
Data Source	NSCH	NSCH	NSCH	NSCH	NSCH
Data Source Year	2016_2017	2017_2018	2018_2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	43.9	44.9	45.9

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)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	87.3	87.7	88	82.2	83
Annual Indicator	87.1	87.1	81.4	78.7	75.7
Numerator	386,469	386,469	359,586	355,101	349,202
Denominator	443,800	443,800	441,589	451,033	461,338
Data Source	NSCH	NSCH	NSCH	NSCH	NSCH
Data Source Year	2016_2017	2016_2017	2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	83.8	84.6	85.4

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					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	57	60	63.3	45.9	46.9
Annual Indicator	53.4	50.6	44.9	44.9	49.5
Numerator	137,990	130,334	117,076	122,840	131,816
Denominator	258,184	257,564	260,596	273,531	266,095
Data Source	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year	2016_2017	2017_2018	2018_2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	47.9	48.9	50.0

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					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	40	43	45.3	27.9	28.9
Annual Indicator	16.2	21.6	26.9	23.8	16.8
Numerator	21,034	28,923	31,754	28,346	21,768
Denominator	129,507	133,731	118,003	119,301	129,340
Data Source	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN	NSCH-CSHCN
Data Source Year	2016_2017	2017_2018	2018_2019	2019_2020	2020_2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	29.9	30.9	31.9

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)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	58.6	59.3	60	54.9	55.7
Annual Indicator	53.3	53.3	54.1	47.0	47.0
Numerator	33,752	33,752	33,888	28,934	28,934
Denominator	63,361	63,361	62,695	61,594	61,594
Data Source	PRAMS	PRAMS	PRAMS	PRAMS	PRAMS
Data Source Year	2017	2017	2019	2020	2020

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	56.5	57.3	59.1

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)					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	6.5	6.4	6.3	4.4	4.1
Annual Indicator	5.5	5.3	4.7	4.2	3.3
Numerator	3,932	3,719	3,281	2,846	2,262
Denominator	71,324	70,599	69,782	68,236	68,059
Data Source	NVSS	NVSS	NVSS	NVSS	NVSS
Data Source Year	2017	2018	2019	2020	2021

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	3.8	3.5	3.2

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	2021	2022
Annual Objective			23.9
Annual Indicator	24.1	35.7	27.3
Numerator	334	493	382
Denominator	1,385,375	1,381,029	1,401,834
Data Source	VSA	CDC Wonder using ICD-10 Codes	CDC Wonder using ICD-10 Codes
Data Source Year	2019	2020	2021
Provisional or Final ?	Final	Provisional	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	23.7	23.5	23.3

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2021**
	Column Name:	**State Provided Data**
	Field Note: Of note, because of the Network Security Incident, 2021 data are not available from the VSA. Therefore, CDC Wonder data was used using ICD-10 codes from SAMSA's guidance.	
2.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**
	Field Note: CDC Wonder data was used using ICD-10 codes from SAMSA's guidance.	

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	2021	2022
Annual Objective			312.1
Annual Indicator	328.5	381.4	427.7
Numerator	640	690	779
Denominator	19,481	18,090	18,213
Data Source	Health Services Cost Review Commission	Health Services Cost Review Commission	Health Services Cost Review Commission
Data Source Year	2018	2021	2022
Provisional or Final ?	Final	Provisional	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	295.7	279.3	262.8

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**

Field Note:
CRISP SIHIS Dashboard; includes transfusions

SPM 3 - Receipt of Primary Care During Early Childhood

Measure Status:	Active

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	64.6	65.8	67.1	68.2	69.4
Annual Indicator	65.9	67.1	67	71.7	72.1
Numerator	30,621	25,794	24,969	27,940	26,442
Denominator	46,466	38,455	37,253	38,989	36,662
Data Source	Medicaid	Medicaid	Medicaid	Medicaid	Medicaid
Data Source Year	2018 (CY)	2019 (CY)	2020 (CY)	2021 (CY)	2022 (CY)
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	70.6	71.8	73.0

Field Level Notes for Form 10 SPMs:

None

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	2021	2022
Annual Objective			8.5
Annual Indicator	9.2	3.5	7.1
Numerator	10,974	4,213	8,460
Denominator	1,195,993	1,193,543	1,193,543
Data Source	Health Services Cost Review Commission	Health Services Cost Review Commission	Health Services Cost Review Commission
Data Source Year	2018	2021	2022
Provisional or Final ?	Final	Final	Provisional

Annual Objectives			
	2023	2024	2025
Annual Objective	7.2	6.7	6.2

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2021**
	Column Name:	**State Provided Data**
	Field Note: We hypothesize that the rate has decreased due to the COVID-19 Pandemic.	
2.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**
	Field Note: Represents the total number of children 2-17 with a primary diagnosis of asthma in an ED visit regardless of whether the child was admitted to an inpatient setting; CRISP SIHIS Dashboard	

SPM 5 - Cross-Cutting Measure: Percentage of MCHB committees/workgroups that include community members/persons with lived experience

Measure Status:	Active

State Provided Data		
	2021	2022
Annual Objective		
Annual Indicator	18.2	30
Numerator	2	3
Denominator	11	10
Data Source	Title V program data	Title V program data
Data Source Year	2021	2022
Provisional or Final ?	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	27.0	36.0	45.0

Field Level Notes for Form 10 SPMs:

1.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**

Field Note:
One of the committees sunsetted after 2021.

Form 10
Evidence-Based or –Informed Strategy Measures (ESMs)

State: Maryland

ESM 3.1 - Percentage of Level III & IV Perinatal Referral Centers who received their re-designations based on the 2019 MD Perinatal System Standards

Measure Status:	Active

State Provided Data				
	2019	2020	2021	2022
Annual Objective			93.7	62
Annual Indicator	0	15.4	46.2	53.8
Numerator	0	2	6	7
Denominator	14	13	13	13
Data Source	Program Data	Program Data	Program Data	Program Data
Data Source Year	2019	2020	2021	2022
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	85.0	100.0	100.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2020**
	Column Name:	**State Provided Data**

Field Note:
Of note during 2021, there were 13 Level III and IV Perinatal Referral Standards.

ESM 4.1 - Number of birthing hospitals designated as breastfeeding friendly

Measure Status:			Active	
State Provided Data				
	2019	**2020**	**2021**	**2022**
Annual Objective			10	11
Annual Indicator		10	10	10
Numerator				
Denominator				
Data Source		MDH Breastfeeding Policy Committe	MDH Breastfeeding Policy Committee	MDH Breastfeeding Policy Committee
Data Source Year		FY 2020	FY2021	FY2022
Provisional or Final ?		Final	Final	Final

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	12.0	13.0	15.0

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.	
2.	**Field Name:**	**2021**
	Column Name:	**State Provided Data**
	Field Note: Due to emphasis on addressing COVID, the number of baby-friendly hospitals remain the same.	
3.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**
	Field Note: Due to the Infant Formula Shortage and the Network Security Event, Title V and the Bureau's resources were diverted to address these events.	

ESM 5.2 - Number of home visiting or care coordination clients, providers, and other Title V program participants that received infant safe sleep counseling and information

Measure Status:	Active

State Provided Data		
	2021	2022
Annual Objective		
Annual Indicator	6,800	7,552
Numerator		
Denominator		
Data Source	Title V program Data	Title V Program Data
Data Source Year	2021	2022
Provisional or Final ?	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	7,600.0	7,650.0	7,700.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2021**
	Column Name:	**State Provided Data**

Field Note:
For 2021, the number was 6,728

ESM 6.1 - Number of parents who receive information/education on the importance of developmental screenings from Home Visiting and Care Coordination Title V providers

Measure Status:	Active

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	1,181	1,201	1,220	1,239	1,259
Annual Indicator	1,035	1,022	749	2,325	5,522
Numerator					
Denominator					
Data Source	MCHB Data	MCHB	MCHB Data	MCHB Data	MCHB Data
Data Source Year	2018	2019	FY 2020	2021	2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	5,600.0	5,650.0	5,700.0

Field Level Notes for Form 10 ESMs:

1.	**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 health services and school-based health centers.

Measure Status:	Active

State Provided Data				
	2019	2020	2021	2022
Annual Objective			45,000	60,000
Annual Indicator		37,578	798	14,190
Numerator				
Denominator				
Data Source		MCHB Data	MCHB Data	MCHB/Title V LHD Data
Data Source Year		FY 2020	FY2021	FY2022
Provisional or Final ?		Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	75,000.0	90,000.0	110,000.0

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	
2.	**Field Name:**	**2021**
	Column Name:	**State Provided Data**
	Field Note: The numbers dramatically decreased due to COVID. Many schools were operating virtually and therefore school health services and school-based clinics were not open.	
3.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**
	Field Note: Numbers have increased. Of note, the ESM was clarified to indicate School Health Services, and not school-based Health Centers	

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

Measure Status:				Active	
State Provided Data					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	61	5,300	5,400	5,500	5,600
Annual Indicator	5,362	5,770	1,463	1,502	756
Numerator					
Denominator					
Data Source	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data
Data Source Year	FY 18	FY 19	FY 2020	FY 2021	FY2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	1,500.0	1,600.0	1,650.0

Field Level Notes for Form 10 ESMs:

1.	**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.	
2.	**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.	
3.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**
	Field Note: The number has decreased due to COVID	

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

Measure Status:				Active	
State Provided Data					
	2018	**2019**	**2020**	**2021**	**2022**
Annual Objective	61	62	63	64	65
Annual Indicator	5,697	1,308	416	81	184
Numerator					
Denominator					
Data Source	OGPSHCN	OGPSHCN	OGPSHCN Data	OGPSHCN Data	OGPSHCN Data
Data Source Year	FY2018	FY 2019	FY 2020	FY 2021	FY2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	**2024**	**2025**
Annual Objective	66.0	67.0	1,300.0

Field Level Notes for Form 10 ESMs:

1.	**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.	
2.	**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.	
3.	**Field Name:**	**2021**
	Column Name:	**State Provided Data**
	Field Note: The 2021 numbers are significantly low because of COVID.	

ESM 13.1.1 - Percentage of pregnant individuals aged 21 and older on medical assistance in Maryland who receive a preventive dental visit

Measure Status:	Active

State Provided Data				
	2019	2020	2021	2022
Annual Objective			28.4	29.9
Annual Indicator	28.2	28.8	21.6	20.6
Numerator	7,979	8,346	6,666	7,255
Denominator	28,259	28,939	30,925	35,263
Data Source	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report	Office of Oral Health Legislative Report
Data Source Year	CY 2018	CY 2019	CY2020	CY2021
Provisional or Final ?	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	31.4	32.5	34.0

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:**	**2021**
	Column Name:	**State Provided Data**
	Field Note: Numbers impacted by the COVID-19 Pandemic	
3.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**
	Field Note: Decreased numbers due to COVID	

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

Measure Status:	Active

State Provided Data					
	2018	2019	2020	2021	2022
Annual Objective	136	137	139	140	142
Annual Indicator	131	99	86	67	39
Numerator					
Denominator					
Data Source	MDH CTPC Quitline Data	MDH CTPC Quitline Data	Quit Line Data	Quit line Data	Quit line Data
Data Source Year	FY 18	FY 19	FY 2020	FY2021	FY2022
Provisional or Final ?	Final	Final	Final	Final	Final

Annual Objectives			
	2023	2024	2025
Annual Objective	143.0	143.0	143.0

Field Level Notes for Form 10 ESMs:

1.	**Field Name:**	**2022**
	Column Name:	**State Provided Data**

Field Note:
Numbers decreased compared to prior years because fewer funds were dedicated to outreach.

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:	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. This is part of the Statewide Integrated Health Improvement Strategy that is part of the Maryland Total Cost of Care Model.

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.

SPM 5 - Cross-Cutting Measure: Percentage of MCHB committees/workgroups that include community members/persons with lived experience
Population Domain(s) – Cross-Cutting/Systems Building

Measure Status:	Active
Goal:	To have at least 50% of MCHB State Committees/workgroups include community members/persons with lived experiences by SFY2025
Definition:	**Unit Type:** Percentage **Unit Number:** 100 **Numerator:** Number of MCHB commissions/workgroups that include persons with lived experience or community members **Denominator:** Number of MCHB commissions that Title V staff coordinate
Data Sources and Data Issues:	Title Data
Significance:	Working towards MCHB policies and practices are centered on equity and anti-racism principles will support Title V activities achieve inclusion and equity. The Title V staff would like to see more MCHB commissions/workgroups that include persons with lived experience or community members.

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 Level III & IV Perinatal Referral Centers who received their re-designations based on the 2019 MD Perinatal System Standards
NPM 3 – Percent of very low birth weight (VLBW) infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To have 100% of Level III & IV Perinatal Referral Centers receive their re-designations based on the 2019 MD Perinatal System Standards</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Percentage</td></tr>
<tr><td>Unit Number:</td><td>100</td></tr>
<tr><td>Numerator:</td><td>Number of Level III & IV Perinatal Referral Centers who receive their re-designations</td></tr>
<tr><td>Denominator:</td><td>Total Number of Level III & IV Perinatal Referral Centers</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Programmatic Data</td></tr>
<tr><td>Significance:</td><td>Infants who are born at facilities that are equipped to meet the need of both the infant and the birthing individual is important to improve both maternal and neonatal outcomes. Infants born in appropriate level hospitals have a decreased risk of adverse outcomes. Since the mid-1990s, Maryland has developed voluntary standards for Maryland hospitals providing obstetric and neonatal services. The Standards have been incorporated into regulations for designation of perinatal referral centers (Level III, and Level IV) by the Maryland Institute for Emergency Medical Service Systems (MIEMSS). The re-designation of the Perinatal Referral Center ensures that these Centers are equipped to meet the need of both the infant the birthing individual</td></tr>
</table>

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 Baby-Friendly accreditation status **Denominator:**
Data Sources and Data Issues:	The information is from the Breastfeeding Policy Committee that tracks and monitors the number of hospitals that have received the baby-friendly designation.
Significance:	Increased support from hospitals will have a positive impact on the number of women who initiate breastfeeding

ESM 5.2 - Number of home visiting or care coordination clients, providers, and other Title V program participants that received infant safe sleep counseling and information
NPM 5 – A) Percent of infants placed to sleep on their backs B) Percent of infants placed to sleep on a separate approved sleep surface C) Percent of infants placed to sleep without soft objects or loose bedding

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>To overall see an increase percentage of infants placed to sleep on their backs, on a separate approved sleep surface, and placed to sleep without soft objects or loose bedding with increased safe sleep counseling and information</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Unit Type:</td><td>Count</td></tr>
<tr><td>Unit Number:</td><td>10,000</td></tr>
<tr><td>Numerator:</td><td>Number of home visiting or care coordination clients, providers, and other Title V program participants that received infant safe sleep counseling and information</td></tr>
<tr><td>Denominator:</td><td></td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>Title V Data Source</td></tr>
<tr><td>Evidence-based/informed strategy:</td><td>The American Academy of Pediatrics recommend that infants sleep on their back, on a firm surface without any loose bedding or soft objects. The strategy is to provide infant safe sleep counseling and information to families as well as providers who work with families. According to Ashley et al, receiving provider advice was associated with increased use of safe sleep practices (Prevalence and Factors Associated With Safe Infant Sleep Practices. Pediatrics November 2019). By providing information and counselling to families and providers who can provider counseling, this may increase the number of infants who are sleeping safely.</td></tr>
<tr><td>Significance:</td><td>This ESM measures the number of families and providers who are trained on the importance of infant safe sleep, how infants can sleep safely. To change the culture of infant safe sleep, it is important for all families to know how infants can sleep safely.</td></tr>
</table>

ESM 6.1 - Number of parents who receive information/education on the importance of developmental screenings from Home Visiting and Care Coordination Title V providers
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 receive education about developmental screening tools from Home Visiting and Care Coordination Title V providers
Definition:	**Unit Type:** Count **Unit Number:** 10,000 **Numerator:** Home Visiting, Care Coordination, and other Title V program clients/parents who 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 health services and 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 aged 21 and older on medical assistance in Maryland 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
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 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 2022

	Access				Linkages	
Data Sources	(A) State Title V Program has Consistent Annual Access to Data Source	(B) State Title V Program has Access to an Electronic Data Source	(C) Describe Periodicity	(D) Indicate Lag Length for Most Timely Data Available in Number of Months	(E) Data Source is Linked to Vital Records Birth	(F) Data Source is Linked to Another Data Source
1) Vital Records Birth	Yes	No	Annually	24		
2) Vital Records Death	Yes	No	Annually	24	Yes	
3) Medicaid	No	No	Never	NA	No	
4) WIC	No	No	Never	NA	No	
5) Newborn Bloodspot Screening	Yes	Yes	Daily	0	No	
6) Newborn Hearing Screening	Yes	Yes	Daily	0	Yes	
7) Hospital Discharge	Yes	Yes	Quarterly	4	No	
8) PRAMS or PRAMS-like	Yes	Yes	Annually	12	No	

Form Notes for Form 12:

None

Field Level Notes for Form 12:

None