Maternal and Child Health Services Title V Block Grant

Maryland

FY 2018 Application/ FY 2016 Annual Report

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I. General Requirements

I.A. Letter of Transmittal

MARYLAND
Department of Health

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

July 13, 2017

U.S. Department of Health and Human Services
Health Resources and Services Administration
Maternal and Child Health Bureau
Division of State and Community Health
Room 5C-26
5600 Fishers Lane
Rockville, MD 20857

Dear Sir or Madam:

The State of Maryland is pleased to submit its FY 2018 Title V Maternal and Child Health Block Grant Application and FY 2016 Annual Report. Maryland is not requesting a waiver of the Maternal and Child Health Block Grant requirements at this time. We believe that all requirements stated in the guidance have been met in our application.

We look forward to your review of our application. If there are any questions about the application, please contact me at 410-767- 5596 or courtney.lewis@maryland.gov.

Sincerely,

Courtney Lewis

Courtney Lewis, MPH
Director
Maternal and Child Health Bureau

cc: Stacey Little
Jed Miller
Meredith Truss

201 W. Preston St.—Baltimore, MD 21201 · health.maryland.gov · Toll Free: 1-877-463-3464 · TTY 1-800-735-2258

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 C of the 2015 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 "GUIDANCE AND FORMS FOR THE TITLE V APPLICATION/ANNUAL REPORT," OMB NO: 0915-0172; published January 2015; expires December 31, 2017.

I.E. Application/Annual Report Executive Summary

Executive Summary

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

As Maryland's Title V Maternal and Child Health Block Grant Agency, the Maryland Department of Health Maternal and Child Health Bureau (MCHB) provides leadership to improve the health and wellbeing of MCH populations. MCHB receives approximately $11.6 million annually to address ongoing and emerging health care needs for Marylanders across the six MCH population domains: women, infants, children, adolescents, children with special health care needs, and cross-cutting/life course. Title V implements strategies in support of its eight chosen national performance measures (NPMs). Maryland utilizes Title V funds to support staff at the state and local levels, and to support a broad range of services and activities directed toward the priority populations. This annual report and application provides an overview of Maryland's Title V activities and accomplishments across the six domains, as well as next steps to continue progress toward the NPMs.

Women's Health: Maryland has chosen low-risk cesarean delivery as its NPM in the women's health domain, based on findings of the 2015 needs assessment; according to Maryland Vital Statistics Administration (VSA) data, in 2015 more than one-third of Maryland births were delivered via cesarean section. During FY16 MCHB continued work toward reducing this rate through the Title V program. Efforts included partnerships with 31 of the 32 delivery hospitals in the state to share individual hospital rates, education, and technical assistance in the implementation of policies and practices to reduce the number of low-risk cesarean births. This work will continue in 2018 through annual distribution of cesarean delivery rates to each delivery hospital, MCHB support of the Maryland Perinatal Neonatal Quality Collaborative initiative to reduce low-risk cesarean deliveries, provision of training resources, educational meetings, and quarterly monitoring of cesarean birth data from VSA. Results are already indicating that progress is being made on this NPM. Although the rate of low-risk cesarean deliveries increased 17%, from 25.8% in 2003 to 30.2% in 2015, in 2016 the rate decreased to 28.4% (VSA data).

Infant/Perinatal Health: Maryland's infant health NPM is the placement of infants on their back to sleep, as sleep-related infant deaths remain the third leading cause of overall infant mortality and the leading cause of postneonatal deaths in Maryland. During FY16, Title V supported local Fetal and Infant Mortality Review (FIMR) and Child Fatality Review (CFR) activities to investigate causes of infant death. Title V also supported infant mortality reduction activities in local health departments across the state. These funds were utilized for home visiting strategies, paraprofessional case management services for high-risk women and infants, expansion of preconception care and family planning services, screening and referrals for mental health and substance use, and pre-conception/prenatal nutrition support. Specifically, safe sleep education was provided to families through home visiting and case management programs for high risk families, and certification of home births. Finally, during FY16 Title V began a hospital recognition program to recognize hospitals that model safe sleep practices. In 2018, Title V will continue to fund local health departments for FIMR and CFR activities, and for infant mortality reduction strategies including home visiting and case management of high risk women and infants. The hospital safe sleep recognition program will continue. A new Title V initiative that began during 2017 and will continue during 2018 is interviews of families who have lost infants to sleep-related causes, to better understand how safe sleep messaging is perceived and accepted. This information will allow MCHB and Title V to understand the social determinants of infant mortality due to sleep related causes and what safe sleep information new parents and other caregivers could use to increase the use of safe practices.

Maryland opted to revise its state performance measure (SPM) in the infant health domain during 2017 to reflect an emerging area of need related to the statewide opioid addiction crisis. As part of ongoing Title V needs assessment activities, MCHB monitors the number of infants born with Neonatal Abstinence Syndrome (NAS). According to the Maryland Health Services Cost Review Commission, the number of infants born with NAS has increased annually since 2009 when 958 infants were born with NAS, to 1,419 infants in 2015. In 2017 Title V developed a new SPM to measure its work on this issue: number of hospitals that integrate service practices/policies to improve the quality of care for substance exposed infants. During 2017 Title V supported the Maryland Perinatal Neonatal Quality Collaborative initiative to standardize the care of infants born with NAS. Support included access to the Vermont Oxford Network Neonatal Abstinence Syndrome Implementation Package for hospitals statewide, which includes evidence-based education modules and resources for improving outcomes and increasing the quality and safety of care provided to infants with NAS. Maryland has also been selected to participate in the second SAMHSA Policy Academy to improve outcomes for pregnant and postpartum women with opioid use disorder and their infants. A major part of this initiative is to develop a process to engage families with child welfare services, to support family preservation, and to develop a Plan of Safe Care for each substance exposed infant. MCHB is a member of this policy team along with child welfare and substance abuse agencies. Finally, Title V provides funding to local health departments across the state to link women of childbearing age with substance use disorders with treatment sources. These activities will continue in 2018.

Children's Health: Title V efforts in Maryland continue to focus on children who receive a developmental screen as its child health NPM. In FY16, child health activities for which Title V provided leadership and funding included child fatality review activities, promoting access to well child visits for children and adolescents, lead case management, Infants and Toddlers Program support, and services such as immunizations and hearing/vision screening. Using Title V funding, local health departments provided education to families of young children about developmental screening through home visiting programs, case management of children with elevated blood lead levels, and case management for children in the Infants and Toddlers Program; all of these activities will continue in 2018.

During 2017, the Title V manager worked with funded local health departments to align their activities with Maryland's NPMs and SPMs, and to develop new local level performance measures to document impact and progress. Beginning in FY18, grantees will report new performance data quarterly, which will allow Maryland to collect a core set of data around activities that support developmental screening and other child health activities.

Maryland also chose to develop a new SPM related to primary care and developmental screening for children. Since the NPM focuses on developmental screening using a parent-completed tool, Maryland developed an SPM around receipt of primary care as an additional point of access to developmental screening. Bright Futures recommendations indicate that developmental surveillance should be a part of each well visit, with developmental screening at 9 months. Maryland's new child health SPM will measure the percent of Medicaid patients, age 15 months, who had 5 or more well child visits during the first 15 months of life, as a gauge of both receipt of primary care and access to developmental surveillance/screening. Local health departments will continue to use Title V funding to educate parents of young children about developmental screening, and to refer children to their health care providers for screening. MCHB and Title V will monitor data for potential disparities in populations related to developmental screening and/or well visits to target future efforts.

Adolescent Health: In 2016, MCHB hired a new Chief of Child and Adolescent Health, Dr. Jed Miller. Dr. Miller worked with Title V during FY16 to refine activities in support of adolescent health and the NPM around annual well visits. Late in FY16, the Child and Adolescent Health Unit began a strategic planning process for adolescent health, including literature review, stakeholder meeting planning, and identification of participants for an advisory committee. Dr. Miller and other Title V staff also applied and were selected to participate in the second cohort of the Adolescent and Young Adult Health (AYAH) Collaborative Improvement and Innovation Network (CoIIN). CoIIN work will focus on selecting and monitoring measures around access to and quality of well visits for adolescents and young adults, and on partnerships with local health improvement coalitions to develop strategies to increase access to and quality of well visits.

Children with Special Health Care Needs (CSHCN): The Maryland Title V Program has chosen to focus on NPMs around ensuring medical home access and transition support/services for children and youth with special health care needs (CYSHCN). During FY16, the program provided care coordination through local health departments and other grantees for CYSHCN, support, education, and resources for families of CYSHCN, trainings for families and health care providers on family professional partnership, financial support to health care institutions to enhance medical home efforts, early and continuous screening follow-up, trainings and education for health insurance plans, providers, and families around health care transition, and funds to health care systems and organizations to support transition activities.

During FY18, the program plans to incorporate standardization of a Medical Home and Health Care Transition Framework, including specific target areas and expected outcomes, which grantees will utilize to provide services to CYSHCN. Also in FY18, Title V will undertake a statewide provider inventory of care coordination services for CYSHCN. Maryland will continue its work through the Health Transformation Cohort Project, focused on improving care coordination for CYSHCN.

Cross-cutting/Life Course: One of Maryland's cross-cutting NPMs focuses on dental visits during pregnancy and for infants/children. Title V continued to work with the Office of Oral Health (OOH) during 2016 to implement its Perinatal and Infant Oral Health Quality Improvement grant. OOH began implementation of a survey initiative to gather data from medical and dental providers and pregnant women about oral health knowledge, practices, and barriers/facilitators to care. OOH also planned a perinatal and infant oral health literacy marketing campaign, targeted to Latinas of childbearing age via radio and online ads in three areas of Maryland with high numbers of Hispanic residents.

The OOH conducted its Oral Health Survey of Maryland School Children during FY16, to assess the oral health status of children in kindergarten and 3rd grade (an in-school, open mouth assessment of dental caries status and dental sealant usage). The survey showed an increase in dental caries in kindergarten compared to the 2011-2012 survey, however, there was a decrease in untreated dental caries in 3rd grade children and an increase in dental sealants compared to the 2011-2012 survey.

To continue to facilitate dental care during pregnancy, in 2017 and 2018 Title V will participate on the OOH's committee to develop state oral health during pregnancy practice guidelines for prenatal and oral health care providers. Survey efforts will also continue in FY18 and may include interviews and/or focus groups of health care providers at community-based health centers regarding their knowledge, understanding, attitudes, behaviors, and practices around oral health during pregnancy.

Maryland is also partnering with the Center for Tobacco Prevention and Control (CTPC) on a cross-cutting NPM to reduce smoking during pregnancy. During FY16 CTPC implemented several marketing campaigns targeting pregnant women with special incentives for those who call the Quitline. Title V will continue to partner with CTPC in 2018 to monitor smoking during pregnancy and to promote the Quitline to pregnant women. Title V will also continue to fund local health departments to provide family planning services to women of childbearing age, including screening and referral for tobacco use. Grantees will begin to report specific data to Title V quarterly on the number of women referred to tobacco cessation services.

Next Steps: In addition to domain-specific progress and activities, the Maryland Title V Program has worked during 2016 and 2017 to align all activities at the state and local/grantee levels with the Title V action plan and performance measures. To ensure accountability and measure progress, beginning in FY18, Title V population domain leads within MCHB will begin to use a shared, centralized database and will update data relevant to NPMs, SPMs, and ESMs throughout the year. Local health department (LHD) grantees will also begin to report new data during FY18. Between late December 2016 and June 2017, the Title V manager communicated extensively with LHDs to develop new local-level performance measures that capture their work on Title V priorities, and that align with NPMs, SPMs, and ESMs. In FY18, LHDs will begin to report quarterly data to the centralized database, so that

the Title V program can collect a core set of "like" performance measure data and monitor progress.

During FY18, Maryland also plans to enhance its ongoing needs assessment efforts, to engage a more diverse and broader subset of key populations impacted by MCH funding and programmatic services. Partners to target may include LHDs, sub-grantees, and vendors serving MCH populations, relevant coalitions, advisory groups, and community-based stakeholders. Data will be collected from MCH end-users bi-annually to gather feedback on MCH population needs. This may include the implementation of a bi-annual stakeholder survey (through LHDs), informal group discussions, and fora to collect interim data to inform MCH efforts, planning, and approaches prior to the 2020 comprehensive needs assessment.

II. Components of the Application/Annual Report

II.A. Overview of the State

Introduction

Maryland is a small but diverse state comprised of 24 political jurisdictions, including 23 counties and the City of Baltimore. With an estimated population of more than 6 million in 2016 [i], Maryland is the nation's 19th most populous state, yet it ranks among the 10 smallest states according to land area [ii]. 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 D.C., and flat rural areas in the eastern region. The "Eastern Shore" borders Delaware, the Atlantic Ocean and the Chesapeake Bay, the largest estuary in the U.S. The Bay is a treasured geographic asset but the fact that it bisects the State presents special challenges (e.g., transportation and access to specialty care services) for Eastern Shore residents.

The State's Maternal and Child Health (MCH) population included an estimated 1 million women of childbearing age (ages 15-45), 1.5 million children and adolescents (ages 0-19), and 398,869 young adults in 2015. [iii] An estimated 264,730 Maryland children and youth (ages 0-17) have special health care needs. [iv]

Maryland's Health Care Environment

Maryland's health care system includes 24 local health departments (LHDs), 47 hospitals, 21 federally qualified health centers (FQHCs), the Medicaid Program, private insurers, regulatory agencies, provider groups, advocacy groups and countless health practitioners. [v] MCH specific resources include 32 birthing hospitals, nearly 2,600 pediatricians and/or adolescent practitioners, 1,256 obstetricians and/or gynecologists, and 1,886 family/general practitioners. [vi] Maryland is also home to some of the best diagnostic centers for developmental conditions in children, such as Kennedy Kreiger Institute, University of Maryland Division of Behavioral and Developmental Pediatrics, and Mount Washington Pediatric Hospital.

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

During its first year of operation in 2013, MHC enrolled 463,939 Marylanders including 82,535 individuals in private health plans and 381,404 individuals in Medicaid. [vii] During open enrollment for the 2017 plan year, more than 500,000 individuals enrolled through MHC including 157,637 in private health plans (representing a greater than 90% increase over year one enrollment) and 343,542 individuals in Medicaid. [viii]

The Maryland Medicaid Program serves as the major source of publicly sponsored health insurance coverage for children, adolescents, and pregnant women. During calendar year 2016, 655,287 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 2015, Medicaid covered hospital delivery costs for approximately 40% of Maryland births.

Health care workforce shortages/distribution affects many Maryland communities. There are federally designated health professional shortage areas and medically underserved areas/populations located throughout the State, particularly in urban and rural areas. Data from the HRSA Data Warehouse indicates that 19 of Maryland's 24 jurisdictions are currently either entirely or partially federally designated as health professional shortage areas for primary care and/or dental services, and 18 are shortage areas for mental health. Twenty three of 24 jurisdictions in the State 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 as one of the ten wealthiest states in the nation as measured by median household income in 2015. [ix] 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.

The 2016 Kids Count Data Book (Annie E. Casey Foundation), ranked Maryland 16th in overall child well-being as compared with a ranking of 25th in 2008. [x] The State still faces many challenges in maternal and child health. Poverty, which is a significant social determinant of health, increased overall in Maryland from 8% in 2006 to 9.7% in 2015. [xi] The infant mortality rate in Maryland rose 3% from 2014 to 2015 from 6.5 to 6.7 per 1,000, and disparities persist by race/ethnicity and geography. [xii] More than two in five children do not have access to a medical home and successful transition to adult health care is inconsistent. [xiii] More detailed data was included in the 2015 Needs Assessment summary, which is included in section II.B.

Maternal and Child Health Bureau

Maryland's lead public health agency is the Maryland Department of Health (formerly named Department of Health & Mental Hygiene). Throughout the 2016 reporting period, the Maryland Department of Health (MDH) was led by Secretary Van Mitchell under the leadership of Governor Larry Hogan. In December 2016, Dennis Schrader was appointed MDH Acting Secretary; he brings a wealth of state government leadership experience to the Department. MDH houses Maryland's Title V Agency, the Maternal and Child Health Bureau (MCHB or Bureau), within the Prevention and Health Promotion Administration (PHPA). MCHB's mission is to provide State leadership to improve the health and well-being of Maryland women, men, infants, children adolescents and their families. MCHB focuses on prevention across the lifespan for children and women of childbearing age and serves as MDH's primary prevention unit for unintended and adolescent pregnancy; infant mortality and low birth weight reduction; breastfeeding promotion' preventive and primary care for children and adolescents; and systems development for children and youth with special health care needs. MCHB also has the lead responsibility for reducing racial disparities/inequities in health outcomes for women and children.

Major goals 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. MCHB
programs and services are provided across the three levels of the MCH pyramid to protect and promote the health of all women and children.

Title V funds support three offices within the Bureau: the Office of Family and Community Health Services (OFCHS); the Office of

MCH Epidemiology (OME) and the Office for Genetics and People with Special Health Care Needs (OGPSCHN). These three offices employ a staff of 33 FTEs with Title V support.

MCHB collaborates with other PHPA and MDH units and other State agencies to address: access to prenatal care, breastfeeding promotion, childhood obesity prevention, childhood lead screening, cervical and breast cancer screening, access to family planning, screening and treatment of sexually transmitted diseases, immunizations, child abuse and neglect, early childhood mental health, postpartum depression, suicide, school health, substance abuse, tobacco use prevention, and intimate partner violence. 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 medical centers; professional organizations (ACOG, AAP); private non-profits; FQHCs; and advocacy groups. Title V funding is provided to local health departments to drive improvements in the health of women, children, and families at the community level. The Title V Program 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, the 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; and the Personal Responsibility Education Program (PREP), and one State general fund initiative, Babies Born Healthy (BBH). MCHB's staff is multi-disciplinary and includes physicians, nurses, social workers, epidemiologists, educators, community 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 in residence.

MCH Health Needs

In 2014 Maryland's infant mortality rate declined to 6.5 infant deaths per 1,000 live births; a significant decline over the 2008 rate of 8.5. However, in 2015 the infant mortality rate rose from 6.5 to 6.7 per 1,000. [xii] Although the 2011-2015 average rate (6.6) is still lower than the 2006-2010 average rate (7.6), a Black baby born in 2015 was still 2.6 times more likely to die within the first year of life than a White baby. [xii] There are also regional disparities in infant mortality rates, including Baltimore City (8.4 per 1,000), Prince George's County (8.9 per 1,000), Saint Mary's County (8.3 per 100,000) and the Eastern Shore Region (average 9.0 per 1,000). [xii]

Infant mortality reduction remains a MCHB priority. While Maryland has made tremendous progress in reducing overall rates of infant deaths, racial/ethnic disparities remain and will be an increased focus of Title V activities throughout the next budget year. Title V currently supports Fetal and Infant Mortality Review (FIMR) and Child Fatality Review (CFR) activities statewide and is implementing several programs under the State funded Babies Born Healthy Initiative. FIMR programs have been underway in all 24 jurisdictions since 1998. 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 other MCH issues.

In FY16, sixteen FIMR sites engaged their community action teams to implement program activities around the topics of safe sleep, racial disparities in infant mortality, education to support healthy mothers and babies (including reducing tobacco use and screening for substance use and mental health), and cultural competency education for clinicians. Challenges included a change in coordinators at the state level, which provided an opportunity for evaluation and addressing local program needs. During FY16, state FIMR coordinators implemented a process evaluation to examine and address local program strengths, weaknesses, and barriers with a goal of producing recommendations for improvement. The roll out of these recommendations will occur over the next four years, and may include reallocation of funding.

BBH was established in 2007 to reduce infant mortality, improve birth outcomes, and reduce racial disparities. BBH provides funds

to eight sites located in the seven jurisdictions in Maryland with the highest infant mortality rates and highest racial disparities in infant mortality. Jurisdictions focus their resources on tobacco cessation, substance use prevention and treatment, prenatal care, long acting reversible contraception, and other strategies driven by site-specific data to promote healthy maternal and infant outcomes. A statewide BBH strategy to increase birth spacing and improve maternal and child health outcomes is the creation and distribution of a hospital focused Immediate Postpartum Long Acting Reversible Contraception (IPP LARC) Toolkit, which will assist Maryland hospitals in increasing IPP LARC access to all women.

Preventing infant, child, and adolescent deaths through Child Fatality Review (CFR) is another MCHB priority. CFR was established in Maryland statute in 1999. Title V supports a 25 member State CFR Team that meets quarterly. The CFR Team's 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.

In 2016, the OCME referred 176 child deaths to the local CFR teams for review. Injury related deaths were the leading cause of unexpected child deaths in 2016, followed closely by Sudden Unexplained Infant Deaths (SUID). Unsafe sleep factors were present in a majority of the SUID cases. Safe sleep promotion will remain a Title V priority.

In March 2017, Governor Larry Hogan declared a state emergency and committed additional funding in response to Maryland's current opioid addiction crisis. According to the Maryland Health Services Cost Review Commission, the number of infants born with Neonatal Abstinence Syndrome (NAS) has increased annually since 2009 when 958 infants were born with NAS, compared with 1,419 infants in 2015. In 2016, 2,157 infants were born with NAS, however this was the first year of ICD-10 coding which may account for some of the increase. MCHB is committed to addressing substance use among the state's MCH population, and Title V funds are used to support standardization of care for infants with NAS as well as linkage to substance use treatment for women of childbearing age through funding awarded to local health departments. This work will continue during FY 2018.

Teen pregnancy prevention has been a focus area for MCHB for several years. OFCHS oversees the Title X Family Planning Program which includes a Healthy Teen and Young Adult clinical component. In addition, both Abstinence Education and PREP funds made available under the Affordable Care Act are administered under OFCHS. Both Abstinence and PREP provide support to local community agencies and local health departments to implement evidence based programming to prevent teen pregnancy and promote positive youth development.

Reducing unintended pregnancy by assuring access to family planning services is also viewed as a key strategy for reducing infant mortality. MCHB administers the Title X Family Planning Program. Title X Staff work closely with Title V to address such issues as unintended pregnancy, adolescent pregnancy prevention, and women's health. Family planning services are offered through a network of providers statewide. The Title X Program served 64,004 women and 7,819 men in 2016. Title V continues to supplement funding to local health departments for clinical family planning services.

Promoting healthy mothers, babies, and children through home visiting is a core integral component of Maryland's MIECHV Program. MCHB administers MIECHV and works in partnership with local health departments, community-based groups, and other state agencies to support and fully integrate systems of care aimed at improving outcomes for families. Maryland MIECHV has

received both formula and competitive funding totaling $39 million since 2010. Home visiting in Maryland has expanded to ten jurisdictions and served 1,175 families in FY 2016 across both formula and competitive sources. Competitive funds are supporting program evaluation, project expansion, a training institute, a certificate program for home visitors, and a statewide home visiting database. Maryland was one of the first states to enact a Home Visiting Accountability Act law. MIECHV staff are working closely with the Governor's Office for Children and statewide partners to collect data on 19 standard home visiting measures for all evidence based programs statewide.

Maryland has a Project LAUNCH grant that is administered by the Behavioral Health Administration. Title V is represented on the Advisory Council for Project LAUNCH and partners with MIECHV and others to improve early childhood mental health systems of care at the local and State levels.

OFCHS partners with Medicaid to monitor the percentage of infants and adolescents who follow through with well visits. Maryland is also participating in an Adolescent and Young Adult CoIIN during FY17 and FY18 to develop measures around quality of care for adolescents and young adults.

With lead support from OGPSHCN and in collaboration with the OFCHS, youth transition to adult health care remains a MCHB priority focus area. Maryland was one of five states selected to participate in the national Got Transition Initiative. Transition efforts have expanded throughout the state to include more awareness, education and training, and outreach to pediatric and adult providers. Strengthening systems of care for children and youth with special health care needs through the Medical Home model is another priority for OGPSHCN. Improving the infrastructure to support providers who serve CYSHNC while focusing on better access, care coordination, and family involvement are all targeted efforts for OGPSHCN.

Surveillance of Zika-exposed women and infants is a new priority for MCHB. Funds from CDC's "Surveillance, intervention, and referral to services activities for infants with microcephaly or other adverse outcomes linked with the Zika virus" grant will be used during FY 2018 to support two nurses to enhance state birth defect surveillance and care coordination to better understand the impact of Zika virus infection on infant health. These activities will be coordinated by the MCHB OME.

Violence prevention, including intimate partner violence (IPV), is a priority for MDH and MCHB. Maryland was one of six states that received funding for Project Connect in 2013 to integrate IPV assessment into the Title X Family Planning Program. This grant funding was used to integrate IPV assessment into family planning and domestic violence program sites in selected pilot regions of the state, with a goal of expanding to other sites statewide in the future. IPV training is required annually for all Maryland Family Planning Title X staff at all funded clinic sites.

The MCHB/OFCHS continues to support efforts related to HIV testing, including: (1) supporting requirements in Maryland to adopt CDC guidelines and the National HIV/AIDS Strategy (NHAS), regarding normalization of testing and opt-out testing into Family Planning clinics; (2) promoting the continued incorporation of the CDC's "Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings," in all delegate agencies; and (3) continuing to promote RAPID testing to ensure clients are made aware of their results during their visit.

Behavioral health issues were identified as a cross cutting issue during the 2015 Title V needs assessment. Local health departments reported increasing numbers of women of childbearing age as well as pregnant women with mental health, substance abuse, or co-occurring problems. Title X Family Planning has funded delegates to develop a bi-directional service bridge between family planning clinics and substance abuse/mental health treatment centers, to address the related health needs of clients. Four delegates have been funded to incorporate substance abuse/mental health Screening, Brief Intervention, and Referral to Treatment (SBIRT) to in-need clients.

A Title V stakeholder survey cited mental health and substance abuse as priority focus areas for adolescents as well. Maryland will explore the feasibility of developing a state performance measure to address this through its new adolescent and young adult CoIIN during FY18.

[i] United States Census Bureau National Population Totals. https://www.census.gov/data/tables/2016/demo/popest/nation-total.html
[ii] United States Census Bureau State Area Measurements and Internal Point Coordinates.
https://www.census.gov/geo/reference/state-area.html
[iii] 2015 Maryland Vital Statistics Report
[iv] 2011/12 National Survey for Children's Health (NSCH)
[v] Data from Maryland Health Care Commission and HRSA Data Warehouse
[vi] Data from Maryland Board of Physicians
[vii] Maryland Health Benefit Exchange 2014 Annual Report. http://marylandhbe.com/wp-content/uploads/2014/12/MHBE-AnnualReport2014web.pdf
[viii] Maryland Health Benefit Exchange Media Release. http://www.marylandhbe.com/wp-content/uploads/2017/01/020117_OE4Count.pdf
[ix] United States Census Bureau Household Income: 2015. https://www.census.gov/library/publications/2016/acs/acsbr15-02.html
[x] Annie E. Casey Foundation. 2016 Kids Count Databook. http://www.aecf.org/resources/the-2016-kids-count-data-book/
[xi] United States Census Bureau Poverty 2014 and 2015. https://www.census.gov/library/publications/2016/acs/acsbr15-01.html
[xii] Maryland Vital Statistics Infant Mortality in Maryland, 2015.
http://dhmh.maryland.gov/vsa/Documents/Infant_Mortality_Report_2015.pdf
[xiii] 2011/12 National Survey for Children's Health (NSCH)

II.B. Five Year Needs Assessment Summary and Updates

FY 2018 Application/FY 2016 Annual Report Update

Program capacity during 2016 was reduced due to a vacancy in the Title V Program Manager position and a later vacancy in the MCHB Director position, which Dr. Stacey Little filled in an acting role. Despite this challenge, the program continued efforts to assess needs and trends among state MCH populations. Activities included monitoring population health data, supporting relevant state legislation, and enhancing program capacity.

Data Updates

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

Women's/Maternal Health

Cesarean Deliveries: In 2015, more than one-third of Maryland births were delivered via cesarean section. According to Maryland Vital Statistics Administration data, the rate of cesarean deliveries in Maryland increased from 21.0% in 1997 to 34.9% in 2015. The rate of low risk cesarean deliveries increased seventeen percent from 25.8% in 2003 to 30.2% in 2015. Older (35+) Black non-Hispanic mothers had the highest rates of low risk cesarean delivery.

Intimate Partner Violence: According to 2014 Maryland PRAMS data, 2.7% of women reported that they were physically abused by a husband or partner during the 12 months before pregnancy or during pregnancy.

Substance Use/Abuse: The number of drug and alcohol intoxication deaths in Maryland reached a historic high of 1,259 deaths in 2015 with 86% categorized as opioid-related. The number of deaths increased by 22% among women between 2014 and 2015, and by 64% among women between 2010 and 2015.

Mental Health: According to 2014 Maryland PRAMS data, 8% of women reported depression before pregnancy and 12% of mothers reported symptoms of postpartum depression. During the three months before pregnancy, 11% of women reported they had anxiety. After delivery, 8% of women were told by a health care provider that they had depression.

Maternal Mortality and Morbidity: The 2010-2014 Maternal Mortality Rate (MMR) in Maryland increased 51% from the 2005-2009 rate. Major disparities exist. The MMR among Black women is 2.8 times the MMR of White women. The leading cause of pregnancy-associated deaths in 2014 was substance use with unintentional overdose, accounting for 15 percent of these deaths.

Perinatal Health of Maryland Women and Infants

Prenatal Care: The annual percentage of Maryland women who initiated prenatal care during the first trimester has generally risen, and had previously reached its highest rate (81.5%) in 2011. However the latest 2014 PRAMS data indicate a slight increase (82.2%) in early initiation of prenatal care.

Infant Mortality: Maryland Vital Statistics indicate that infant mortality in Maryland in 2015 was 6.7 per 1,000 live births; down from 8.5 in 2004; but a 3.3% increase from 2014 (6.5). The leading causes of infant death were low birth weight, congenital abnormalities, SIDS, maternal complications of pregnancy, and complications of the placenta, cord and membranes.

Low Birth Weight: In 2015, 8.6 percent of live births in Maryland were low birth weight (LBW). Non-Hispanic Blacks were significantly more likely to have a LBW infant than any other race. In 2014, Non-Hispanic Blacks had a LBW rate of 11.9 per 1,000 live births compared to 6.7 per 1,000 live births for the Non-Hispanic White births.

Very Low Birth Weight (VLBW): In 2015, 1.7 of all live births in Maryland were VLBW. However, Maryland has had one of the highest VLBW rates among Non-Hispanic Blacks. In Maryland, Non-Hispanic Blacks were nearly three times more likely than other races to have VLBW infants (2.8% non-Hispanic Blacks, 1.0% non-Hispanic whites, and 1.3% for Hispanics).

Preterm Birth: In 2015, 10.0 percent of live births occurred before 37 weeks of gestation in Maryland. In Maryland, Non-Hispanic Blacks were more likely to have a preterm birth than other races, with a rate of 12.5 percent compared to 8.8 and 9.1 for Non-Hispanic White and Hispanic births, respectively.

Breastfeeding: In 2014, according to PRAMS data 89.3 percent of Maryland mothers reported having ever breastfeed their babies.

Rates of breastfeeding in Maryland were high for all races ranging from 87% for Black non-Hispanic mothers to 95% among Hispanic mothers.

Safe Sleep: In 2014, according to PRAMS data 20 percent of mothers in Maryland reported not placing infants on their back to sleep and 25 percent of mothers reported always or often co-sleeping with their infant.

Child Health

Mortality: In 2015, there were 809 deaths to infants and children ages 0 to 18 years old in Maryland. The majority of these deaths occurred in infancy. Maryland's child death rate had been declining but increased 14% in 2015. Injuries were the leading cause of the 86 deaths to children ages 1-4 and 101 deaths to children ages 5-14 in 2015, followed by cancer.

Health Insurance Coverage: Maryland Medicaid and U.S. Census population estimate data for 2015 show that approximately 41% (656,000 of 1.6 million children ages 1 – 22 years) of Maryland children are enrolled in the Medicaid Program.

Preventive Health Care: According to 2016 Medicaid data, 66.3% of Medicaid enrolled patients who turned 15 months old during 2016 had five or more well-child visits during their first 15 months of life.

School Readiness: According to Maryland State Department of Education data, in the 2016-2017 school year only 43% of Maryland's young children entered kindergarten fully ready to learn (i.e., they demonstrated the skills and behaviors needed to fully participate in the kindergarten curriculum). This was a decline from 47% in school year 2014-2015.

Adolescent Health

Mental Health/Suicide: According to Maryland Vital Statistics Administration data, the rate of suicide deaths among youths ages 15 -19 was 6.0 per 100,000 population in 2015. This represented a decrease from the 2014 rate of 6.5 deaths per 100,000 population. The actual numbers of suicides in this age range decreased from 25 in 2014 to 23 in 2015. The suicide rate remained highest for White male teens in 2015.

Teen Pregnancy and Reproductive/Sexual Health: Maryland Vital Statistics Administration data showed that the adolescent birth rate decreased from 31.2 births per 1,000 adolescent females 15-19 years in 2009 to 16.9 births per 1,000 adolescent females in 2015. Hispanic females had the highest adolescent birth rate, with 42.7 births per 1,000 adolescent females, which was nearly double the adolescent birth rate for Black females (22.8 births per 1,000 adolescent females), and more than four times as high as the adolescent birth rate for White females (9.1 births per 1,000 adolescent females).

Life Course/ Cross Cutting

Smoking in Pregnancy: According to 2014 Maryland PRAMS, 15.3% of women smoked during the 3 months before pregnancy (down from 16% in 2013), 6.5% of women smoked during the last 3 months of pregnancy (down from 8% in 2013) and 11% smoked postpartum. Prenatal smoking rates in Maryland are five times higher than the HP 2020 objective for smoking during pregnancy (1.4%).

State Legislation

The state legislature, the Maryland General Assembly (MGA), convened from January through April 2016. Each year during the legislative session, MCHB receives relevant proposed bills through the PHPA Office of Policy and Planning, and has the opportunity to review and provide comments, information, and/or support for bills that impact the health of women, children, and families.

House Bill 180, HIV Testing During Pregnancy, requires health care providers who provide prenatal care to obtain consent for HIV testing and to test patients during the first and third trimesters, unless the patient declines. MCHB supported this bill; HB 180 was passed by the MGA and approved by Governor Hogan.

House Bill 1005, the Contraceptive Equity Act, requires insurers to provide coverage without a prescription for all contraceptive drugs approved by the FDA and available by prescription and over the counter; and, requires insurers to provide coverage for male sterilization without a copayment, coinsurance, or deductible. MCHB supported this bill; HB 1005 was passed by the MGA and

approved by the Governor.

House Bill 356, Supplemental Nutrition Assistance Program Benefits - Grant Application. This bill requires the Department of Human Resources to submit a grant application to the United States Department of Agriculture to support a pilot project that provides incentives to increase the purchase and consumption of eligible fruits and vegetables by specified program participants. HB 356 was passed by the MGA and approved by Governor Hogan.

House Bill 1293, Break Time for Expression of Breast Milk by Employees, requires employers to provide reasonable break time and private space (other than bathrooms) for an employee to express breast milk for one year after birth. MCHB supported this bill; HB 1293 did not pass.

House Bill 1003, Labor and Employment-Equal Pay for Equal Work, prohibits discrimination on the basis of sex or gender identity. HB 1003 was passed by the MGA and approved by Governor Hogan.

Program Capacity

Since the 2015 comprehensive needs assessment was conducted, there have been several changes in key staff roles. These include the following:

PHPA and MCHB Leadership:
- PHPA Director: Donna Gugel, effective 2016
- PHPA Deputy Director: Shawn Cain, effective 2017
- MCHB Director: Courtney Lewis, effective 2017

OFCHS Staff:
- Title V Program Manager: Meredith Truss, effective 2016
- Child and Adolescent Health Chief: Dr. Jed Miller, effective 2016
- Family Planning Chief: Tillie Metz, effective 2017

OGPSHCN Staff:
- System Development Unit Chief: Keisha Peterson, effective 2015
- Medical Home Coordinator: Anita Stokes, effective 2017

Aligning Program Initiatives with Title V Performance Measures

In the past year, the Maryland Title V program has developed a clear plan for aligning its program performance measures and activities across all programs and domains. Between late December 2016 and June 2017, the Title V Manager (Meredith Truss), under the leadership of the Title V Director (Dr. Little), revised the state Title V action plan, communicated extensively with local health departments to ensure accurate and complete data collection around Title V priorities, and began planning and outlining future needs assessment activities.

Over the next year, Dr. Little and Ms. Truss will work with MCHB funded agencies to capture data relevant to the performance measures that have been developed for Maryland's Title V program. Data will be captured and monitored through the use of a shared data dashboard. Annually, Title V program data and metrics will be shared through written and oral communications. It is the intention of Title V MCH leadership to ensure ongoing engagement about and understanding of the impact of MCH services as they relate to populations served through Title V programs.

Future Needs Assessment Plans

Over the next year, the Title V Director and Manager will work to develop an ***inclusive community engagement and needs assessment plan***. Currently needs assessment data are gathered from MCH and CYSHCN leadership at the local health

departments and key internal MDH divisions (e.g., Oral Health, Tobacco, and Population Health). The new plan will include multiple mechanisms for identifying the MCH needs of residents and gathering input into state MCH efforts, strategies, and approaches. The Title V program plans to enhance efforts to engage a more diverse and broader subset of populations impacted by MCH funding and programmatic services through: local and existing sub-grantees and vendors serving women, pregnant women, children, infants, and families; relevant coalitions (e.g., local health coalitions); advisory groups; and community-based stakeholders. Data will be collected from MCH end-users bi-annually to gather feedback on MCH population needs. This may include the implementation of a bi-annual stakeholder survey, informal group discussions, and fora to collect interim data to inform future MCH efforts prior to the 2020 comprehensive needs assessment.

As one of the first steps toward enhanced community engagement, in 2017 the Title V program communicated the need for local engagement to health officers (HOs), the leaders of local health departments, and many expressed willingness to distribute surveys to the patients they serve. Each jurisdiction in Maryland has a Local Health Improvement Coalition (LHIC) that works toward Maryland State Health Improvement Plan indicators and local priorities. LHICs include members from local government, education, hospitals, health care providers, and community based organizations. Title V has identified these coalitions as valuable partners to engage around MCH population needs and priorities. Many of the organizations represented on LHICs work directly with recipients of Title V services, and LHICs conduct local needs assessments every two years that Title V can utilize. During 2017 and 2018, Title V staff will reach out to LHICs to identify local organizations and stakeholders who may be able to provide feedback to Title V via future surveys. In addition to LHICs, the Maryland Office of Minority Health and Health Disparities maintains a network of funded community organizations that Title V may engage in the future around MCH needs. Finally, the program has identified several entities that may be targeted for Title V partnership development, including the Governor's Office on Children, the Annie E. Casey Foundation, the YMCA of Central Maryland, birth hospitals, and specialty pediatric providers.

II.B Five Year Needs Assessment Summary

Introduction

Maryland's process for conducting the 2015 needs assessment involved engagement of stakeholders, analysis of both qualitative and quantitative data for a population based needs assessment, key informant interviews, surveys, and listening sessions at various stakeholder meetings. The following narrative provides a description of Maryland's findings.

Women's/Maternal Health

Cesarean Deliveries[i]**:** In 2014, more than one-third of Maryland births were delivered via cesarean section. The rate of cesarean deliveries in Maryland increased from 21.0% in 1997 to 34.8% in 2014. Maryland's current cesarean rate is the ninth highest in the nation. The rate of low risk cesarean deliveries increased seventeen percent from 25.8% in 2003 to 30.3% in 2014. Older (35+) Black non-Hispanic mothers had the highest rates low risk cesarean delivery.

Intimate Partner Violence: Maryland's rate of 42% was the 6th highest of any state in the U.S.[ii] According to the 2013 PRAMS report, 2% of women reported that they were physically abused by a husband or partner during the 12 months before pregnancy and 2% reported physical abuse by a husband or partner during pregnancy[iii].

Substance Use/Abuse: Female deaths in 2011-2013 due to accidental overdose rose 16%. Heroin and prescription drugs were involved in the majority of these deaths. Accidental overdose accounted for nearly one-third of pregnancy-associated deaths in 2013, double the number in 2012 (11 vs. 6).

Mental Health: According to the Maryland PRAMS 2013 report, 9% of women reported depression before pregnancy and 11% of mothers reported symptoms of postpartum depression. During the three months before pregnancy, 12% of women reported they had anxiety and 9% reported depression. After delivery, 7% of women were told by a health care provider that they had depression. Female suicide rates increased 14.6% from 2003 to 2013 (3.48 to 3.99 per 100,000).

Preconception Care: In 2014, 22% of women in Maryland did not see a physician for routine check-up within the past year and 72% had not received any counseling from a provider about how to improve birth outcomes prior to pregnancy[iv]. In 2013, 50% of women reported a pre-pregnancy overweight or obese BMI, an increase from 43% in 2009. In 2013, 41% of pregnancies ending in live births were unintended.[v] The highest rates of unintended pregnancies ending in live births were seen among women less than 20 years of age (80%).

Maternal Mortality and Morbidity[vi]:

The 2009-2013 Maternal Mortality Rate (MMR) in Maryland increased 38% from the 2004-2008 rate. Major disparities exist. The MMR among Black women is 2.5 times the MMR of White women. The leading cause of pregnancy-associated deaths in 2013 was substance use with unintentional overdose, accounting for 30 percent of these deaths. Homicide and injury each accounted for 14 percent of pregnancy-associated deaths; an additional five percent were due to suicide. The remaining 37 percent of pregnancy-associated deaths were due to natural (medical) causes.

Perinatal Health of Maryland Women and Infants

Access to Healthcare: Access to healthcare coverage isn't a barrier to most pregnant women in Maryland, with the expansion of Medicaid covering individuals and families at or below 250% of the FPL. However, women who aren't legal residents of the United States are ineligible for standard health coverage but may be illegible for emergency insurance coverage for labor and delivery.[vii]

Prenatal Care: The annual percentage of Maryland women who initiated prenatal care during the first trimester has generally risen, and reached its highest rate (82%) in 2011. This 2011 rate surpassed the Healthy People 2020 objective that 77.9% of pregnant women receive care in the first trimester. The latest 2012 PRAMS data, indicate a slight reduction (80%) in early initiation of prenatal care.

HIV and Pregnant Women: Over the past 3 years HIV Diagnosis among women has decreased in Maryland, from a rate of 23.7 in 2010 to 15.4 in 2012. For individuals of childbearing age, young adults between the ages of 20 and 29 have the highest rates of HIV diagnosis.[viii]

Maternal Depression: Depression is the most common mental illness among all people. Mothers are especially

vulnerable to depression. Over one-third of women of childbearing and childrearing years have depressive symptoms. Maternal depression (Post-Partum Depression) occurs anywhere from pregnancy up to 12 months following delivery, and is the most common complication of pregnancy, affecting 10–15 percent of all women.[ix]
Infant Mortality: Maryland Vital Statistics indicate, infant mortality in Maryland in 2014 was 6.5 per 1,000 live births; down from 8.5 in 2004; a significant decline. The leading causes of infant death were low birth weight, congenital abnormalities, SIDS, maternal complications of pregnancy, and complications of the placenta, cord and membranes. Non-Hispanic Black infants were greater than two times more likely to die in infancy than Non-Hispanic White infants, with infant mortality rates as high as 10.7 per 1,000 live births for Non-Hispanic Black infants.
Low birth weight: In 2014, 8.6 percent of live births in Maryland were low birth weight. Non-Hispanic Blacks were significantly more likely to have a LBW infant than any other race. In 2014, Non-Hispanic Blacks had a LBW rate of 12.1 per 1,000 live births compared to 6.6 just over 6 per 1,000 live births for the Non-Hispanic White population. Younger mothers, below the age of 20, and mothers over the age of 35 were more likely to have LBW infants than mothers between the ages of 20 and 34.[x]
Very Low Birth Weight: Very low birth weight is defined as the birth weight of an infant who is less than <1500 grams and is associated with severe complication and infant mortality. In 2014, 1.7 of all live births in Maryland were VLBW. This was a 13 percent decline from the 2007 data. However, Maryland has had one of the highest very low birth weight (VLBW) rates among Non-Hispanic Blacks. In Maryland, Non-Hispanic Blacks were nearly three times more likely than other races to have VLBW infants (2.7% non-Hispanic Blacks, 1.2% non-Hispanic whites, and 1.3% for Hispanics).
Preterm Birth: In 2014, 10.1 percent of live births occurred before 37 weeks of gestation in Maryland. In Maryland, Non-Hispanic Blacks were more likely to have a preterm birth than other races, with a rate of 12.5 percent compared to 8.9 and 9.6 for Non-Hispanic White and Hispanic populations, respectively. Mothers over the age of 35 were more likely than other age groups to have a preterm birth.
Breastfeeding: In 2013, 88 percent of Maryland mothers reported having ever breastfeed their babies. This rate was comparable to the national average of 79.2 percent. Rates of breastfeeding in Maryland were high for all races ranging from 81% for Black non-Hispanic mothers to 95% among Hispanic mothers. Mothers with greater than 13 years of education were more likely to breastfeed in Maryland and rates were highest among women ages 25-29 (91%).[xi]
Safe Sleep: In 2013, 23 percent of mothers in Maryland reported not placing infants on their back to sleep and 77 percent of mothers reported putting their infant on its back to sleep often. The percentage of NH Black mothers who report not placing their babies on their back to sleep is more than double that of NH White mothers and significantly higher than that of Hispanic mothers.

Child Health

Mortality: In 2013, there were 696 deaths to infants and children under the age of 18 in Maryland. The majority (68.1%) of these deaths occurred in infancy. Maryland's child death rate has been declining. Injuries were the leading cause of the 72 deaths to children ages 1-4 in 2013; followed by congenital anomalies. Injuries were also the leading cause of the 39 deaths to children ages 5-9; followed by cancer.

Morbidity- Hospitalizations:

There were 15,538 hospitalization discharges involving children and adolescents ages 1-19 in 2014 which is 26% less than the amount in 2010. Asthma, episodic mood disorders, and pneumonia/appendicitis were leading causes of hospitalization for children ages 1-19.

Health Insurance Coverage: Maryland Medicaid data for 2013 estimate that one third (555,000 of 1.5 million) of Maryland children are enrolled in the Medicaid Program.

Medical Home: NSCH estimated 57.2% of Maryland children, ages 0-17, reportedly had a medical home in 2011. White non-Hispanic children, (70.4%) in Maryland were more likely to meet the criteria for medical home as compared to Black, non-Hispanic (47.1%) and Hispanic children, ages 0-17.

Well child/preventive visits for young children: According to NSCH, the majority of Maryland children receive at least one wellness check-up per year. Maryland percentages are slightly higher than national levels.

Developmental Screening[xii]: Less than one third (31.8%) of Maryland parents reported that the child, ages 0-5, had received a developmental screen in 2011.

Immunizations[xiii]: According to CDC estimates from the 2014 National Immunization Survey, 81.8% of Maryland children ages 19 to 35 months, were immunized according to the 4:3:1:3:3 series. The Healthy People 2020 goal is 90%.

School Readiness: In the 2014-2015 school year, only 47% of Maryland's young children entered kindergarten fully ready to learn (i.e., they demonstrated the skills and behaviors needed to fully participate in the kindergarten curriculum).[xiv] The data showed that almost 34,000 young children needed support to do kindergarten work.

Adolescent Health

Adolescent Preventive Visits: Eighty-five percent of Maryland parents of teenagers 12-17 reported that their child received a preventive medical care such as a physical exam or well-child checkup within the past year. The percentage was 87.3% for teens enrolled in public insurance such as State Child Health Insurance Program (SCHIP) or Medicaid.

Mental Health/Suicide: *The rate (per 100,000) of suicide deaths among youth aged 15 to 19 years* Suicide and homicide are leading causes of deaths among adolescents in Maryland. The rate among youths ages 15 -19 was 6.5 per 100,000 population in 2014. This represented an increase over the 2012 rate of 5.3 deaths per 100,000 population. The actual numbers of suicides in this age range increased from 21 in 2012 to 25 in 2014. The suicide rate remained highest for White male teens in 2014.

Teen Pregnancy and Reproductive/Sexual Health: According to the MD 2014 YRBSS, 32.4% of high school students and 7.4% of middle school students reported ever having sexual intercourse, 61.3% of high school students and 63.4% of middle school students reported using a condom at last intercourse and 23.7% of high school students reported using drugs or alcohol before having sex. The adolescent birth rate has been steadily decreasing over the past decade. Most recently, the adolescent birth rate decreased from 31.2 births per 1,000 adolescent females 15-19 years in 2009 to 17.8 births per 1,000 adolescent females in 2014.

Substance Use/Abuse: Seventeen percent of high school respondents reported drinking alcohol before the age of 13; while 13% reported engaging in binge drinking the past 30 days. The percentage of middle school youth who used any kind of tobacco product in the past 30 days decreased from 7.0% in 2013 to 5.4% in 2014 and the percentage of youth who smoked a cigarette for the first time before age 11 decreased significantly from 3.8% to 2.2%. Middle school youth reported having tried the following drugs at least once: inhalants 6.3%, prescription drugs 4.5%, cocaine 3.5%, steroids 2.4%, and heroin 1.8% while high school youth reported having tried the following drugs at least once: prescription drugs 14.2%, inhalants 8.5%, ecstasy 6.4%, cocaine 5.4%, steroids 4.3%, heroin 4.2%, and methamphetamines 4.2%.

Overweight/Obesity and Physical Activity: Twenty-six Fifteen percent of Maryland high school students are overweight while nearly 24% of middle school students describe themselves as overweight or obese. The percentage of overweight or obese females compared to males is 24.2% compared to 28.6% (measured by BMI). In the middle school population 23.6% of students describe themselves as overweight or obese and 47.9% of females compared to 34.6% of males are trying to lose weight.

Bullying: Nineteen percent of high school students reported being bullied on school property during the past year. According to YRBSS data; 41% of middle school youth were ever bullied on school property and 20% reported being electronically bullied in 2014.

Children and Youth with Special Health Care Needs (CYSHCN)

Access to Care - Health Insurance Coverage: The 2014 Maryland Parent Survey (MDPS) indicated that their child had insurance, 14% indicated having out of pocket expenses of more than $5000 for services not covered under their insurance plan. Another 42% indicated that they had difficulty paying for one or more basic needs for their family due to health care.

Racial and Ethnic Disparities: The social determinants of health, including poverty, racial and ethnic disparities, and geographic disparities continue to have an impact on the health care of CYSHCN. The 2009/10 NS-CYSHCN demonstrates disparities in all of the core outcomes based on race/ethnicity and household income. This is especially significant because nearly half of Maryland's CYSHCN are racial/ethnic minorities.

Screened Early and Continuously for Special Health Care Needs**:** There were significant racial and income disparities observed for this performance measure. Hispanic CYSHCN and those in households under 100% FPL were more likely to have not been screened for developmental issues. For example, there was a 15 point difference between those at 400% FPL or more, and families at 200-399% FPL. The 2009/10 NS-CYSHCN indicates better performance among this population, with 81.2% of families reporting that this outcome was achieved. Modest income disparities are noted, and again Hispanic families fare much worse on this outcome, achieving it 57.2% of the time, compared to 82-85% for other races.

Families Partner in Decision Making at All Levels: Data from the 2011/12 NSCH indicate that 68.2% of MD families partnered in decision making about their child's health. However, significant racial/ethnic disparities were noted. Nearly half of Hispanic families, 42% of non-Hispanic Black families, and 36% of other non-Hispanic families did not receive family centered care as compared to only 19% of White families.

Consistent and Adequate Public or Private Insurance: The 2011/12 NSCH indicated that 79.7% of CYSHCN did not have difficulty paying for their medical bills compared to 94.1% for non-CYSHCN. Slight racial/ethnic and income disparities were noted in this outcome. In a state such as Maryland where most children are insured, this reflects an issue of adequacy.

Coordinated, Ongoing, Comprehensive Care in a Medical Home: Almost fifty percent (48%) of CYSHCN achieved this outcome, however only 22% of children with one or more Emotional/Behavioral or Developmental (E/B/D) issues achieved it. Furthermore, only 58.1% of CYSHCN who needed care coordination received it as compared to 66.2% for non-CYSHCN. There were significant disparities by race, particularly for Hispanics.[xv]

Easily Accessible Community Based Services: Eighty-six percent of CYSHCN received a preventive dental visit as compared to 76.6% of non-CYSHCN.[xvi] In contrast, only 62.5% of CYSHCN who needed mental services actually received them. Overall, only 4.7 % of non-CYSHCN indicated an unmet need for care in the previous 12 months, compared to 23.3% among CYSHCN with one or more E/B/D issues. Non-Hispanic Black children had 2 to 3 times the rate of unmet needs as compared to other races.

Services Needed for Transition to Adulthood: The 2013 Maryland Transition Survey indicated that only 16.5% of respondents were involved in health care transition planning for their YSCHN.[xvii] While Maryland provides insurance coverage for over 95% of its children adequacy of insurance is a concern due to high out of pocket expenses for care for their CYSHCN.

Life Course/ Cross Cutting

Oral Health Care[xviii]: The Maryland State Health Improvement Plan has identified improving access to oral health for children as a priority measure. In 2011/12, 78.5% of Maryland children ages 1-17, reportedly received preventive dental care in the last year. This compared with 77.2% children nationally.

Smoking in Households: Continuous exposure to secondhand smoke puts children at risk for asthma, lower respiratory tract problems and other diseases. In 2011/12, 20% of Maryland children reside in households where someone smokes compared to 24.1% nationally.[xix]

Smoking in Pregnancy**[xx]:** According to 2013 Maryland PRAMS, 16% of women smoked during the 3 months before pregnancy, 8% of women smoked during the last 3 months of pregnancy and 11% smoked postpartum. Prenatal smoking rates in Maryland are five times higher than the HP 2020 objective for smoking during pregnancy (1.4%). In seven of the rural counties of western Maryland and the Eastern Shore, 16-31% of women reported smoking during pregnancy (Maryland PRAMS 2004-2013).

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[i] Data from Maryland Vital Statistics Administration, Special Request

[ii] Ibid

[iii] 2013 Maryland PRAMS Report

[iv] 2012 Behavioral Risk Factor Survey

[v] 2013 Maryland PRAMS Report

[vi] Maryland Maternal Mortality Review Reports

[vii] https://mmcp.dhmh.maryland.gov/Documents/OB%20MANUAL%20March%202012.pdf

[viii]http://phpa.dhmh.maryland.gov/OIDEOR/CHSE/SiteAssets/SitePages/statistics/Maryland%20HIV%20AIDS%20Epidemiological%20Profile2.pdf

[ix] maternal_depression_guide.pdf

[x] 2013 CDC Wonder Infant Mortality

[xi] Paragraph one data is from the 2011 Maryland PRAMS Report

[xii] Ibid

[xiii] 2013 National Immunization Survey

[xiv] Maryland State Department of Education. The 2014-15 Kindergarten Readiness Assessment Report.
divisions/child_care/early_learning/docs/ReadinessM014-20
http://e/divisions/child_care/early_learning/docs/ReadinessMatters2.pdf15.pdfe -2015 Kindergarten Readiness Assessment Report 2014-2015 Kindergarten Readiness
Assessment Report

[xv] 2011/12 NCHS
[xvi]Ibid

[xvii] 2013 Maryland Transition Survey

[xviii] Ibid

[xix] Ibid

[xx] Maryland PRAMS Reports

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

II.B.1. Process

Introduction

Maryland began its needs assessment in October 2014 and concluded its efforts in June 2015. A comprehensive approach that included the gathering, review and analysis of primary and secondary data to assess and better understand the needs of Maryland's women, children and families. The following narrative provides a description of Maryland's methodology and a discussion of the findings.

Methodology

Maryland's 2015 Needs Assessment was a multi-step process that included: 1) stakeholder engagement, 2) MCH data collection and analysis, 3) capacity assessment, 4) priority selection, 5) performance measurement selection and development, and 6) action planning. The leadership team consisted of staff who represented three primary offices within the Maternal and Child Health Bureau. These offices were the Office of Family and Community Health Services (OFCHS), and the Office of Genetics and People with Special Health Care Needs (OGPSHCN) Maryland used a mixed method approach to gathering and analyzing data related to the health outcomes of the Maryland residents. OGPSHCN maintains a continuous needs assessment (NA) process by keeping stakeholders engaged in planning and implementing programs on behalf of children and youth with special health care needs (CYSHCN).

A. Our Leadership—In order to ensure for interdepartmental engagement, Maryland comprised a team of key office and departmental leaders within the Maternal Child Health Bureau. The Title V Core Team included senior staff from the OFCHS, OME, and OGPSHCN. Overall activities were coordinated by the Title V MCH Program Manager– Ms. Yvette McEachern. Members of the Steering Committee included the Director of MCHB – Ms. Ilise Marrazzo; MCHB's Medical Director – Dr. Lee Woods, the Director of OFCHS– Dr. Stacey Little; the Chief of Child and Adolescent Health (OFCHS) - Dr. Debbie Badawi; the Director of MCH Epidemiology- Dr. Lawrence Reid; the Chief of Women's and Perinatal Health – Dr. Diana Cheng, and the Chief of Family Planning – Dr. Ebony Parker; and the Director for the OGPSCHN– Ms. Donna Harris. The primary responsibilities of the core team were to develop and implement the MCH needs assessment, develop and guide the work group planning process, structure the process of data gathering, data review and analysis, and develop the needs assessment summary documents by domain. Staff from each office served as members of ad hoc work groups focused on specific Title V population domain areas and data focused team. The domain focused work groups identified stakeholders, oversaw the assessment for their domain area, assisted with the overall assessment and provided input into the strategic planning process. The Data Team, led by Dr. Reid, was comprised of epidemiological staff throughout MCHB and specifically the OFCHS and OGPSHCN. Ad hoc work groups met regularly to gather and review data for need and gaps in services for specific populations.

B. Garnering Internal Support and Buy-in—Maryland's need assessment efforts began with a DHMH-wide leadership meeting that provided an overview of the 2015 Title V Needs Assessment, application requirements, and future Title V fiscal and programmatic data needs. Data and information gleaned from this meeting were used to inform our overall needs assessment process. All Title V Agency staff and key stakeholders were briefed on the 2010 needs assessment. Updates on the needs assessment process and progress were provided at monthly staff meetings. Using both quantitative and qualitative methods, core members of the Title V leadership team followed the following methods:

C. Quantitative Approach—Various secondary data sources were used to meet the requirement for determining the health status and needs of the MCH Population groups including pregnant women and children under the age of 20. MCH epidemiology staff used existing reports and datasets to summarize the health status of each population groups. These datasets included the Behavioral Risk Surveillance System (BRFSS), the Pregnancy Risk Assessment Monitoring System (PRAMS), the Youth Risk Behavior Survey (YRBS), the National Survey of Children's Health (NSCH), the Health Services Cost Review Commission (HSCRC), Census Current Population Survey, and Vital Statistics (birth and death reports). Other sources of data used included: The 2009/10 National Survey of Children with Special Health care Needs, Maryland State Department of Education Special Education Reports, 2014 Maryland Parent's Survey, 2013 Maryland Parents' Transition

Survey, 2014 Consortium of Care (CoC) Survey, and The Children with Special Health Care Needs (CYSHCN) Priority Poll.

D. Qualitative Approach—Methods included a survey of local health department staff; listening sessions with various MCH related boards, committees and task forces; two web-based (Survey Monkey) surveys of various MCH stakeholders to determine final list of MCH priorities for consideration by Title V. Data and information collected informed the selection of priority needs and performance measures.

Major findings from the 2015 needs assessment are provided below. This section is followed by a description of Title V capacity to address essential MCH public health functions.

II.B.2. Findings

II.B.2.a. MCH Population Needs

Women's/Maternal Health

There were approximately 1.2 million women of childbearing age (ages 15-44) living in Maryland in 2013. This represents approximately 20% of Maryland's total population of 5.9 million. In 2013, over half of all births in Maryland were to racial and ethnic minorities. (30)

Maryland Vital Statistics data, Pregnancy Risk Assessment Monitoring System (PRAMS) reports, the CDC's Behavioral Risk Factor Surveillance System (BRFSS), surveys of local health departments, schools, government, community-based agencies and citizens, as well as meetings with service providers, served as the basis for analyzing the needs and issues identified for women during pregnancy and the childbearing years described in this report.

Cesarean Deliveries**:** In 2013, more than one-third of Maryland births were delivered via cesarean section. Cesarean delivery rates have increased steadily in the past two decades without a concomitant improvement in maternal and infant health, raising questions about overuse of this intervention. The rate of cesarean deliveries in Maryland has increased from 21.0% in 1997 to 35% in 2013. Maryland's current cesarean rate is the ninth highest in the nation. The rate of low risk cesarean deliveries increased 30% from 25.8% in 2003 to 30.8% in 2013 and rates were consistently highest among older (35+) Black non-Hispanic mothers. (31)

Intimate Partner Violence: In Maryland, a leading cause of death during pregnancy and postpartum is homicide. Two out of every three homicides was perpetrated by an intimate partner from 1993-2008. (32) Nationally, in 2010, the lifetime prevalence of intimate partner violence (IPV) including rape, physical violence and/or stalking in women was approximately 35%.[i] Maryland's rate of 42% was the 6th highest of any state in the U.S. (33) In addition to injuries sustained during violent episodes, IPV is linked to a number of adverse physical health effects including chronic diseases, depression, PTSD, tobacco, alcohol and illicit drug use, as well as reproductive health outcomes, including unintended pregnancies and complications of pregnancy. According to the 2012 PRAMS report, 7.2% of women reported that they were physically abused by a current or former partner during pregnancy or the year before. (34)

Substance Use: Substance misuse (i.e., smoking, alcohol and illicit drug use) during pregnancy increases the risk for a poor pregnancy outcome. Compared to 2008-2010, female deaths in 2011-2013 due to accidental overdose rose 16%. Heroin and prescription drugs were involved in the majority of these deaths. Accidental overdose accounted for nearly one-third of pregnancy-associated deaths in 2013, triple the number in 2012 (12 vs. 4). (35)

Smoking rates among pregnant women have generally declined, reaching a low of 7% in 2012. However, this percentage continues to exceed the Healthy People 2020 goal of 1.4%. In 2012, 9% of the women surveyed used alcohol during pregnancy. (36) These percentages fall short when compared to the Healthy People 2020 objective to reduce the rate of alcohol use during pregnancy to 1.7%. Additionally, 52% of women indicated that they consumed alcohol during the three

months prior to pregnancy. (37) This is significant when we consider that these women may really be drinking during early pregnancy prior to pregnancy confirmation.

Mental Health: Depression and anxiety disorders are the most common mental health problems before and during pregnancy. Untreated, mental health problems impact the general emotional health of the mother and are associated with learning and behavior problems in their infants and children. It is also a common comorbid condition among women who smoke, binge drink, use drugs, and experience abuse. According to Maryland PRAMS 2012, 11% of women reported depression before pregnancy and 12% of mothers reported symptoms of postpartum depression. During the three months before pregnancy, 13% of women reported they had anxiety. During pregnancy, 9% and 8% of women were told by a health care provider that they had anxiety and depression, respectively. Female suicide rates increased 14.6% from 2003 to 2013 (3.48 to 3.99 per 100,000). (38)

Preconception Care: The best chance for a healthy pregnancy outcome begins with a mother who is healthy before pregnancy, who intends to become pregnant, and who has the resources necessary to meet her physical, emotional and basic material needs. In 2012, 25% of women in Maryland did not see a physician for routine check-up within the past year and 72% had not received any counseling from a provider about how to improve birth outcomes prior to pregnancy[ii]. These are missed opportunities to assess and provide appropriate interventions for women with chronic disorders, IPV, mental health and substance use prior to pregnancy. Leading pre-pregnancy disorders reported by women in 2012 were anemia, anxiety, depression, asthma and hypertension.

In 2012, 48% of women reported a pre-pregnancy overweight or obese BMI, an increase from 43% in 2009. Pre-pregnancy folic acid consumption can prevent neural tube birth defects yet only 37% of women consumed folic acid prior to pregnancy in 2012. Pregnancy planning is also an important part of preconception care. In 2012, 42% of pregnancies ending in live births were unintended. (39) The highest rates of unintended pregnancies ending in live births were seen among women less than 20 years of age (78%). (40)

Maternal Mortality and Morbidity: The 2008-2012 Maternal Mortality Rate (MMR) in Maryland increased 23% from the 2003-2007 rate. Major disparities exist. The MMR among Black women is 2.3 times the MMR of White women. In 2013, the majority (62%) of pregnancy-associated deaths was due to behavioral and social causes such as accidental overdose, homicide, suicide and automobile accidents. (41)

Perinatal Health of Maryland Women and Infants

According to the National Vital Statistics, in 2013, 73,029 babies were born to Maryland women. Birth rates in Maryland have been declining overall and across all racial/ethnic groups. Having healthy women of childbearing age before, during and after pregnancy is the best way to have healthy pregnancy outcomes and healthy babies. Maryland's MCHB focuses on key public health access and care issues to improve perinatal health for all women and infants.

Access to Healthcare: Access to healthcare coverage isn't a barrier to most pregnant women in Maryland, with the expansion of Medicaid covering individuals and families at or below 250% of the FPL. However, women who aren't legal residents of the United States are ineligible for standard health coverage. In an effort to fill insurance gaps and improve birth outcomes of pregnant women with illegal status who financially qualify, Maryland provides emergency insurance coverage for labor and delivery. (42)

Prenatal Care: The annual percentage of Maryland women who initiated prenatal care during the first trimester has generally risen, and reached its highest rate (82%) in 2011. This 2011 rate surpassed the Healthy People 2020 objective that 77.9% of pregnant women receive care in the first trimester. The latest 2012 PRAMS data, indicate a slight reduction (80%) in early initiation of prenatal care.

HIV and Pregnant Women: Over the past 3 years HIV Diagnosis among women has decreased in Maryland, from a rate of 23.7 in 2010 to 15.4 in 2012. For individuals of childbearing age, young adults between the ages of 20 and 29 have the highest rates of HIV diagnosis. (43)

Maternal Depression: Depression is the most common mental illness among all people. Mothers are especially vulnerable to depression. Over one-third of women of childbearing and childrearing years have depressive symptoms. Maternal depression (Post-Partum Depression) occurs anywhere from pregnancy up to 12 months following delivery, and is the most common complication of pregnancy, affecting 10–15 percent of all women. (44)

Infant Mortality: Maryland Vital Statistics indicate, infant mortality in Maryland in 2013 was 6.6 per 1,000 live births; down from 8.5 in 2004; a significant decline. The leading causes of infant death were low birth weight, congenital abnormalities, SIDS, maternal complications of pregnancy, and complications of the placenta, cord and membranes. Non-Hispanic Black infants were greater than two times more likely to die in infancy than Non-Hispanic White infants, with infant mortality rates as high as 10.6 per 1,000 live births for Non-Hispanic Black infants.

Low birth weight: In 2013, 8.5 percent of live births in Maryland were low birth weight. Maryland's LBW rate was slightly above the national average of 8.0 percent. According to the CDC Wonder data, the percentage of LBW has been steadily declining since 2007, with an overall decline of seven percent. In Maryland, Non-Hispanic Blacks were significantly more likely to have a LBW infant than any other race. In 2013, Non-Hispanic Blacks had a LBW rate of approximately 12 per 1,000 live births compared to just over 6 per 1,000 live births for the Non-Hispanic White population. Younger mothers, below the age of 20, and mothers over the age of 35 were more likely to have LBW infants than mothers between the ages of 20 and 34.

Very Low Birth Weight: Very low birth weight is defined as the birth weight of an infant who is less than <1500 grams and is associated with severe complication and infant mortality. In 2013, 1.6 of all live births in Maryland were VLBW. This was a 13 percent decline from the 2007 data. However, Maryland has had one of the highest very low birth weight (VLBW) rates among Non-Hispanic Blacks. In Maryland, Non-Hispanic Blacks were approximately three times more likely than other races to have VLBW infants. (45)

Preterm Birth: In 2013, 9.8 percent of live births occurred before 37 weeks of gestation in Maryland. The preterm birth rate has been declining since 2008, and with the 2013 statistics, Maryland has already surpassed the Health People 2020 target. In Maryland, Non-Hispanic Blacks were more likely to have a preterm birth than other races, with a rate of 12 percent compared to 8.5 and 8.4 for Non-Hispanic White and Hispanic populations, respectively. Mothers over the age of 35 were more likely than other age groups to have a preterm birth. (46)

Breastfeeding: In 2011, 79.8 percent of Maryland mothers reported having ever breastfeed their babies. This rate was comparable to the national average of 79.2 percent. Rates of breastfeeding in Maryland were high for all races; however, rates were slightly higher among Hispanic populations. Mothers with greater than 13 years of education were more likely to breastfeed in Maryland and the rate of breastfeed in Maryland increased with age. (47)

The percent of mothers in Maryland who report breastfeeding at six months was 60.1 percent, which was greater than the national average of 49.4 percent. Breastfeeding rates in Maryland at 12 months were significantly less at 29.4 percent according to the National Immunization Survey. (48)

Safe Sleep: An infant's sleeping position is associated with infant complications such as sudden unexplained infant deaths (SUIDs) which includes sudden infant death syndrome. In 2011, 20.6 percent of mothers in Maryland reported not placing infants on their back to sleep and 79.4 percent of mothers reported putting their infant on its back to sleep often. The percentage of NH Black mothers who report not placing their babies on their back to sleep is more than double that of NH White mothers and significantly higher than that of Hispanic mothers. Rates of infants sleeping on their backs increased with maternal age. Rates of back sleep were similar across different levels of education, with the maternal education above 12 years having a slightly higher rate. (49)

Child Health

For the 2015 needs assessment, data from Vital Statistics reports, the NSCH, other surveys and stakeholder input were

examined to determine the health needs of Maryland's children. The data that follow present first a demographic profile followed by a brief health profile of Maryland's children, ages 1-9. Pre-teens and teens (ages 10-19) are discussed in the next section, although in some instances there may be an overlap in the discussion across the two age groupings.

In 2013, there were approximately 700,000 children, ages 1-9, living in Maryland and representing 11.7% of the State's total population. More than 75% of young children live in one of the two major Metropolitan areas, Baltimore and Washington, D.C., surrounding Maryland. By race, 55% were White; 33% were Black and 6% were Asian and 6% represented other minority groups in 2013. By ethnicity, Hispanic children represented 9.1% of the children in this age range. (50)

Of the estimated 180,000 children (ages 0-17) living Maryland who were poor in 2012, an estimated 52,000 lived in areas of extreme or concentrated poverty; the majority (40,000) located in Baltimore City. Poverty rates vary by race/ethnicity and were highest for African American children (22%) and lowest for White children (7%). While the majority of Maryland children lived in two parent families in 2012; more than one third (36%) under the age of 18 lived in a single parent home. (51)

Child Health Status: According to the 2011/2012 NSCH, most (86.3%) Maryland parents/caregivers of children ages 0-17 perceived their child's health status as excellent or very good. This percentage rose to 88% for young children ages 0-5. Overall, less than 3% perceived their child's health status as fair/poor. These results are similar to national findings. (52)

Mortality: In 2013, there were 696 deaths to infants and children under the age of 18 in Maryland. The majority (68.1%) of these deaths occurred in infancy. Maryland's child death rate has been declining. Injuries were the leading cause of the 72 deaths to children ages 1-4 in 2013; followed by congenital anomalies. Injuries were also the leading cause of the 39 deaths to children ages 5-9; followed by cancer.

Death rates due to childhood injury have been declining in Maryland. The rate of deaths due to injury among children of all age groups declined more than 35% from 12.4 per 100,000 population in the three year period 2007-2009 to 8.0 in the period 2010-2012. This change was statistically significant. (53)

Morbidity- Hospitalizations: In 2012, there were 33,084 Maryland hospital discharges involving children and adolescents ages 1-19. Asthma and pneumonia/appendicitis were leading causes of hospitalization for children ages 1-14. (54)

Health Insurance Coverage: An estimated 95.6% of Maryland children were insured. This meant that approximately 4.4% or 58,000 were uninsured. Medicaid and ACA expansions have improved the rate of health insurance coverage in Maryland. Almost 8% reported that their child was currently uninsured or had experienced periods of no coverage over the past year. More than one in five (23.5%) reported that their child's insurance was inadequate. Inadequacy was defined coverage that doesn't allow a child to see needed providers, health insurance benefits that don't meet the child's needs and unreasonable out of pocket expenses. Maryland Medicaid data for 2013 estimate that one third (555,000 of 1.5 million) of Maryland children are enrolled in the Medicaid Program. (55)

Medical Home: The AAP recommends that every child have a medical home. Research indicates that children with a stable and continuous source of health care are more likely to receive appropriate preventive health care and immunizations, are less likely to be hospitalized for preventive conditions, and more likely to be diagnosed for chronic conditions. An estimated 57.2% of Maryland children, ages 0-17, reportedly had a medical home in 2011. White non-Hispanic children, (70.4%) in Maryland were more likely to meet the criteria for medical home as compared to Black, non-Hispanic (47.1%) and Hispanic children, ages 0-17. (56)

Well child/preventive visits for young children: Most Maryland children appear to be receiving at least one wellness check-up per year. When asked if their child, age 0-17, had received a preventive care visit in the past year, 88.2% of parents responding to the NSCH said "yes." Percentages were highest for young children, ages 0-5 (90.7%) and lowest for teens, ages 12-17 (85.2%). Maryland percentages are slightly higher than national levels. (57)

Developmental Screening: Early identification of developmental disorders is critical to the well-being of children. The AAP recommends that developmental screening tests begin at the 9 month visit. Less than one third (31.8%) of Maryland

parents reported that the child, ages 0-5, had received a developmental screen in 2011. (58)

Immunizations: According to CDC estimates from the National Immunization Survey, 75.8% of Maryland children ages 19 to 35 months, were immunized according to the 4:3:1:3:3 series. The Healthy People 2020 goal is 90%. (59)

School Readiness: The Maryland Department of Education annually evaluates school readiness for public school kindergarten entrants. In the 2014-2015 school year, only 47% of Maryland's young children entered kindergarten fully ready to learn (i.e., they demonstrated the skills and behaviors needed to fully participate in the kindergarten curriculum). The data showed that almost 34,000 young children needed support to do kindergarten work. (60)

Adolescent Health

For the 2015 needs assessment, Maryland reviewed data from Vital Statistics report, the NSCH, the YRBSS, other surveys and stakeholder input to determine the health needs of Maryland adolescents. There were almost 800,000 preteens and teens ages 10-19 living in Maryland in 2013. The majority (77%) of adolescents lived in the Baltimore or Washington, D.C. metropolitan areas. Hispanics represented 6% of Maryland adolescents in 2013. Fifty five percent of adolescents were White, 34% were African American, 6% were Asian, and 5% were other minority.

Major health issues, needs and concerns identified by needs assessment stakeholders for the adolescent population included substance abuse, depression and other mental health disorders, limited access to behavioral health services, reproductive health and teen pregnancy, obesity and violence. Some stakeholders saw the health care services system as "adolescent unfriendly" since there are few providers trained and skilled in addressing the unique needs of adolescents. They often identified the need for the State to develop a more comprehensive approach to adolescent health that is fully integrated with broader efforts aimed at positive youth development. Findings from the 2015 needs assessment for adolescents are summarized below.

Teen Pregnancy and Reproductive/Sexual Health: According to the MD 2013 YRBSS, 39.1% of high school students reported ever having sexual intercourse, 61.5% reported using a condom at last intercourse and 24% reported using drugs or alcohol before having sex. The adolescent birth rate has been steadily decreasing over the past decade. Most recently, the adolescent birth rate decreased from 31.2 births per 1,000 adolescent females ages 15-19 years in 2009 to 19.3 births per 1,000 adolescent females in 2013. The adolescent birth rate is highest among Hispanic women (39.5) and lowest among non-Hispanic, White women (10.7). Maryland's Chlamydia infection rate in adolescents, 15-19, was 2052.7 cases per 100,000 in 2013, while the U.S. infection rate for this group was 1852.1 cases per 100,000. (61)

Substance Use: Substance use is prevalent among Maryland teens as reported in the 2013 YRBSS report. Nineteen percent of high school respondents reported drinking alcohol before the age of 13; while 17% reported engaging in binge drinking the past 30 days. Almost 12% of youth reported that they smoked a cigarette in the past 30 days. 35.9% indicated trying marijuana at least once, 15.3% reported using prescription drugs and 11.3% reported using inhalants to get high at least once. (62)

Mental Health: Depression is a leading risk factor for suicide among high school students residing in Maryland. According to the 2013 YRBSS, one in four Maryland high school students felt so sad or hopeless for two or more weeks in a row that they stopped doing usual activities as compared to 23.2% in 2007 and 29.7% in 2005. Females (34.2%) were more likely to report feeling sad or hopeless than males (19.7%) and Lesbian Gay Bisexual and Transgender (LGBT) youth (51.5%) were more likely to report feeling sad or hopeless than youth who identified as Heterosexual (23.8%). In 2013, suicide claimed the lives of 23 youth ages 15-19. The White youth (ages 15-19) suicide rate in 2013 at 7.5 deaths per 100,000 population was twice the rate for African Americans (3.7). (63)

Overweight/Obesity and Physical Activity: Young people are experiencing challenges with and/or have concerns about their body weight. Fifteen percent of Maryland high school students are overweight. Twenty-five percent of these high school students described themselves as overweight or obese and forty-five percent reported that they are trying to lose weight.

The percentage of females (58.5%) trying to lose weight is almost twice that of males (30%). (64)

Approximately one in five Maryland high school students reported being active for a total of 60 minutes per day for seven days, while almost one in five reported not being physically active for at least 60 minutes during the past 7 days. Forty percent of adolescents reported that they are physically active for 60 minutes or more for 5 days or more per week. Slightly less than one in three (31.4%) adolescents reported that they watched three or more hours of television per day. 46.7% of males reported that they participated in a physical education class one or more days per week while 31.3% of females reported that they did so.

Bullying: The percentage of students who report being bullied declined from 28.4% in 2005 to 19.6% in 2013 according to YRBSS data. One in seven Maryland teens reported being electronically bullied in the past year and one in five Maryland public school students were victims of bullying on school property. (65)

Adolescent Preventive Visits: Eighty-five percent of Maryland parents of teenagers 12-17 reported that their child received a preventive visit within the past year. This percentage was lower for teens enrolled in Medicaid. In 2013, 54.7% of teens enrolled in Medicaid received a wellness checkup in that year. (66)

Children and Youth with Special Health Care Needs (CYSHCN)

The 2011/12 NSCH estimates the Maryland prevalence of CYSHCN (ages 0-17) to be 19.7%, corresponding to approximately 264,729 CYSHCN. Similarly, the national prevalence rate is 19.8%. Another national survey, the 2009/10 National Survey of CYSHCN, estimated that 23.1% of Maryland households had one or more CYSHCN. (67)

Access to Care - Health Insurance Coverage: The ACA provision which mandates coverage for youth and young adults up to age 26 positively impacts CYSHCN by allowing additional time for families to address health care transition issues. However, adequacy of insurance coverage remains a concern. For example, while 99% of respondents to the 2014 Maryland Parent Survey (MDPS) indicated that their child had insurance, 14% indicated having out of pocket expenses of more than $5000 for services not covered under their insurance plan. Another 42% indicated that they had difficulty paying for one or more basic needs for their family due to health care expenses for their child/children with SHCN.

Maryland has a legislative mandate for coverage for habilitative services, however with no legislative authority on plans that are not registered in the state, coverage remains inconsistent. In addition, payment reforms and incentives for quality improvement have focused on adult chronic disease, and there has not been an evaluation of the cost/benefit ratio for the CYSHCN population. Care coordination is also a challenge for all children, particularly those in out of home placements. Baltimore City has a successful program serving the needs of medically complex children in out of home placements, and in their annual report, the State Council on Child Abuse and Neglect has recommended that this model be expanded statewide.

Racial and Ethnic Disparities: The social determinants of health, including poverty, racial and ethnic disparities, and geographic disparities continue to have an impact on the health care of CYSHCN. The 2009/10 NS-CYSHCN demonstrates disparities in all of the core outcomes based on race/ethnicity and household income. This is especially significant because nearly half of Maryland's CYSHCN are racial/ethnic minorities.

Screened Early and Continuously for Special Health Care Needs**:** There were significant racial and income disparities observed for this performance measure. Hispanic CYSHCN and those in households under 100% FPL were more likely to have not been screened for developmental issues. For example, there was a 15 point difference between those at 400% FPL or more, and families at 200-399% FPL. The 2009/10 NS-CYSHCN indicates better performance among this population, with 81.2% of families reporting that this outcome was achieved. Modest income disparities are noted, and again Hispanic families fare much worse on this outcome, achieving it 57.2% of the time, compared to 82-85% for other races. The 2014 MDPS did not ask specifically about screening, but did ask if families were satisfied with their provider's ability to identify a variety of needs for their child. While 87.7% of respondents were confident in their provider's ability to identify a need for further medical evaluation: 69.7% believed they could identify a need for occupational therapy; 74.4% for physical therapy;

78.4% for early intervention services; and 76.5% for a developmental evaluation.

Families Partner in Decision Making at All Levels: Data from the 2011/12 NSCH indicate that 68.2% of MD families partnered in decision making about their child's health. However, significant racial/ethnic disparities were noted. Nearly half of Hispanic families, 42% of non-Hispanic Black families, and 36% of other non-Hispanic families did not receive family centered care as compared to only 19% of White families. The 2009/10 NS-CYSHCN, with its more nuanced criteria for family partnerships, indicated that 69.3% considered themselves partners in decision making with respect to their child's health, but also revealed significant disparities based on race and ethnicity and income.

Consistent and Adequate Public or Private Insurance: The 2011/12 NSCH indicated that 79.7% of CYSHCN did not have difficulty paying for their medical bills compared to 94.1% for non-CYSHCN. Slight racial/ethnic and income disparities were noted in this outcome. In a state such as Maryland where most children are insured, this reflects an issue of adequacy.

Coordinated, Ongoing, Comprehensive Care in a Medical Home: Almost fifty percent (48%) of CYSHCN achieved this outcome, however only 22% of children with one or more Emotional/Behavioral or Developmental (E/B/D) issues achieved it. Furthermore, only 58.1% of CYSHCN who needed care coordination received it as compared to 66.2% for non-CYSHCN. There were significant disparities by race, particularly for Hispanics. (68)

Easily Accessible Community Based Services: Eighty-six percent of CYSHCN received a preventive dental visit as compared to 76.6% of non-CYSHCN. (69) In contrast, only 62.5% of CYSHCN who needed mental services actually received them. Overall, only 4.7 % of non-CYSHCN indicated an unmet need for care in the previous 12 months, compared to 23.3% among CYSHCN with one or more E/B/D issues. Non-Hispanic Black children had 2 to 3 times the rate of unmet needs as compared to other races. According to the MDPS, 44.5% of respondents indicated that a family member had to cut back on work hours or stop working in order to care for their CYSHCN. Nearly 59% indicated that they either cut back/stopped working, or avoided changing jobs to maintain current insurance for their child. (70)

Services Needed for Transition to Adulthood: Maryland performs slightly worse than the nation, with only 36.8% of YSHCN ages 12 -17 years successfully achieving this outcome. There are disparities noted by the presence of one or more E/B/Ds with only 28% of these children achieving this outcome, compared to 42.5% of CYSHCN without E/B/Ds. Racial/ethnic and economic disparities are difficult to assess due to small numbers in some groups, however Whites achieve this outcome at more than 1.5 times the rate of non-Hispanic Blacks. The 2013 Maryland Transition Survey indicated that only 16.5% of respondents were involved in health care transition planning for their YSCHN. (71)

Although Maryland performs near or above the national average on many core outcomes for CYSHCN, improvement is still needed, particularly because disparities are a consistent concern. Access to community based services, particularly for mental health/behavioral needs is a significant gap for this population. Similarly, a large proportion of CYSHCN are not receiving coordinated, ongoing, comprehensive care in a medical home, and disparities exist based on race/ethnicity. Maryland provides insurance coverage for over 95% of its children, however adequacy of insurance is a concern, with many families paying high out of pocket expenses for care for their CYSHCN. Finally, transition to all aspects of adult life and health care in particular, is a significant need for all children, but particularly for CYSHCN.

Life Course/ Cross Cutting

Maryland recognized the significance of the life course framework as it conducted the 2015 needs assessment. This framework highlights the importance of broad social, economic, environmental, and early life events in shaping an individual's and/or a community's health trajectories. The social determinants of health (e.g., poverty and income, adverse childhood experiences, racism) were consistently identified as unmet MCH needs in surveys and discussions held for the 2015 needs assessment. Data collected for the needs assessment, when available, was examined through a social determinants lens. Maryland Title V also began collecting and analyzing data using the life course metrics dataset developed by AMCHP. These data will assist in identifying the State's 3-5 additional performance measures over the coming months.

The 2015 Maryland needs assessment identified numerous cross-cutting issues and concerns including lack of adequate

mental health screening and treatment for women, children and adolescents; substance use and addictions among women, parents and adolescents; the social determinants of health (e.g., income and poverty, racism) and the three cross-cutting areas identified by national MCHB: smoking, oral health and health insurance adequacy. Findings for the MCHB cross-cutting areas are highlighted below.

Adequate Insurance Coverage**:** More than one in five (22.3%) of Maryland parents reported that their child's current health insurance coverage was inadequate. Young children under the age of 5 (82.1%) were more likely than teens ages 12-17 (74.5%) to have adequate coverage. CYSHCN (69.8%) were less likely than non-CYSHCN (79.7%) to have adequate insurance. In a related question concerning consistency of insurance coverage, 7.7% of Maryland parents reported that their child lacked continuous insurance coverage in the previous year. (72)

Oral Health Care: The Maryland State Health Improvement Plan has identified improving access to oral health for children as a priority measure. Dental caries (tooth decay) are the most prevalent chronic disease for both children and adults. Prevention is key to reducing dental caries. In 2011/12, 78.5% of Maryland children ages 1-17, reportedly received preventive dental care in the last year. This compared with 77.2% children nationally. (73)

Smoking in Households: Continuous exposure to secondhand smoke puts children at risk for asthma, lower respiratory tract problems and other diseases. In 2011/12, 20% of Maryland children reside in households where someone smokes compared to 24.1% nationally. (74)

Smoking in Pregnancy**:** According to 2012 Maryland PRAMS, 18.0% of women smoked during the 3 months before pregnancy, 7.0% of women smoked during the last 3 months of pregnancy and 10.3% smoked postpartum. Prenatal smoking rates in Maryland are five times higher than the HP 2020 objective for smoking during pregnancy (1.4%). In seven of the rural counties of western Maryland and the Eastern Shore, 20-27% of women reported smoking during pregnancy (Maryland PRAMS 2001-2009). (75)

II.B.2.b Title V Program Capacity

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

In January 2015, Larry Hogan was sworn in as the Governor of Maryland and during the 2015 Maryland legislative session, Van Mitchell was appointed and confirmed as the Secretary of the Maryland Department of Health and Mental Hygiene (DHMH). DHMH is the designated agency responsible for administering Title V-Section 509 (b) as well as other Title V programs.

DHMH has four major divisions: Public Health Services, Behavioral Health, Developmental Disabilities, and Health Care Financing. In addition, the department has 20 boards that license and regulate health care professionals; and various commissions that issue grants, and research and make recommendations on issues that affect Maryland's health care delivery system. The newly appointed Deputy Secretary for Public Health Services, Dr. Howard Haft, oversees vital public services to Maryland residents including infectious disease and environmental health concerns, family health services and emergency preparedness and response activities.

The Title V Program is within the Prevention and Health Promotion Administration (PHPA) under the leadership of Michelle Spencer, MS, Director for PHPA and Donna Gugel, MHS Deputy Director. The Prevention and Health Promotion Administration is organized into five Bureaus that oversee a diverse array of public health programs targeting all of Maryland citizens and working together to support the core functions of public health. The bureaus are: Maternal and Child Health; Environmental Health; Primary Care and Community Health; Infections Disease Epidemiology and Outbreak Response; and Infection Disease Prevention and Care Services.

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

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

The mission of MCHB is to provide statewide leadership to improve the health and well-being of Maryland women, men, infants, children, adolescents and their families. Through maternal and child health expertise, guidance and support, MCHB envisions a Maryland in which our population achieves optimal health through the elimination of health inequities, promotion of the highest quality accessible care and engagement of families to live healthier and happier lives. MCH programs and services in Maryland are provided at a variety of levels and work to protect and promote the health of women and children, including those with special health care needs.

The MCH Program is responsible for addressing several federal and state mandates for improving the health of women and children. These State statutes and regulations are highlighted in the Overview Section to this report. MCH staff positions are described in the process section.

Maryland's MCH Bureau

Maryland's MCH Bureau (MCHB) includes a highly skilled and diverse team of public health professionals representing a variety of disciplines. This team plans, manages, and monitors Title V activities for Maryland and supports a variety of MCH staff in local health departments, including a cadre of community health nurses, physicians, program administrators and clerical personnel, are also supported by Title V funds. The Maternal and Child Bureau has four offices – Office of the Maryland WIC Program (WIC); Office of Family and Community Health Services (OFCHS); Office of Genetics and People with Special Health Care Needs (OGPSCHN) and the Office of Maternal and Child Health Epidemiology (OME). The Title V program supports and is managed by the last three offices. An organization chart is attached and descriptions for key staff within the Bureau and each of the offices is provided below.

DHMH MCHB is directed by Ilise D. Marrazzo, RN, BSN, MPH. Ms. Marrazzo is a pediatric nurse with and 18 years of experience in public health with a focus in maternal and child health. She is responsible for MCH policy development and serves as the Title V and Title X director for the State of Maryland. She has served as the MCHB director since 2013.

Alison Whitney, MSW, MPH is the Health Policy Advisor for the Maternal and Child Health Bureau. Ms. Whitney manages the Babies Born Healthy and State Systems Development Initiative grants, with a focus on reducing the infant mortality rate and reducing racial disparities in maternal and child health outcomes by using data-driven strategies. She supervises the SSI epidemiologist.

Dr. S. Lee Woods, a neonatologist with a Ph.D. in genetics, serves as Medical Director for the MCHB. Dr. Dr. Woods oversees and provides medical consultation on clinical policy, quality improvement, and legislative issues.

Dr. Stacey E. Little has a Ph.D. in social work and serves as the Director for the OFCHS. As noted in the attached organizational chart, the OFCHS is organized into four programmatic units each with a focus on one Title V area. In addition to the 22 FTEs that support the work of the OFCHS, there are graduate student interns that assist with a variety of projects.

Yvette McEachern, M.A., serves as Title V Program Manager within the OFCHS and oversees development of the Title V application including data collection, performance monitoring and needs assessment. Ms. McEachern has over 25 years of experience as a health policy analyst and program administrator.

Dr. Debbie Badawi serves as the Section Chief for Child and Adolescent Health under OFCHS. She is a developmental pediatrician who formerly served as the Medical Director of OGPSHCN. Her unit includes adolescent health and teen pregnancy prevention, child fatality review and newborn screening.

Dr. Diana Cheng is the Section Chief for Women's and Perinatal Health under OFCSH. She is an OB/GYN and has worked with Title V programs for over 15 years. Her unit includes PRAMS and activities focused on improving women's and maternal health.

Dr. Ebony Parker oversees the Maryland Family Planning Program. Mary LaCasse serves as the Section Chief for Early Childhood and Family Support Services. Her Division houses the MIECHV home visiting program and the ECCS Grant.

Dr. Lawrence Reid serves as the Director of the Office of Maternal and Child Health Epidemiology. MCHB. He manages and coordinates epidemiologic investigations for the Bureau with support from two staff. He is the primary liaison for data with the Medicaid program, with other units within DHMH, including the Vital Statistics Administration and provides epidemiological support to the PRAMS program.

Donna X. Harris, BS has been the OGPSHCN Director for the past four years. Prior to becoming the Director, Ms. Harris served as Deputy Director for OGPSHCN for 12 years. She has over 20 years of experience in public health and training in Special Education. OGPSHCN has a staff of 20.

Patricia Williamson, BSN, RN has served as the Chief of the Children's Medical Services (CMS) program for eight years. She oversees medical eligibility for the program and reviews and preauthorized all services provided through CMS.

Monika Piccardi, RN. is the Program Chief for the Birth Defects Reporting Information System and Long Term Follow-Up. Tanya D. Green, M.S., CCC-A is the Director of the Maryland Early Hearing and Identification (EHDI) Program. Ms. Angela Sittler, B.S. is the CYSHCN Resource Coordinator and a parent of two children with special health care needs and a trained emergency medical technician.

Recruitment has begun for a newly created Health Policy Analyst position in OGPSHCN. This analytic, administrative, and coordinative position will support statewide public health policy development, strategic planning as well as program development, implementation and evaluation activities that align with federal and State guidelines and mandates.

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

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

MCHB supports an annual Reproductive Health Conference as well as periodic meetings and webinars for grantees. Title V staff participate in the planning of the annual school health institute, the youth suicide prevention conference and annual or ongoing meetings with Title V grantees, advisory groups and stakeholders.

Title V staff have recently received training on contract monitoring, fiscal and budgetary management and change management. Moving forward, Title V staff are being instructed to use the MCH Navigator for training opportunities and resources. New Title V employees will be directed to several of the training bundles to receive helpful background information on Title V, MCH and public health.

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

This section provides an overview of major MCH collaborations with State agencies including DHMH bureaus and office. Other key MCH collaborations are discussed in the Action Plan section for each domain group.

State Agencies: The Governor's Office for Children (GOC) is the coordinating unit for Maryland Governor’s Children's Cabinet. The Children’s Cabinet coordinates Maryland’s child and family focused service delivery system by emphasizing prevention, early intervention, and community-based services for all children and families. The Children’s Cabinet includes the Secretaries from the Departments of Budget and Management, Disabilities, Health and Mental Hygiene, Human Resources, and Juvenile Services, as well as the State Superintendent of Schools for the Maryland State Department of Education. The Executive Director of the Governor’s Office for Children chairs the Children’s Cabinet.
MCHB in recent years has been invited to brief the Children's Cabinet on a number of important MCH issues including: FASD, teen pregnancy, infant mortality, and most recently, home visiting. MCHB also works directly with the Children's Cabinet agencies in a number of programmatic areas. GOC is a key partner on infant mortality issues and serves in an advisory and decision-making role for the MIECHV home visiting program which is administered by MCHB. MCHB represents DHMH at annual briefings by GOC to the Maryland General Assembly’s Joint Committee on Children, Youth and Families.

At the local level, GOC funds Local Management Boards (LMBs) in every jurisdiction. The LMBs are comprised of the local agency counterparts to the Children's Cabinet agencies. The LMBs conduct periodic needs assessment and this data is shared with Title V. Input from the LMBs is also more broadly sought by Title V on issues and needs impacting children and families in Maryland.

DHMH shares responsibility for school health with the Maryland Department of Education (MSDE). MCHB coordinates with the DHMH Office of School Health on school health issues. MSDE has lead State responsibility for early childhood issues in Maryland with much of the work coordinated through an Early Childhood Advisory Council (ECAC). Title V is represented on the ECAC and this group serves as the State Team for the Early Childhood Comprehensive Systems (ECCS) grant. Title V's Early Childhood Coordinator sits on the Office of Child Care's Advisory Group. MSDE is a recipient of Race to the Top (RTT) funding. Title V worked with the Office of Child Care within MSDE on their Race to the Top application and encouraged the use of RTT funding for training in developmental screening for primary care clinicians across the State. Developmental screening training and technical assistance is being provided to the Maryland Chapter of the American Academy of Pediatrics with RTT support.

Other key child serving agencies include the Maryland Department of Human Resources, the Governor's Office for Crime Control and Prevention and the Department of Juvenile Services. DHR oversees the State's network of social services offices and addresses financial support for families, child protective services and foster care. MCHB collaborates with DHR on child abuse and neglect, teen pregnancy prevention, outreach for family planning, and early initiation of prenatal care. Title V is represented on the Governor's Council on Child Abuse and Neglect. MCHB provides consultation and technical assistance on adolescent health and teen pregnancy prevention to the Department of Juvenile Services. The Chief of Perinatal and Women's Health represents the DHMH Secretary on the Governor's Office of Crime Control and Prevention's Family Violence Council.

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

DHMH Agencies – Prevention and Health Promotion Administration

As described earlier, MCHB is one of five bureaus within PHPA. MCHB plays a major leadership role for maternal and child health issues across the Administration and its bureaus. Three of the four offices within MCHB: OFCHS, OGPSCHN, and OME manage Title V Block Grant funds. The fourth office, the WIC Program, works closely with the Title V agencies on a number of issues including preconception health, breastfeeding, nutrition and obesity prevention, and family planning outreach.

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

The Primary Care and Community Health Bureau includes offices that address obesity prevention, oral health, smoking and tobacco use. This Bureau also conducts and oversees the YRBSS. MCHB works with these offices on women's and maternal health, childhood obesity prevention, oral health concerns of children and pregnant women, and smoking cessation. Title V is represented on the Maryland Dental Action Coalition and the YRBSS Advisory Group.

The Infectious Disease Bureau addresses MCH linked activities such as immunizations and sexually transmitted infection (STI) prevention. Title V partners with this Bureau and local health departments to improve immunization rates and reduce STI rates including HIV/AIDS.

DHMH Agencies - Other

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

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

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

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

Coordination with Medicaid

An updated Title V/Title XIX/Title X/WIC cooperative agreement between the PHPA and Medicaid was approved this Spring. The seventeen page document contains eight sections: administration and policy; reimbursement and contract monitoring; data exchange; outreach and referral activities; training and technical assistance; provider capacity; system coordination; and quality assurance. Each of these sections is further organized into areas addressing primary preventive services and oral health; pregnant women and infants; children with special health care, and family planning.

II.C. State Selected Priorities

No.	Priority Need
1	Optimize the health and well-being of girls and women across the life span using preventive strategies
2	Improve perinatal and infant health in Maryland by reducing disparities
3	Improve access to preventive, primary, specialty and behavioral health services for Maryland children including those with special health care needs
4	Improve the health and well-being of adolescents and young adults in Maryland including those with special health care needs by addressing risk behaviors
5	Improve the health of children and youth with special health care needs
6	Reduce substance use/abuse across the life span for MCH populations including use of tobacco products, alcohol, prescription drugs and opioids
7	Improve the oral health status of MCH populations across the life span

Statewide health priorities in Maryland are determined by the Governor, the Maryland General Assembly, the MDH Secretary or other MDH leadership, and/or data that demonstrate new or emerging health needs. Governor Hogan has identified reducing drug related deaths as one of his top health priorities, and declared a state of emergency in 2017 in response to the opioid addiction crisis. The number of drug and alcohol intoxication deaths in Maryland continued to rise for the fifth year in a row in 2015, reaching a historic high of 1,259 deaths with 86% categorized as opioid-related. [i] The Title V Program continues to prioritize substance use as a priority MCH need.

The elimination of health disparities remains a MDH priority as well. In particular, reduction of disparities in infant mortality rates is a priority for both Title V and MDH. Title V strategies to address disparities focus on safe sleep promotion, care of infants born with neonatal abstinence syndrome, and reduction of substance use among women of childbearing age. In addition, MCHB will be participating in a quality improvement project during FY 2018 to enhance state Fetal and Infant Mortality Review processes to better identify and address the causes of infant mortality and related disparities.

Access to oral health care also remains a MDH priority for Maryland children and families. Maryland has an oral health safety net to increase access to dental public health services for low-income children. However, access to dental services remains as a problem for many Maryland residents, including children and youth with special health care needs, pregnant/postpartum women and adults generally. Oral health was identified as a priority national performance measure for Maryland based on 2015 needs assessment results, and Title V continues to partner with the state Office of Oral Health in the implementation of its Perinatal and Infant Oral Health Quality Improvement Grant.

MCHB Priorities

Priorities for the Maryland Title V Program did not change during FY 2016, and there are no plans to change priorities during FY 2018. Maryland's MCH priority needs for focused action in 2016-2020 are outlined in Table 1 below and include:

1. Optimize the health and well-being of girls and women across the lifespan using prevention strategies.
2. Improve perinatal and infant health in Maryland by reducing disparities.
3. Improve access to preventive, primary, specialty, behavioral health services and medical homes for Maryland children including those with special health care needs.
4. Improve the health and well-being of adolescents and young adults in Maryland including those with special health care needs by promoting positive youth development.
5. Improve the health of children and youth with special health care needs.
6. Improve the oral health status of MCH populations across the lifespan.
7. Reduce substance use/abuse across the lifespan for MCH populations including tobacco, alcohol, prescription drugs, and illegal drugs.

Table 1. Maryland Priority Needs and National Performance Measures, 2015 Needs Assessment

Maryland Priority Needs, 2016-2020	National Performance Measure(s)	Population Domain
1. Women's Wellness, Healthy Pregnancy Outcomes: Optimize the health and well-being of girls and women across the life course using preventive strategies	**Low Risk Cesarean Deliveries:** Percent of low risk cesarean deliveries (Data Source: Vital Statistics) Baseline: 30.3% in 2014	Women's and Maternal Health
2. Healthy Infants: Improve perinatal and infant health in Maryland by reducing disparities	**Safe Sleep:** Percent of infants placed on back to sleep (Data Source: PRAMS Survey) Baseline: 76.5% (2013)	Perinatal and Infant Health
3. Access to Health Care for Children: Improve access to preventive, primary, specialty and behavioral health services as well as medical homes for Maryland children including those with special health care needs	**Developmental Screening**: Percent of children, ages 9-71 months, receiving a developmental screening using a parent completed screening tool (Data Source: National Survey of Children's Health) Baseline: 31.8% in 2011/12	Children
4. Healthy Adolescents: Improve the health and well-being of adolescents and young adults in Maryland including those with special health care needs by addressing risky behaviors	**Adolescent Well Visits:** Percent of adolescents with a preventive services visit within the past year (Data Source: National Survey of Children's Health) Baseline: 85% in 2011/12	Adolescents
5. Healthy Children with Special Needs: Improve the health of children and youth with special health care needs	**Medical Home:** Percent of children with and without special health care needs having a medical home (Data Source: National Survey of Children's Health) Baseline- MD children (0-17): 57.2% in 2011/12 Baseline- MD CSHCN: 48% in 2011/12 **Transition**:	Children with Special Health Care Needs

	Percent of children with and without special health care needs who received services necessary to make transitions to adult health care (Data Source: National Survey of Children's Health) Baseline- MD CSHCN: 36.8% Baseline- All MD children: Not available	
6. Oral Health: Improve the oral health status of MCH populations across the lifespan	**Oral Health:** Percent of women who had a dental visit during pregnancy and percent of infants and children who had a preventive visit in the last year (Data Sources: PRAMS Survey and National Survey of Children's Health) Baseline- Pregnant women: 56% of women had a visit within past year Baseline- children (ages 6-11): 87.8% in 2011/12	Cross-Cutting
7. Substance Use: Reduce substance use/abuse (including tobacco, alcohol, prescription drugs, and opioids) across the lifespan for MCH populations	**Smoking**: Percent of women who smoke during pregnancy and percent of children who live in households where someone smokes (Data Sources: PRAMS Survey and the National Survey of Children's Health) Baseline- Pregnant women: 8 % in 2009-2011 Baseline- Children and household smoking: 20%	Cross- Cutting

[i] Drug- and Alcohol-Related Intoxication Deaths in Maryland, 2015. http://bha.dhmh.maryland.gov/OVERDOSE_PREVENTION/Documents/2015%20Annual%20Report_revised.pdf

II.D. Linkage of State Selected Priorities with National Performance and Outcome Measures

- NPM 2 - Percent of cesarean deliveries among low-risk first births
- NPM 5 - Percent of infants placed to sleep on their backs
- NPM 6 - Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool
- NPM 10 - Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.
- NPM 11 - Percent of children with and without special health care needs having a medical home
- NPM 12 - Percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care
- NPM 13 - A) Percent of women who had a dental visit during pregnancy and B) Percent of children, ages 1 through 17 who had a preventive dental visit in the past year
- NPM 14 - A) Percent of women who smoke during pregnancy and B) Percent of children who live in households where someone smokes

Based on results of the 2015 needs assessment, in 2015 Maryland chose eight national performance measures (NPMs) related to the seven priority needs outlined in the previous section. Maryland does not propose any changes to its priority needs, national performance measures, or national outcome measures, which are outlined in Table 2 below.

During 2016, Title V refined its evidence-based strategy measures (ESMs) for each of the NPMs. The Title V Director and Manager consulted with internal MCHB population domain leads to identify measures that can be reliably tracked, and are directly related to strategies that will drive improvement in the NPMs. Table 2 below outlines Maryland's Title V state priorities, NPMs, NOMs, and ESMs.

Table 2. Maryland Priorities with National Performance, Outcome, and Strategy Measures.

State Priority	National Performance Measure	National Outcome Measures	Evidence-based Strategy Measures
• **Women's Wellness, Healthy Pregnancy Outcomes**: Optimize the health and well-being of girls and women across the life course using preventive strategies	• Low risk cesarean delivery reduction: % of cesarean deliveries among low risk first births	• Severe Maternal Morbidity • Maternal Mortality	• #/% of birth hospitals that receive technical assistance from Title V on low risk cesarean birth reduction
• **Healthy Infants**: Improve perinatal and infant health in Maryland by reducing disparities	• Safe sleep: % of infants placed on their back to sleep	• Infant Mortality • Neonatal Mortality • Post Neonatal Mortality • Sleep-related SUID Mortality	• # of parental interviews of SUID cases conducted (to inform future safe sleep efforts)
• **Access to Healthcare for all Children**: Improve access to preventive, primary and specialty health services	• Developmental screening: % of children, ages 9-71 months, receiving a developmental screening using a parent completed screening tool	• Health Status • School Readiness	• # of parents/ caregivers who receive education about developmental screening
• **Healthy Adolescents**:	• Adolescent well-visits: % of	• Health Status • Death Rate	• # of adolescent health measures

Improve the health and well-being of adolescents and young adults	adolescents with a preventive services visit within the last year	• Tobacco Use • Mental Health Treatment	re- access to and quality of care identified and tracked through CoIIN
• **Children with Special Health Care Needs**: Improve the health of children and youth with special health care needs	• Medical Home: % of children with and without special health care needs who have a medical home • Transition: % of adolescents with and without special health care needs who received services necessary to make transitions to adult health care	• Medical Home: Receipt of Care in a Well-functioning System • Transition: % of adolescents who have received services to transition	• Medical Home: # of CYSHCN who receive patient and family centered care coordination services • Transition: #of YSHCN and families that participate in transition planning activities
• **Oral Health**: Improve the oral health status of MCH populations across the lifespan	• Oral Health: a. % of women who had a dental visit during pregnancy, and b. % of infants and children, ages 1-17 years, who had a preventive dental visit in the last year	• Child Health Status	• # of OBGYN and dental providers who receive training and new state practice guidelines on oral health during pregnancy and infancy
• **Substance Use/Abuse**: Reduce substance use/abuse across the lifespan for MCH populations	• Smoking: a. % of women who smoke during pregnancy, and b. % of children who live in households where someone smokes	• Maternal Morbitity/ Mortality • LBW & VLBW Rates • Preterm, Early Preterm, & Late Preterm Birth Rates • Infant Mortality • Child Health Status	• # of pregnant women who call the Quitline to access cessation services

II.E. Linkage of State Selected Priorities with State Performance and Outcome Measures

- SPM 3 - Receipt of Primary Care During Early Childhood
- SPM 4 - Identification of Mental and Behavioral Health Needs in Adolescents
- SPM 6 - Hospital Policy Changes to Reduce Low-risk Cesarean Deliveries
- SPM 7 - Hospital Policy Changes to Improve Quality of Care for Infants with Neonatal Abstinence Syndrome
- SPM 8 - Barriers and Facilitators to Dental Care During Pregnancy

In 2015, based on the results of its Title V needs assessment, Maryland chose five initial state performance measures (SPMs) across five of the six MCH population domains: women's health, infant health, children's health, adolescent health, and cross-cutting (related to smoking cessation). During 2016 and 2017, Title V leadership worked with MCH domain leads to ensure that the five SPMs were directly related to a priority need, and based on sound and available data. As a result of this discussion and analysis, Maryland decided to edit/refine its SPMs. Table 3 below outlines Maryland's Title V state priorities, SPMs (former and new), and state outcome measures.

Table 3. Maryland Priorities with State Performance and Outcome Measures.

State Priority	Former State Performance Measure	New State Performance Measure	State Outcome Measure
• **Women's Wellness, Healthy Pregnancy Outcomes**: Optimize the health and well-being of girls and women across the life course using preventive strategies	• % and # of hospitals that integrate service practices to support the reduction of low-risk cesarean deliveries	• % and # of hospitals that integrate service practices/policies to support the reduction of low-risk cesarean deliveries • Rationale: Added "policies" to include policy as well as practice changes	• % of low risk cesarean deliveries
• **Healthy Infants**: Improve perinatal and infant health in Maryland by reducing disparities	• # and % of individuals with increased knowledge of SUID and strategies to reduce risk	• % and # of hospitals that integrate service practices/policies to improve the quality of care for substance exposed infants • Rationale: To align with Title V efforts to standardize care for substance exposed infants in response to Maryland's opioid addiction public health crisis, the infant health SPM will capture/measure work being done with MD hospitals	• Average length of stay for infants born with neonatal abstinence syndrome (NAS) • Average length of time on medication management for infants born with NAS
• **Access to Healthcare for**	• # and % of infants and	• % of Medicaid patients, age 15	• % of children, ages 10-71

all Children: Improve access to preventive, primary and specialty health services	toddlers with identified developmental needs	months, who had 5 or more well child visits during the first 15 months of life ● Rationale: Anticipated difficulty in accessing data and setting an objective for % of children with identified needs; well visit compliance during infancy ensures access to preventive care as well as early developmental screening	months, receiving a developmental screen
● **Healthy Adolescents**: Improve the health and well-being of adolescents and young adults	● % early identification of mental health and behavioral health needs in primary care	● % of Medicaid patients, ages 11-18, who received a mental or behavioral health screen in the past year ● Rationale: Refined population definition; annual mental/behavioral health screens for adolescents will lead to more accurate and timely identification of needs	● % of adolescents in excellent or very good health
● **Cross-cutting/ Oral Health**: Improve the oral health status of MCH populations across the lifespan	● # of pregnant women enrolled in tobacco treatment programs	● # of pregnant women surveyed/ interviewed on barriers and facilitators to dental care ● Rationale: Change SPM due to availability of data; Office of Oral Health is focusing efforts on surveying pregnant women on oral health during pregnancy; new SPM	● % of women who receive dental care during pregnancy

		will measure performance/success and findings will be used to inform future initiatives	

II.F. Five Year State Action Plan

II.F.1 State Action Plan and Strategies by MCH Population Domain

State Action Plan Table

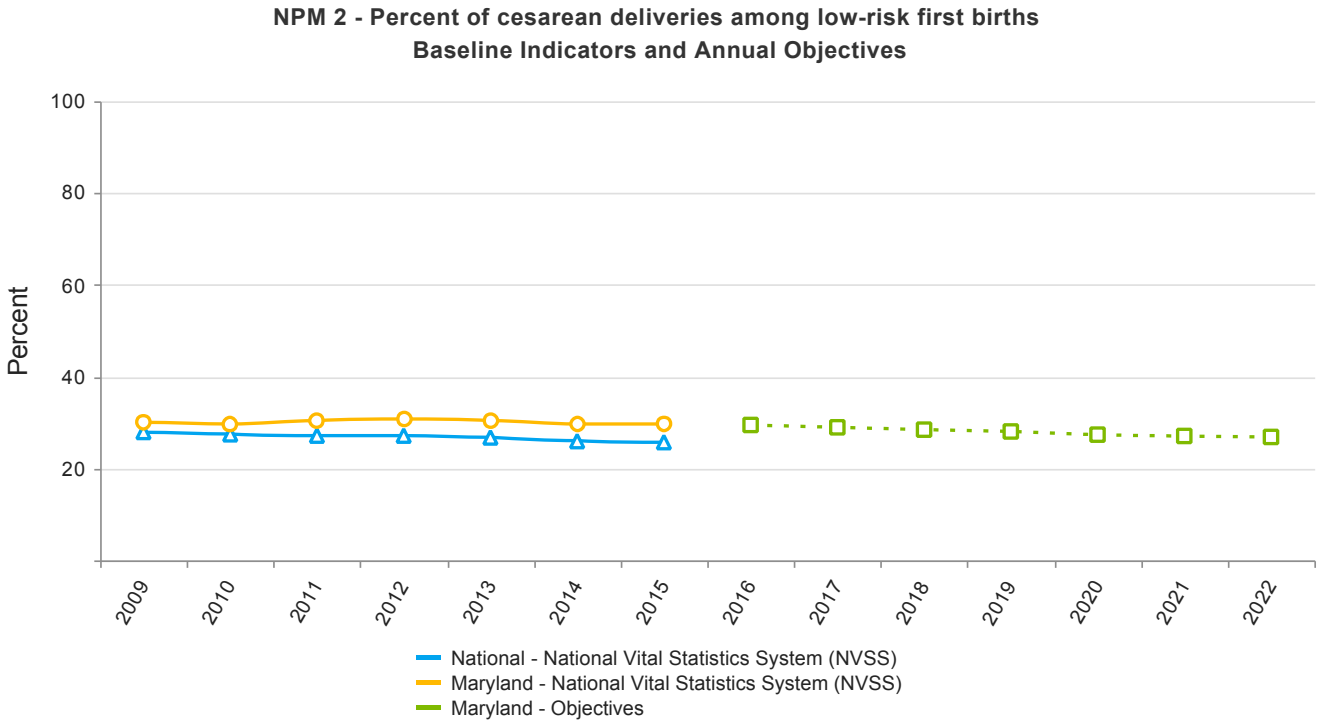
Please go to the Appendix to view a full version of the State Action Plan Table.

Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2014	188.2	NPM 2
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2011_2015	23.5	NPM 2

National Performance Measures



Federally Available Data	
Data Source: National Vital Statistics System (NVSS)	
	2016
Annual Objective	29.5
Annual Indicator	29.9
Numerator	7,249
Denominator	24,240
Data Source	NVSS
Data Source Year	2015

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	29.0	28.5	28.1	27.4	27.1	26.9

Evidence-Based or –Informed Strategy Measures

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

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	31
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	31.0	31.0	31.0	31.0	31.0	31.0

State Performance Measures

SPM 1 - Low Risk Cesarean Deliveries

Measure Status:	Inactive - Replaced

State Provided Data	
	2016
Annual Objective	
Annual Indicator	29.9
Numerator	
Denominator	
Data Source	NVSS
Data Source Year	2015
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	29.0	28.5	28.1	27.4	27.1	26.9

SPM 5 - Smoking Cessation During Pregnancy

Measure Status:	Inactive - Replaced

State Provided Data	
	2016
Annual Objective	
Annual Indicator	165
Numerator	
Denominator	
Data Source	MDH CTPC Quitline Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	167.0	169.0	170.0	171.0	172.0	173.0

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

Measure Status:	Active

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	71.2	74.6	74.6	74.6	74.6	74.6

Women/Maternal Health - Plan for the Application Year

Maternal Mortality: The Maternal Mortality Review (MMR) Program will continue to review all pregnancy-associated deaths in Maryland. To assist in the case reviews, all case abstractors are receiving access to the Maryland Prescription Drug Monitoring Program and the regional health information exchange serving Maryland and the District of Columbia. Legislation is also being introduced in 2018 to allow the MMR Committee access to relevant birth and fetal death certificates. In FY 2018, Maryland will adopt the CDC Maternal Mortality Review Information Application (MMRIA), a standardized data system that supports MMR case abstraction, case narrative development, documentation of committee deliberations, and data analysis. By 2018, 33 states will be using this data program. The MMR Committee is actively recruiting members from delivery hospitals in the more rural areas of the State as well as from the Johns Hopkins and the University of Maryland Schools of Public Health. The MMR Program will continue to broaden its dissemination of findings and recommendations. The five-year data summit held in 2016 was very successful and similar outreach activities are being planned for future years.

Cesarean Delivery: Annual distribution of total and low-risk (nulliparous, term, singleton, vertex/NTSV) cesarean rates to each delivery hospital in Maryland will continue. This will encourage review of hospital policies and practices, and support the Maryland Perinatal Neonatal Quality Collaborative initiative to reduce NTSV cesarean deliveries. Thirty-one of 32 delivery hospitals are now enrolled. These hospitals will continue to have access to training resources, educational meetings, support of national experts, and an active online communication network among the delivery hospitals. Data will be collected both from the hospitals and from Vital Statistics, and shared quarterly to monitor progress. The two year goal of the Collaborative is to reduce NTSV cesarean births by 10% from the 2014 baseline.

Unintended Pregnancy: The Family Planning (FP) program works to reduce unintended pregnancy with funding from Title X, Title V, and State general funds. Title V funding will continue to support local health department family planning services during FY18, and local health departments will begin to report additional data to Title V around LARC uptake and tobacco/substance use screening and referral. Continued advocacy for LARC will improve unintended pregnancy rates. Unintended pregnancy and adolescent pregnancy rates will be tracked by PRAMS and Vital Statistics.

Intimate Partner Violence (IPV): Over the next five years, MCHB hopes to expand its efforts to address intimate partner violence in other public health clinical sites such as home visiting, STI programs, and WIC. MCHB continues to represent the Department on the Governor's Family Violence Council. Also, an emerging issue is violence in the lesbian, gay, bisexual and transgender (LGBT) population. While data collection is not adequate at this time, initial studies suggest that IPV is just as prevalent or increased in LGBT populations.

Alcohol and Substance Use Disorders: The Maryland FASD Coalition group will plan a series of events to attract more pediatric interest in FASD. Maryland PRAMS will continue to track the prevalence of alcohol use before and during pregnancy.

The Maryland Patient Safety Center's Perinatal Neonatal Quality Collaborative, funded by MCHB, will continue the quality improvement initiative to standardize management of neonatal abstinence syndrome (NAS). Thirty-one of 32 Maryland delivery hospitals are now enrolled. The Collaborative has partnered with the Vermont Oxford Network (VON) on this initiative. Participating hospitals have full access to the VON NAS Toolkit, which has been proven successful in reducing length of pharmacologic treatment and length of hospital stay for infants with NAS. [i] The Toolkit includes CME/CEU training modules, sample policies and protocols, and extensive reference materials. Hospitals are further supported by in-person educational sessions, conference calls, an active online communication network among the delivery hospitals, as well as data collection, analysis and reporting.

Maryland was selected as one of ten states to participate in the second SAMHSA Policy Academy aimed at improving outcomes for pregnant and postpartum women with opioid use disorder and their infants and families who are involved or at risk of being involved

with child welfare services. The state child welfare, maternal and child health, and substance abuse agencies are required to work together to develop a plan to address the complex needs of this population. Each state team is asked to develop a state-specific policy agenda and action plan, and to strengthen collaboration across agencies. The Policy Academy was launched with a two day conference on February 7 and 8, 2017 in Baltimore which included presentations by national experts, team discussions with SAMHSA facilitators, and presentations by previous state participants. The Maryland team now continues to receive technical assistance including conference calls with change leaders, webinars, other resources and tools, as well as site visits to support the development and implementation of a State action plan.

Mental Health: In 2015, legislation was enacted in Maryland establishing the Task Force to Study Maternal Mental Health. The Task Force presented its recommendations to the Governor and General Assembly in December 2016. In response, further legislation was passed in 2017 which charges MDH, in consultation with stakeholders, to: (1) identify current, evidence–based, information about perinatal mood and anxiety disorders; (2) provide the information to health care facilities and providers of prenatal care, labor and delivery services, and postnatal care to women; (3) make the information available on the department's web site; (4) identify and develop training programs to improve early identification of postpartum depression and perinatal mood and anxiety disorders; and (5) develop a statewide plan to expand the Maryland Behavioral Health Integration in Pediatric Primary Care (BHIPP) program to assist obstetric, primary care, pediatric, and other health care providers in addressing the emotional and mental health needs of pregnant and postpartum women. MCHB remains a partner in these efforts.

Women/Maternal Health - Annual Report

In FY 2016, Maryland Title V conducted activities to address national and state women's/maternal health performance measures including low risk first birth cesarean delivery.

According to the Maryland PRAMS Report on 2014 births, 82% of women in Maryland received prenatal care in their first trimester of pregnancy, essentially unchanged from 83% in 2013 but up from 79% five years earlier in 2009. In 2014, prenatal care initiation in the 1st trimester was lowest for Hispanic (68%) and African American (75%) women.

There have been no improvements in the unintended pregnancy rate in Maryland. According to Maryland 2014 PRAMS data, 44.6% of pregnancies that resulted in a live birth were unintended, representing an increase from 41% in 2013, but approximately equal to the 2009 rate (45%). The highest rate of unintended pregnancies was seen in women less than 20 years of age (87%).

In fiscal year 2015, a plan was initiated to address the substance abuse and mental health needs of family planning clients, by inviting existing Maryland Family Planning Title X delegates to apply for funds aimed at developing an integrated model of mutually linking mental health and/or substance abusing clients with family planning services. Through the creation of formal partnerships with Substance Abuse and Mental Health treatment facilities, a bi-directional service bridge was developed to screen and subsequently refer clients to the necessary services. Maryland also continued efforts to reduce unintended pregnancies to improve women's health and birth outcomes. This integrated effort continues as an enhanced family planning service for clients and has expanded to additional delegate clinic sites in the state.

The Maryland Family Planning Program works to reduce unintended pregnancy with funding from Title X, Title V, and State general funds. Title V funds were awarded to 13 local health departments during FY16 to provide family planning services. The FP program served approximately 64,000 women in 2016. Nearly all of these women have limited access to health care; 83% had annual incomes at or below the federal poverty level, 65% were African American, Asian or Hispanic, and nearly 17% were less than 20 years of age. The FP program works to reduce unintended pregnancy by providing education, reproductive life plan counseling, and contraceptive services. In recent years, the FP program has encouraged more women to use most effective contraception, especially LARC due to effectiveness and ease of use. LARC use has generally risen annually over the past decade in the FP program.

Maternal Mortality and Morbidity: Maryland's maternal mortality rate for 2009-2013 (25.9 deaths per 100,000 live births) was higher than the national rate in 2011 (23.5 deaths per 100,000 live births). A five-year average is used to stabilize the Maryland rate because maternal deaths are relatively infrequent events that may vary considerably year to year. The Healthy People 2020 target is 11.4 maternal deaths per 100,000 live births. Considerable disparity exists in Maryland. The Maryland 2009-2013 maternal mortality rate among Black women was more than twice the White rate (41.5 vs. 16.8). While Maryland's high maternal mortality rate is concerning, it is also a reflection of the State's intense efforts to more accurately identify maternal deaths since the mid-1990s.

In March 2016, the Maryland MMR Program conducted a five year review of data and held a summit to disseminate the information to obstetric providers, public health officials, and the public. For the period 2009-2013, the leading cause of pregnancy-associated deaths (deaths occurring during pregnancy or within one year afterwards from any cause) was unintentional drug overdose, followed by non-cardiovascular medical conditions (primarily cancer) and injury (primarily motor vehicle accidents). The leading cause of pregnancy-related deaths during the same period was hemorrhage, followed closely by homicide and cardiovascular conditions. If deaths related to behavioral health issues were considered together (unintentional drug overdose, homicide/intimate partner violence, and suicide), these deaths accounted for 31% of pregnancy-associated and 25% of pregnancy-related deaths, far surpassing any other individual cause. Recommendations from these case reviews have resulted in programmatic activities at MCHB for intimate partner violence, substance use disorders, and mental health. Regional trainings, grand rounds, educational materials and briefs have been completed to increase awareness and interventions in these areas.

From 2009 to 2015, the Maryland Maternal Mortality Review Committee found unintentional drug overdose was the leading cause of pregnancy-associated deaths in Maryland with 39 cases during that period. Opioids (including prescription medications, methadone, and heroin) were the most frequently detected drugs in overdose death cases. These drugs were frequently used in combination with other drugs, such as alcohol, cocaine, and psychotropic medication (such as benzodiazepines). Sixty-four percent of the deaths occurred among women age 25 to 34, and 85% of deaths were among non-Hispanic White women. While 67% of the decedents received some prenatal care, only 26.5% were known to have received any substance abuse treatment. In FY 2016, all case abstractors for the Maternal Mortality Review Committee were provided access to the Maryland Prescription Drug Monitoring Program to assist in their review of pregnancy-associated deaths.

Substance use during pregnancy increases the risk for poor pregnancy outcomes and may result in premature birth, miscarriage, neonatal abstinence syndrome in exposed newborns, as well as maternal and fetal death. Title V funded FP providers screen women of childbearing age and pregnant women for substance use, and refer them to treatment programs. MDH requires state-funded substance use treatment programs to prioritize pregnant women and provide initial contact within 24 hours of a request for services. However, many treatment providers do not feel comfortable providing services for pregnant women, and several geographic areas in the state have few substance use disorder treatment resources available.

Prenatal care visits provide an important opportunity to screen all pregnant women for substance use disorders and to provide referral to treatment. Substance use disorder treatment during pregnancy can improve maternal and neonatal outcomes among substance using women. In 2016, the Maternal Mortality Review Committee disseminated its findings broadly in the provider community with recommendations to: (1) use clinical tools to identify women with substance use disorders during and after pregnancy; (2) refer patients with substance use disorders to treatment; (3) register with and use the Maryland Prescription Drug Monitoring Program; and (4) train patients and families on naloxone use and response to opioid overdose. Additionally, in FY 2016, MCHB continued to fund regional trainings for substance use treatment providers on best practices for treating pregnant women.

A toolkit for prenatal care providers on tobacco, alcohol and drug use, entitled "Substance Abuse in Pregnancy: A Clinician's Toolkit for Screening, Counseling, Referral and Care" was completed by the Regional Perinatal Advisory Group, a public health consortium based at the Baltimore County Health Department that draws participants from multiple local health departments in central Maryland as well as several State agencies. The statewide distribution of the toolkit began in the fall of 2014 and continued in FY 2016 in order to reach all Maryland obstetric and substance use treatment providers.

Cesarean Delivery: In Maryland and the U.S., births by cesarean delivery (CD) have increased significantly. According to Maryland Vital Statistics Administration data, in 2015, 34.9% of all births to Maryland residents occurred by cesarean. This represents a 58% increase from 1995 when the cesarean delivery rate was 22.1%. Contributing to the high CD rate in Maryland was the decrease in the VBAC (vaginal birth after cesarean) rate. In 2014, the VBAC rate was 11.9%, half of what it was in 1991 (24.4%). The American Congress of Obstetricians and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM) issued a joint statement in 2014 discussing the lack of improvement in maternal or neonatal morbidity despite the recent increase in cesarean delivery rate. Although there is no doubt that cesarean delivery can be life-saving and benefit maternal and infant health, there remains strong concern that the surgery is overused.

Many organizations such as the Joint Commission, U.S. Department of Health and Human Services, and ACOG have recently focused on reducing the CD rate among low-risk women. These are defined as women who are nulliparous at term with a singleton fetus in a vertex position (NTSV). Maryland's NTSV cesarean delivery rate (34.9%) is substantially higher than the Healthy People (HP) 2020 objective (23.9%). Seven of Maryland's 32 delivery hospitals have achieved the HP 2020 objective. The range for NTSV CD rates by hospital in 2015 was 15.9% to 37.5%, with an average of 28.9%. In-depth postpartum survey data from Maryland PRAMS (Pregnancy Risk Assessment Monitoring System) for the 2009-2011 birth years reported that the leading reasons

for cesarean delivery were failed induction and non-reassuring fetal monitor tracing.

Although cesarean delivery is a relatively safe operative procedure, severe maternal morbidity (such as hemorrhage requiring transfusion or hysterectomy, uterine rupture, anesthetic complications, major infection, cardiac arrest, etc.) can occur. Long-term risks from repeat cesareans include placental abnormalities, such as placenta previa or accreta. Cesarean delivery also adversely impacts neonatal outcomes, increasing the risk of neonatal intensive care unit admission and perinatal death.

Due to the high prevalence of cesarean delivery in Maryland and the various adverse effects on mother and infant, the reduction of NTSV cesarean births is a Title V performance measure for Maryland. In 2015, the Maternal and Child Health Bureau (MCHB) and the Vital Statistics Administration (VSA) began to collect NTSV cesarean rates by Maryland hospital. The wide variation in rates of NTSV cesarean deliveries indicated that clinical practice patterns and hospital environment may impact the number of cesarean deliveries performed. These hospital-specific data are now shared annually with all of the delivery hospitals in the State.

In FY 2016, the Maryland Patient Safety Center's Perinatal Neonatal Quality Collaborative, funded by MCHB and Title V, began a quality improvement initiative to reduce NTSV cesarean deliveries. At the launch of this initiative, Maryland was selected as one of eight states to receive funding and technical support under the Alliance for Innovation on Maternal Health (AIM) Program, a national partnership of organizations working to reduce severe maternal morbidity and maternal mortality. Thirty-one of the 32 Maryland delivery hospitals have enrolled in the initiative. As part of this quality improvement initiative, MCHB has begun to monitor severe maternal morbidities as well.

Intimate Partner Violence (IPV): In Maryland, homicide is a leading cause of death during pregnancy and the first postpartum year. Two out of every three of these pregnancy-associated homicides are perpetrated by an intimate partner. During 2010-2012, the lifetime prevalence of intimate partner violence including sexual violence, physical violence, and/or stalking victimization was 34.4% for women in Maryland. [ii] In addition to injuries sustained during violent episodes, IPV is linked to a number of adverse physical health effects including chronic diseases and conditions, behavioral health issues such as depression, post-traumatic stress disorder, tobacco, alcohol and illicit drug use, as well as reproductive health outcomes, including unintended pregnancies and complications of pregnancy. For example, research completed at MCHB using multi-state PRAMS data revealed that compared with non-physically abused women, those who experienced physical abuse were more likely to smoke before pregnancy (44% vs. 21%) and during pregnancy (30% versus 11%). [iii]

Prevention of violence remains a priority for MCHB. In 2016, the director of women's health continued to serve as a member of the Baltimore City Domestic Violence Fatality Review Team and the Maryland Maternal Mortality Review Committee. Both of these multi-disciplinary groups review intimate partner homicide cases. These reviews have resulted in strong recommendations that health care providers screen for IPV among women of reproductive ages and intervene appropriately.

In 2013, Maryland was 1 of 6 states funded by the Office on Women's Health, DHHS, for Project Connect, a "Public Health Initiative to Prevent and Respond to Violence Against Women," administered by Futures Without Violence. This three-year project, ending in August 2015, integrated IPV assessment into Title X family planning program and added women's health services to a local domestic violence program (House of Ruth). An evaluation at one of the sites has shown that at least 90% of women who had a health visit reported their health care provider spoke to them about safe relationships and cared about their safety. Ninety-four percent of women better understood how to help someone being hurt by an intimate partner. Nearly all women (99%) had received information about healthy relationships along with sources for further information. Project Connect Maryland was the recipient of a 2015 Governor's Victim Assistance Award.

[i] Patrick SW, Schumacher RE, Horbar JD, et al. Improving Care for Neonatal Abstinence Syndrome. *Pediatrics*.

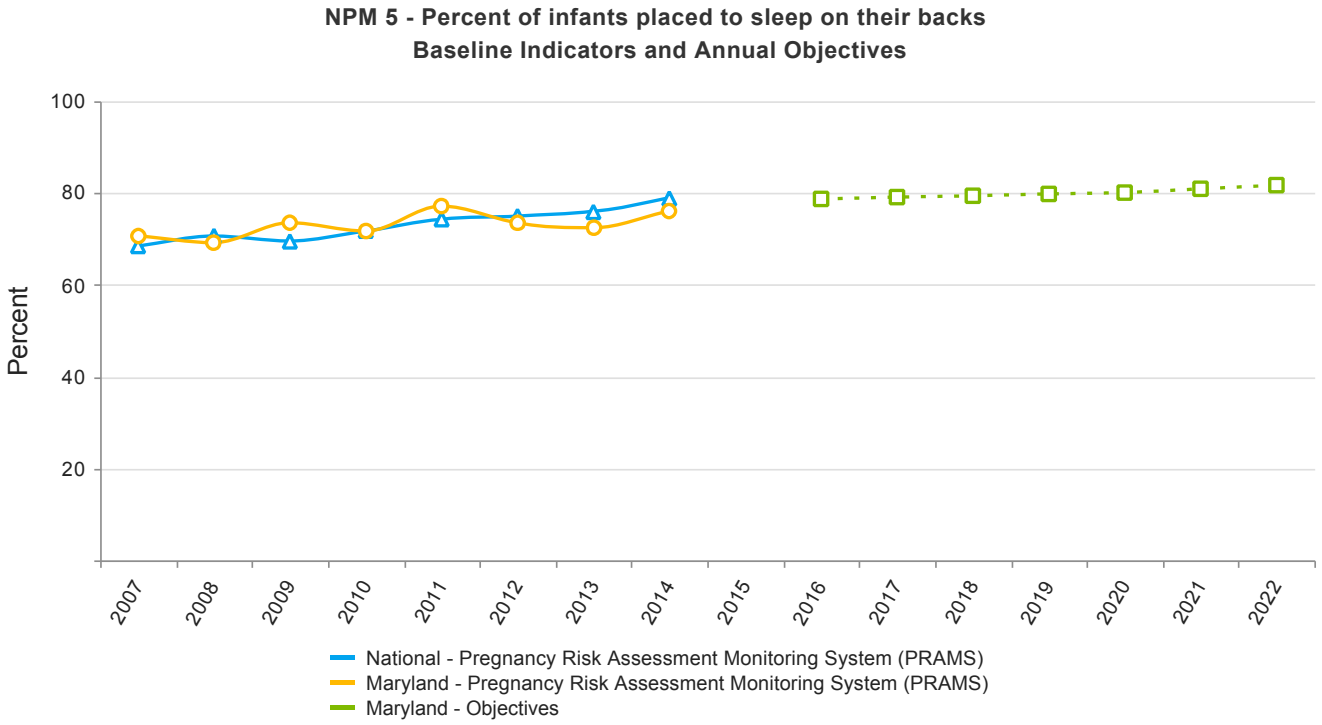
2016;137(5):e20153835.
[ii] Smith, SG, Chen, J, Basile, KC, Gilbert, LK, Merrick, MT, Patel, N, Walling, M, & Jain, A. (2017) The National Intimate Partner and Sexual Violence Survey (NISVS): 2010-2012 State Report. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
[iii] Cheng D, Salimi S, Terplan M, Chisolm MS. Intimate partner violence and maternal cigarette smoking before and during pregnancy. Obstet Gynecol. 2015 Feb;125(2):356-62.

Perinatal/Infant Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2014	6.5	NPM 5
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2014	1.9	NPM 5
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2014	89.3	NPM 5

National Performance Measures



Federally Available Data	
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)	
	2016
Annual Objective	78.6
Annual Indicator	76.0
Numerator	49,042
Denominator	64,531
Data Source	PRAMS
Data Source Year	2014

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	79.0	79.3	79.7	80.0	80.8	81.6

Evidence-Based or –Informed Strategy Measures

ESM 5.1 - Safe Sleep Parental Interviews

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	25.0	25.0	0.0	0.0	0.0	0.0

State Performance Measures

SPM 2 - Safe Sleep

Measure Status:	Inactive - Replaced

State Provided Data	
	2016
Annual Objective	
Annual Indicator	76
Numerator	
Denominator	
Data Source	PRAMS
Data Source Year	2014
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	79.0	79.3	79.7	80.0	80.5	81.0

SPM 7 - Hospital Policy Changes to Improve Quality of Care for Infants with Neonatal Abstinence Syndrome

Measure Status:	Active

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	26.0	32.0	32.0	32.0	32.0	32.0

Perinatal/Infant Health - Plan for the Application Year

Over the next five years, the Maternal and Child Health Bureau, along with colleagues within MDH and other partners, will work to develop strategic approaches and initiatives that further support statewide perinatal and infant health. This includes strategies for improving the health of infants, decreasing the incidence of low birth weight and preterm birth, and reducing infant mortality. Ongoing Maryland strategies include:

- Continuing to transition state funded family planning sites to a comprehensive women's health model and integrating reproductive life planning as a standard of practice;
- Expanding access to family planning services via FQHCs, community health centers and local health departments;
- Prioritizing teen pregnancy prevention through the Personal Responsibility Education Program, Abstinence Education and Coordination Program, and Healthy Teen and Young Adult Clinics;
- Promoting health insurance coverage through the Maryland Health Connection for women of childbearing age;
- Expediting Medicaid coverage for pregnant women;
- Improving access to early prenatal care services by providing "Quickstart" prenatal care services and linking women to prenatal care providers;
- Increasing access to Medicaid coverage for oral health services for pregnant and postpartum women;
- Promoting smoking cessation and flu vaccination among pregnant women and caregivers through MIECHV, Babies Born Healthy, and local health department programs;
- Increasing access to substance abuse treatment services for pregnant women and improving the quality of those services through Maryland participation in the SAMHSA Policy Academy;
- Providing high-risk obstetric support from the State's academic medical programs to community obstetricians through the Maryland Advanced Perinatal System Support program;
- Linking high-risk pregnant and postpartum women to services through Perinatal Navigators and local health departments;
- Assuring the quality of hospital obstetric and neonatal services through the Maryland Perinatal System Standards and the verification processes of the Maryland Institute for Emergency Medical Services Systems, and the MCHB Morbidity, Mortality, and Quality Review Committee;
- Supporting quality improvement in obstetric and neonatal services through the Maryland Perinatal Neonatal Quality Collaborative;
- Supporting breastfeeding through hospital adoption of model breastfeeding policies or by becoming "Baby Friendly";
- Improving the care of infants with neonatal abstinence syndrome;
- Promoting the use of most-effective contraceptives through a shared decision making process;
- Standardizing postpartum discharge referrals that link high-risk mothers and infants to community services;
- Promoting infant safe sleep practices; and
- Distributing and inspecting safety seats through the Kids in Safety Seats (KISS) program.

Babies Born Healthy: During FY18, the Babies Born Healthy (BBH) Initiative will continue to use a comprehensive, life course approach to improve perinatal health outcomes in specific jurisdictions. Grantees will use funds to support home-visiting strategies, paraprofessional case management service for high-risk women and infants, expansion of preconception care, screening and referrals for mental health/substance abuse, and pre-conception and prenatal nutrition support. At the state level, one strategy to increase birth spacing and improve maternal and child health outcomes is the creation and distribution of a hospital focused Immediate Postpartum Long Acting Reversible Contraception (IPP LARC) Toolkit, which will assist Maryland hospitals in increasing IPP LARC access to all women. In FY 18, MCHB hopes to integrate FIMR and BBH activities to leverage existing resources and improve collaborative efforts between program strategies and activities.

FIMR and CFR: In 2017, FIMR was chosen as a primary strategy to improve maternal and child health for the Maryland Public Health Strategic Plan, to be evaluated through a quality improvement process. During FY18, FIMR program and data outputs will

be evaluated and strengthened to improve program outcomes. Informed by the quality improvement process, an integrated FIMR Advisory Board comprised of the Morbidity, Mortality, and Quality Review Committee, the Office of Minority Health, local FIMR coordinators, and Vital Statistics will be formulated and an annual FIMR report will be produced by 2018. In 2018, local CFR teams will continue to review cases of sudden infant death. The State CFR Team coordinator will continue to serve on an Improving CFR Process Workgroup, offering insight and recommendations on ways to strengthen multidisciplinary and multiagency CFR processes throughout the state.

Safe Sleep: Maryland chose safe sleep as its national performance measure under the Perinatal/Infant Health Domain. Sleep-related infant deaths, including Sudden Infant Death Syndrome (SIDS), remain the third leading cause of overall infant mortality and the leading cause of postneonatal deaths in Maryland. The number of sleep-related deaths has been increasing, up 25% from 48 deaths in 2012 to 60 deaths in 2015. More than 90 percent of these deaths were related to an unsafe sleep environment, most commonly with the infant sharing a sleep surface with an adult or another child (co-sleeping) or with soft objects present in the infant's sleep space. These deaths occurred almost twice as frequently among non-Hispanic Black infants as among non-Hispanic white infants. The vast majority of these deaths are potentially preventable if adherence to safe infant sleep practices were increased.

In FY 2018, MCHB will continue to work with the Center for Infant and Child Loss (CICL) to offer a hospital recognition program for those hospitals with an exemplary program to train staff and educate new parents about safe sleep. MCHB is also supporting CICL to conduct interviews with families who have lost infants from sleep-related causes to better understand how safe sleep messaging is perceived and accepted. This information will allow MCHB to present safe sleep information to new parents and other caregivers in a more effective way.

MCHB will continue working with WIC to update and expand safe sleep messaging and to integrate safe sleep with breastfeeding promotion. MCHB is also working with the MIECHV program to strengthen safe sleep training for home visitors and onsite interventions with families. MCHB is providing safe sleep materials to be given out by the KISS program at every car seat installation or inspection. In FY 2018, Title V will support a statewide safe sleep training program for Maryland First Responders. MCHB is also working with the Office of Minority Health and Health Disparities to include safe sleep training for community health workers and to reach out to the faith community for support in spreading safe sleep messages.

MCHB will continue to direct all local CFR teams to send a letter to the hospital of birth whenever an infant sleep-related death is reviewed. This outreach is intended to alert hospitals that sleep-related deaths are occurring among their patients, to encourage review of their safe sleep education and practices, and to encourage dialogue between the hospital and CFR team. In addition, MCHB will continue to support initiatives, such as Baltimore City's Safe Sleep Campaign. Campaign materials will be shared with FIMR and CFR Teams statewide.

Neonatal Abstinence Syndrome: MCHB continues to collaborate with the Maryland Patient Safety Center (MPSC) to support the Maryland Perinatal Neonatal Quality Collaborative. All 32 delivery hospitals in the State are engaged with the Collaborative. Thirty-one of 32 hospitals plus one chronic care hospital with an NAS treatment program are participating in the current Collaborative effort to standardize care of infants with NAS. The goals of this initiative are to reduce length of stay and length of treatment with medication, to reduce 30 day readmissions for NAS, and to reduce transfers to a higher level of care. The MPSC has partnered with the Vermont Oxford Network (VON) to utilize their Neonatal Abstinence Syndrome Implementation Package statewide. This VON Package provides Collaborative participants with access to evidence-based education modules and resources for improving outcomes and increasing the quality and safety of the care provided to infants with NAS and their families.

Maryland has also been selected as one of ten states to participate in the second SAMHSA Policy Academy to improve outcomes for pregnant and postpartum women with opioid use disorder and their infants. A major part of this initiative is to develop a process in the State to engage these families with child welfare services, to support family preservation and to develop a Plan of Safe Care for

each substance exposed infant. MCHB is a member of this policy team along with the State child welfare and substance abuse agencies.

Perinatal/Infant Health - Annual Report

The Maryland Title V Program conducted activities to address national and state perinatal and infant health performance measures in 2016. Progress on perinatal regionalization, neonatal abstinence syndrome, safe sleep, and breastfeeding is summarized below.

Maryland's Perinatal Clinical Advisory Committee, on which MCHB participates, develops, reviews, and updates the Maryland Perinatal System Standards for all levels of perinatal and neonatal care. 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. Annually, MCHB sends each Maryland delivery hospital a report showing VLBW births and neonatal mortality rates by hospital of delivery and level of care. Hospitals are coded in the report and each hospital knows only its code. The data show that VLBW infants born at a level I hospital are 3.5 times more likely to die in the first 28 days of life and those born at a level II hospital are 2.2 times more likely to die than a VLBW infant born at a level III or IV facility.

Of the 32 delivery hospitals in Maryland, 6 are level I, 11 are level II, 13 are level III, and two are level IV. The Standards are incorporated in regulations governing the level III and IV hospitals. Compliance with the Standards is required for designation at these levels. MCHB participates in the compliance reviews of level III and IV centers with the Maryland Institute for Emergency Medical Services Systems. The MCHB Morbidity, Mortality, and Quality Review Committee monitors voluntary compliance of level I and II hospitals with the Standards. During site visits every 3 to 4 years, level I and II hospitals are asked to review all VLBW births to determine if any could have been avoided by transfer of the mother to a higher level of care prior to delivery. With these efforts, 89.5% of all VLBW births in 2015 occurred at level III and IV hospitals, well above the HP2020 goal of 83.7%.

MCHB also supports a Perinatal Neonatal Quality Collaborative in partnership with the Maryland Patient Safety Center. This is a collaborative and confidential effort among all Maryland delivery hospitals to undertake quality improvement initiatives, share best practices, and reduce adverse events in the perinatal period. Recent initiatives have included eliminating elective deliveries prior to 39 weeks gestation, standardizing the approach to obstetric hemorrhage, and preventing necrotizing enterocolitis. In FY 2016, the Collaborative began initiatives to reduce low-risk primary cesarean section rates and to standardize care of infants with Neonatal Abstinence Syndrome (NAS). To date, 31 of 32 delivery hospitals are participating in the Collaborative to standardize care for infants with NAS.

The Maryland Advanced Perinatal System Support (MAPSS) Program is another MCHB initiative to support the perinatal system of care. The State's two academic medical centers jointly provide high risk perinatal support, outreach education, and maternal transport support to hospitals and obstetric providers throughout the State.

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. Maryland now has eight Baby Friendly Hospitals (Adventist HealthCare Shady Grove Medical Center, Calvert Memorial Hospital, Howard County General Hospital, The Johns Hopkins Hospital, MedStar Franklin Square Medical Center, MedStar St. Mary's Hospital, University of Maryland Upper Chesapeake Medical Center, and Walter Reed National Military Medical Center), with several others expressing their intent to become Baby Friendly. All other delivery hospitals in the State have signed letters of commitment to follow Maryland's Hospital Breastfeeding Policy Recommendations. The MCHB Hospital Breastfeeding Policy Committee holds quarterly conference calls with the delivery hospitals to support their efforts. In FY 2016, the MCHB Hospital Breastfeeding Policy Committee developed online CME/CEU training modules that can be used to fulfill staff training requirements for either Baby Friendly or Maryland Policy Recommendations. These modules will be launched in FY 2017.

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 2015, the Maryland infant mortality rate was 6.7 deaths per 1,000 live births, a 3% increase over the 2014 rate of 6.5. This increase was the result of a 3% rise in the white infant mortality rate (from 4.2 to 4.3) and a 6% rise in the Black infant mortality rate (from 10.6 to 11.2). The neonatal mortality rate (deaths under 28 days of age) increased by 6% and the postneonatal mortality rate declined by 4% between 2014 and 2015. The leading causes of infant death in 2015 were low birth weight (23%), congenital abnormalities (17%), and sudden infant death syndrome (13%).

The Maryland 2015 infant mortality rate remained higher than the national average (5.8 per 1,000 live births in 2014, the most recent year for which national data are available). Despite the increase in 2015, the average infant mortality rate in Maryland has fallen by 14% over the past decade, with an 11% decline among white infants and a 17% decline among Black infants. Both neonatal and postneonatal mortality rates have fallen substantially over that period. Although the statewide infant mortality rate has declined over the past decade, there are areas of the State, notably on the Eastern Shore, where rates have been increasing.

Racial and geographic disparities in perinatal health outcomes are well-documented. MCHB is committed to implementing a multifaceted approach that is integrative and collaborative, to reduce disparities in the state's infant mortality rates. The following section provides specific activities that were implemented to improve perinatal and infant health.

FIMR and CFR: During FY16 MCHB continued to provide grants to every jurisdiction to support FIMR and CFR activities. Jurisdictions receive state general funds to support these activities, which is counted toward the required Title V match. In FY 16, sixteen FIMR sites engaged their community action teams on program activities on the topics of safe sleep, racial disparities in infant mortality, education on healthy mothers and babies, and cultural competency education for clinicians. State CFR efforts to reduce the number of preventable child deaths continued as mandated by the Maryland Legislature. Among these efforts included joining the Maryland team of the 2016 Three Branch Institute on Improving Child Safety and Preventing Child Fatalities, a partnership designed to bring the three branches of government together to develop a comprehensive action plan to address the most pressing child welfare issues. The OCME referred 176 child deaths to local CFR teams during 2016.

Babies Born Healthy: In FY 16, eight Baby Born Healthy sites in seven local jurisdictions engaged women and communities in the promotion of tobacco cessation, reduction of substance use, prenatal care, long acting reversible contraception, and other strategies driven by site-specific data to promote healthy maternal and infant outcomes. Specific activities included home visiting strategies, paraprofessional case management services for high-risk women and infants, expansion of preconception care and family planning services, screening and referrals for mental health and substance use, and pre-conception and prenatal nutrition support.

Safe Sleep: Promoting safe sleep continues to be a priority in Maryland. PRAMS data for 2014 births indicated that 80% of new mothers placed their babies on their backs to sleep, up from 77% in 2013. This is the highest percentage of reported back sleeping position since the Maryland PRAMS survey was initiated in 2001 and exceeds the Healthy People 2020 target of 75%. The prevalence was highest among non-Hispanic white mothers (86%) and mothers 30-34 years old (87%), but lowest among non-Hispanic Black mothers (71%) and mothers under age 20 (72%).

In FY 2016, MCHB provided funding to the University of Maryland Center for Infant and Child Loss (CICL) to develop a program to recognize delivery hospitals in Maryland that do an outstanding job in teaching new parents about infant safe sleep practices. Hospitals receiving this recognition must have a comprehensive safe sleep program that covers every hospital unit where infants receive care, and includes requirements for staff training, expectations for modeling safe sleep practices, standards for parent teaching (including some component of face to face interaction with trained staff), and plans for responding to both parents and staff who do not follow safe sleep practices. The hospital recognition program was launched in October 2016, during SIDS Awareness month. During FY16, MCHB worked to promote the program to hospitals and encourage them to submit for recognition.

In addition, during FY16 Title V funds were given to several local health departments throughout the state to work on initiatives related to infant mortality reduction, including safe sleep. Safe sleep education was provided to families through Title V-funded home visiting programs for high risk families, and certification of home births. During FY18, Title V will begin to collect specific performance measure data from local health departments to accurately capture the number of families who received safe sleep education.

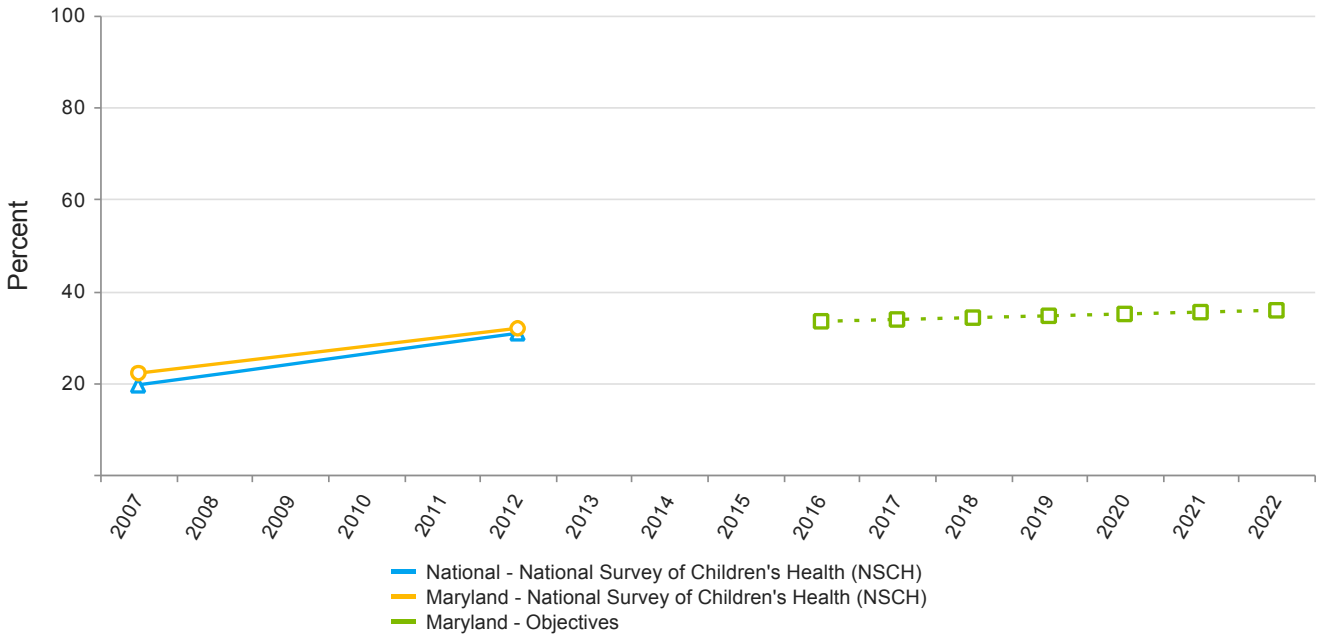
Child Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)	NSCH	Data Not Available	NPM 6
NOM 19 - Percent of children in excellent or very good health	NSCH-2011_2012	86.3 %	NPM 6

National Performance Measures

NPM 6 - Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool
Baseline Indicators and Annual Objectives



Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	33.4
Annual Indicator	31.8
Numerator	108,620
Denominator	341,810
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	33.8	34.2	34.6	35.0	35.4	35.8

Evidence-Based or –Informed Strategy Measures

ESM 6.1 - Developmental Screening Education

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	2,785
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	2,832.0	2,878.0	2,925.0	2,971.0	3,018.0	3,064.0

State Performance Measures

SPM 3 - Receipt of Primary Care During Early Childhood

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	66.3
Numerator	27,004
Denominator	40,723
Data Source	Medicaid
Data Source Year	2016 (CY)
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	67.4	68.5	69.6	70.7	71.8	72.9

Local Health Departments

During FY18, Title V will work to collect relevant performance measure data from local health departments. Due to the current funding mechanism (Title V funds are allocated to the MDH Office of Population Health Improvement (OPHI) and then distributed to local health departments), in the past it has been a challenge to collect MCH performance measure data through OPHI. However during FY17, Title V worked with OPHI to transfer responsibility for performance measure reporting back to MCHB, and the Title V manager worked with local health departments to develop and educate staff on a set of core measures for all health departments. Beginning during the first quarter of FY18, Title V will begin collecting data on the new performance measures, and will be able to more accurately document the program's reach and impact in the child health domain.

Child health performance measures for local health departments during FY18 will clearly document links to the Title V action plan, and will focus on safe sleep, developmental screening, and case management services for children with or at risk of developmental delays, in addition to the numbers of children served and direct services provided. Title V will also work with local health department staff to establish networking mechanisms for sharing of best practices, innovative programs, challenges, etc.

Well Visits

During FY17 Title V developed a new state performance measure related to child health, which measures the percentage of Medicaid enrolled infants who had five or more well visits during their first 15 months of life. This performance measure was developed because pediatricians offer an additional setting where developmental screening of infants and toddlers can be conducted, and the Maryland Chapter of the American Academy of Pediatrics has provided education and training to pediatricians in recent years around developmental screening. Title V views access to well visits during the first 15 months of life as a precursor to access to developmental screening via pediatricians. During FY18 Title V will begin to periodically monitor Medicaid data around this new SPM, to identify trends and potential disparities among populations for targeted activities in the future.

Home Visiting

The Maryland MIECHV program has been awarded competitive funding through HRSA's 2016 Innovation Awards grant. The proposal is a cooperative agreement between Maryland and New Jersey, which will leverage respective strengths and experience to enhance home visiting by the use of the Goal Plan Strategy (GPS). GPS uses the Family Goal Plan as a focal point to improve on the status quo regarding workforce development, family engagement, coordination with community services, and CQI. A Family Goal Plan is intended to reflect both goals that are important to the family and priorities of the program. This partnership will address common gaps in services by focusing on the perspectives of *both* major participants in home visiting -- parents and home visitors. By focusing on the central role of the Family Goal Plan, MIECHV will deepen its understanding of families' reasons for enrolling in home visiting, and their preferences for shared decision-making. Additionally, observational measures of visitor-parent communication will assess visitor responsiveness to family concerns, family-centeredness, sharing of decision-making, and adherence to principles of motivational interviewing.

In addition to MIECHV, many local health departments will utilize Title V funds during FY18 to offer home visiting services to high risk pregnant women and caregivers of infants and toddlers to improve infant/child health and safety outcomes. Title V will rely on MIECHV expertise when needed, as it has done in past years, to enhance local health department home visiting programs and streamline performance measure data collection.

Child Health - Annual Report

Maryland Title V provided preventive and primary care direct and enabling services to address the health needs of nearly 100,000 children in FY 2016. Services and activities focus on the needs of children across the Title V pyramid. At the State level, Title V federal and matching funds supported child health staff including a pediatrician/director for child and adolescent health, a health educator, and a program administrator. Child health activities for which Maryland Title V provides leadership include child fatality review processes, promoting access to well child visits for all children and adolescents, lead case management, "Infants and Toddlers" program support, and services such as immunizations and hearing/vision screening.

Child Fatality Review was established in Maryland statute in 1999. The 25 member State CFR Team include subject matter experts, physicians, community members, and local health department CFR staff. The team uses review processes to understand the circumstances around incidents of child fatality, and to recommend strategies for prevention of future fatalities. The State CFR Team oversees the efforts of local CFR Teams that operate in each jurisdiction. Title V matching funds support State and local CFR staff.

Local health departments serve as Title V's major delivery arms for preventive and primary care services for children. Each of the 24 local health departments receives federal Title V funding through a State core funding process to support direct, enabling, and population services. These services during FY16 included direct services such as immunizations and hearing and vision screening; case management of children with elevated blood lead levels and children enrolled in Infants and Toddlers; home birth certification; home visiting and parental education on infant health topics including safe sleep and developmental screening; and school health services including acute and wellness care.

During FY16, the Title V program began to work with the core funding office (OPHI) to collect performance measure data from local health departments to document how their activities align with the Title V action plan. MCHB and OPHI worked collaboratively to assess the use of Title V resources by MCH population domain. Much effort also went into addressing the barriers faced by LHDs to provide performance based data. MCHB led several presentations with LHD Health Officers to provide an overview of Title V regulations and expectations and, outlined how changes would affect their health departments and staff. Over the course of two years, the Title V team created a shared understanding about Title V 3.0 and its funding requirements. As indicated in the previous section, over the course of the next Title V program period, technical assistance will be given to LHDs to ensure data are being collected completely and accurately so that MCHB is able to demonstrate Title V's impact in the child health domain through local health department awards.

Title V partners with several agencies and groups to improve early childhood health. This is accomplished by inter-agency partnerships, shared professional development activities, health promotion and data sharing. Activities include collaborating with the Parent's Place in support of families and children and youth with special health care needs; working with the Center for Immunization and local health departments to increase immunization rates; working with the WIC Program to improve the nutritional status of pregnant women and young children; and supporting the Environmental Health Bureau in its mission to prevent lead poisoning in young children.

Medicaid is a key Title V partner. The current MOU outlines agreements and guidelines on administration and policy, systems coordination, outreach and referral activities, and data sharing. Local Title V supported staff work with Medicaid ACCU staff in local health departments to identify and enroll eligible children in the Medicaid Program. Medicaid and Title V staff work collaboratively on nationally led projects such as Children in the Vanguard and AMCHP's Policy Leadership Initiative.

Maryland did not receive the Early Childhood Comprehensive Systems (ECCS) Impact grant and it ended in August of 2016, however, MCHB remains committed to improving the health and well-being of children through integrated, data driven, and collaborative approaches. The Maternal, Infant, and Early Childhood Home Visiting (MIECHV) grant program gives pregnant

women and families, particularly those considered at-risk, necessary resources and skills to raise children who are physically, socially, and emotionally healthy and ready to learn. Title V and MIECHV staff work closely with the Maryland State Department of Education, which is the State's lead agency for early childhood issues, and with the Governor's Office for Children. Title V staff attend regular meetings of MSDE's Early Childhood Advisory Council, the Early Childhood Mental Health Steering Committee housed at the State's Behavioral Health Administration, the Home Visiting Alliance, and the Project LAUNCH Advisory Committee. Child abuse and neglect issues are coordinated with the Center for Injury Prevention and MCHB is a key partner and collaborator on many committees and workgroups (i.e., State Council on Child Abuse and Neglect (SCCAN) and Three Branches Addressing Child Maltreatment). MCHB supports and manages the CHAMP Program (Child Abuse Medical Providers' Network), and serves as a committee member the Governor's Council on Child Abuse and Neglect Multi-Agency Workgroup which is housed in the Department of Human Resources.

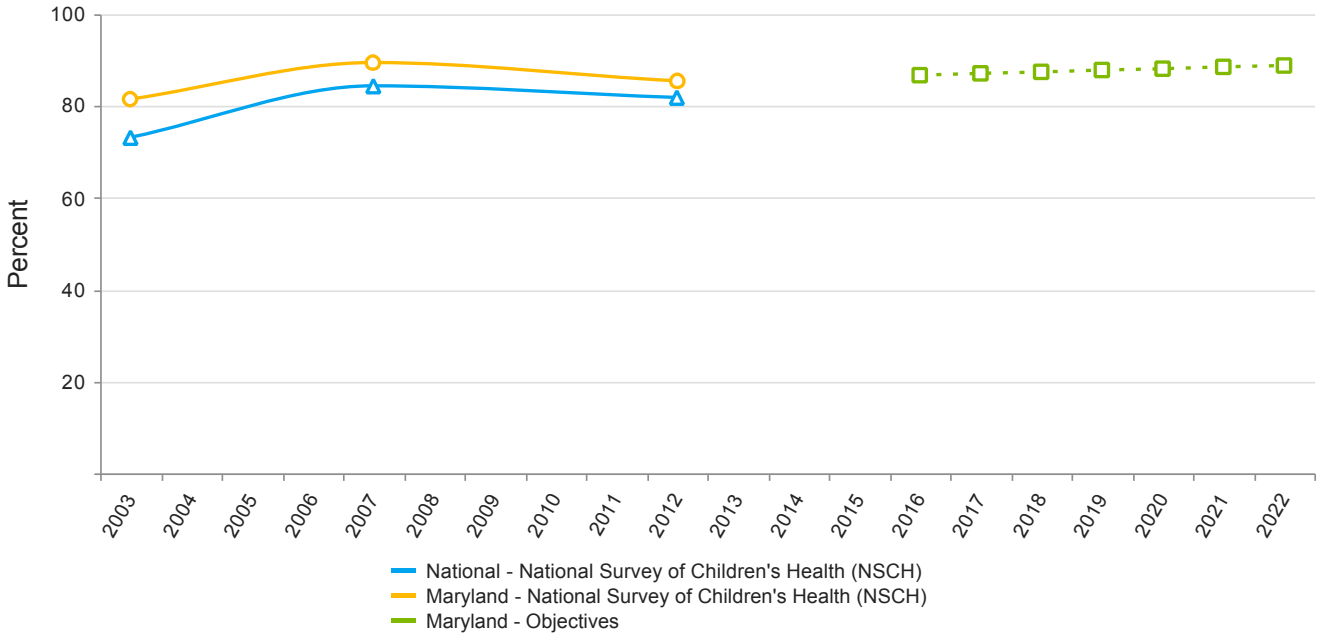
Adolescent Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 16.1 - Adolescent mortality rate ages 10 through 19 per 100,000	NVSS-2015	29.9	NPM 10
NOM 16.2 - Adolescent motor vehicle mortality rate, ages 15 through 19 per 100,000	NVSS-2013_2015	6.9	NPM 10
NOM 16.3 - Adolescent suicide rate, ages 15 through 19 per 100,000	NVSS-2013_2015	6.3	NPM 10
NOM 18 - Percent of children with a mental/behavioral condition who receive treatment or counseling	NSCH-2011_2012	60.6 %	NPM 10
NOM 19 - Percent of children in excellent or very good health	NSCH-2011_2012	86.3 %	NPM 10
NOM 20 - Percent of children and adolescents who are overweight or obese (BMI at or above the 85th percentile)	NSCH-2011_2012	31.6 %	NPM 10
NOM 20 - Percent of children and adolescents who are overweight or obese (BMI at or above the 85th percentile)	WIC-2014	33.1 %	NPM 10
NOM 20 - Percent of children and adolescents who are overweight or obese (BMI at or above the 85th percentile)	YRBSS-2015	26.5 %	NPM 10
NOM 22.2 - Percent of children 6 months through 17 years who are vaccinated annually against seasonal influenza	NIS-2015_2016	72.8 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NISF-2015	66.0 %	NPM 10
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NISM-2015	55.0 %	NPM 10
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2015	86.5 %	NPM 10
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2015	87.3 %	NPM 10

National Performance Measures

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



Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	86.6
Annual Indicator	85.2
Numerator	389,842
Denominator	457,466
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	87.0	87.3	87.7	88.0	88.4	88.7

Evidence-Based or –Informed Strategy Measures

ESM 10.1 - Adolescent Health Measures

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	2016
Data Source Year	MCHB Data
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	2.0	5.0	5.0	5.0	5.0	5.0

State Performance Measures

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

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	Medicaid
Data Source Year	CY 2016
Provisional or Final ?	Provisional

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

Adolescent Health - Plan for the Application Year

The adolescent health strategic planning process has incorporated stakeholder discussions on several key topics in adolescent health, including adolescent health data and metrics, mental health, substance use, LGBTQ health, and adolescent-to-adult healthcare transition. While these topics are interwoven and can be approached at multiple levels, a theme that emerged from the strategic planning process was the value of the adolescent well visit in the context of these topics. The adolescent well visit has become a focal point for adolescent health strategic planning, which aligns closely with Maryland's selection of Title V National Performance Measure #10, *Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year*.

In February 2017, Maryland was selected to participate in the second cohort of the Adolescent and Young Adult Health (AYAH) Collaborative Improvement and Innovation Network (CoIIN). The AYAH CoIIN is an 18-month project employing quality improvement principles to increase utilization and quality of well visits for adolescents and young adults ages 10-25 years. The AYAH CoIIN is an initiative of the HRSA-funded Adolescent and Young Adult Health National Resource Center, in partnership with the Association of Maternal and Child Health Programs, the National Adolescent and Young Adult Health Informational Center, the National Improvement Partnership Network, and the State Adolescent Health Resource Center.

The Maryland team for the AYAH CoIIN includes representatives from the MDH Maternal and Child Health Bureau, MDH Office of Population Health Improvement, MDH Health Care Financing (Maryland Medicaid), the Johns Hopkins Disparities Leadership Education in Adolescent Health training program, a young adult who mentors youth, Chesapeake Regional Chapter of the Society for Adolescent Health and Medicine, Maryland Chapter of the American Academy of Pediatrics, and two Medicaid managed care organizations.

AYAH CoIIN activities started in April 2017 and will continue through Fall 2018. General CoIIN activities include monthly online learning sessions, team-specific technical assistance through a team coach from one of the project partners, and participation in three National Strategy Teams. The National Strategy Teams focus on well visit access and utilization; well visit quality; and state- and systems-level policy and practices. Each of these strategy teams have a corresponding measure for which data will be collected and tracked. In addition to these CoIIN-wide activities, Maryland will be working on Maryland-specific activities in State FY 2018:

- AYAH measures: The Maryland team will identify measures currently used in Maryland with relevance to well visits for adolescents and young adults, and determine if there are opportunities for alignment of measures used within the State and/or with national measure sets. Receipt of adolescent well visits is an existing measure within the State Health Improvement Process and has been a priority area for the Medicaid program as well. The Maryland Team will also look at opportunities related to design of State-specific measures that could drive improvements in access to and quality of well visits for adolescents and young adults, including sustained access to and utilization of well care.

- Pilot engagement with Local Health Improvement Coalitions: Maryland has 22 local health improvement coalitions (LHICs) that serve the 23 Maryland counties and Baltimore City. LHICs are jurisdiction-specific panels comprised of representatives from local health departments, hospitals, physicians, community organizations, and other local entities. The Maryland team will partner with two LHICs to develop local profiles of primary care services for adolescents and young adults and facilitate development of jurisdiction-specific strategies to increase access to and quality of well visits for adolescents and young adults.

These activities will be supported and complemented by other activities designed to improve utilization and quality of well visits, such as identification of strategies for providers to meet quality measures and practical guidance for providers' offices.

Adolescent Health - Annual Report

The Child and Adolescent Health Unit within the OFCHS is headed by Dr. Jed Miller, a board certified pediatrician. This unit is responsible for addressing Title V national and state priorities and performance measures focused on child and adolescent health without special health care needs. Additional staff in this section include the Personal Responsibility Education Program (PREP) coordinator and the State Adolescent Health Coordinator. Both Dr. Miller and the State Adolescent Health Coordinator are funded by Title V federal or matching state funds. The State Adolescent Health Coordinator develops and implements strategies and partnerships to address key adolescent health issues in Maryland and administers the Maryland Abstinence Education Program.

Teen Pregnancy Prevention and STI Prevention: The Maryland Abstinence Education Program and Maryland PREP administer grant funding from the HHS Administration for Children and Families authorized by Sections 510 and 513 of the Social Security Act, respectively. The goal of these programs is to reduce teen pregnancy and sexually transmitted infections by using positive youth development principles to build knowledge and skills in at-risk youth ages 10-19 across Maryland. The Maryland Abstinence Education Program provides funding for abstinence education and Maryland PREP provides funding for comprehensive sexual education that includes abstinence and contraception education. PREP also includes Adult Preparation Subjects to build skills for successful transitions to adulthood. Both programs require grantees to use evidence-based curricula and incorporate a parent engagement component in their program activities. In State FY 2016, grants were provided to seven local health departments for Abstinence Education and eight local health departments for PREP. Grants were also provided to three community-based organizations for Abstinence Education. A request for grant applications was developed for community- and faith-based organizations to deliver PREP activities in a jurisdiction where PREP was previously administered through a local health department. In addition, Maryland PREP administrator coordinated and implemented PREP-based events for incoming students at the University of Maryland Eastern Shore (Historically Black College/University (HBCU)). This program allowed for the sexual and reproductive health training of peer leaders who served and facilitators of the university-based initiative.

In addition, nine local health departments used Title V funding during FY16 to provide family planning services to women of child bearing age, including teenagers. Title V funding supported direct services such as contraception, education about contraception options, screening for mental and behavioral health problems and substance use, and referrals to tobacco cessation programs, substance use treatment, and mental health care as needed.

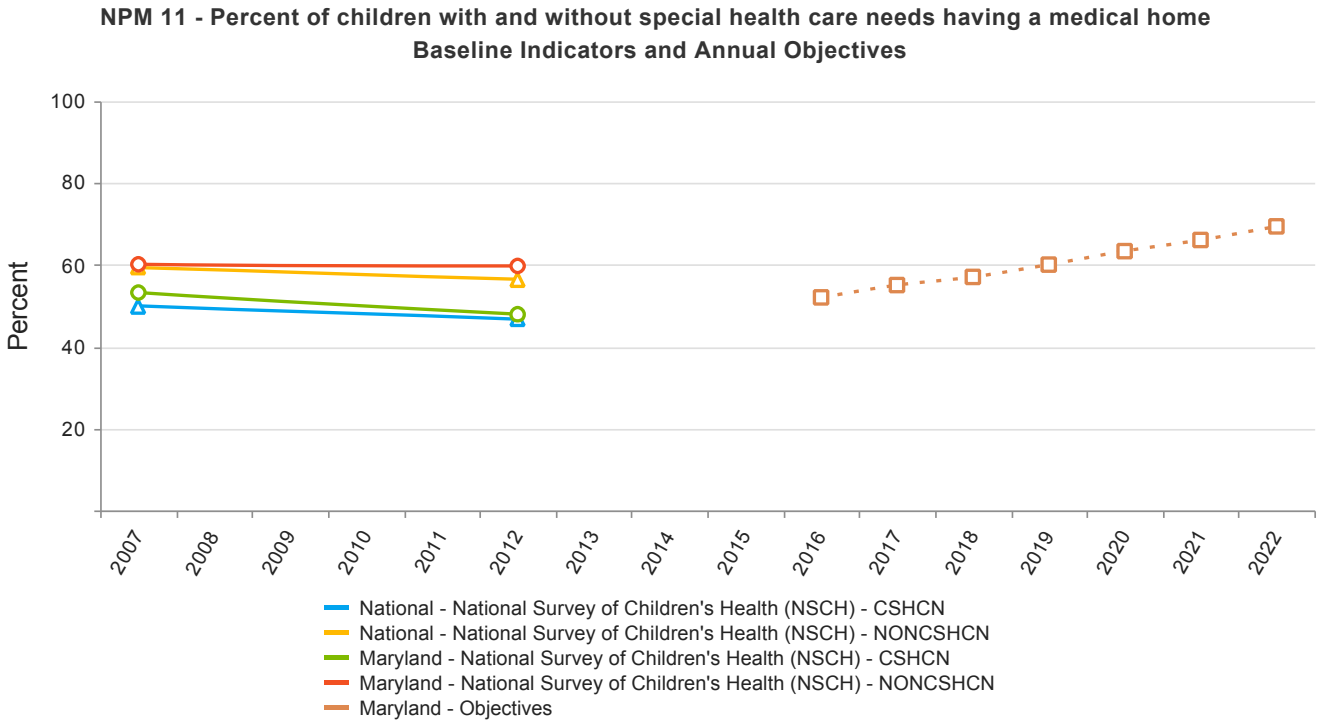
Adolescent Health Strategic Planning: Adolescent health needs were identified using both quantitative and qualitative sources as part of Maryland's 2015 needs assessment. Mental health, substance use, sexual health, and social determinants of health were identified as key areas for adolescent health needs. Recognizing the importance of addressing these needs for Maryland's youth, adolescent health was recognized as a priority for the OFCHS. Late in FY16, the Child and Adolescent Health Unit started a strategic planning process for adolescent health. This included a review of adolescent health literature, planning for internal and external stakeholder meetings, and identification of participants for an advisory committee with representation from State agencies, academia, and nonprofit organizations. These activities laid a foundation for further strategic planning in State FY 2017, including participation in an Adolescent and Young Adult Health Collaborative Improvement and Innovation Network (CoIIN).

Children with Special Health Care Needs

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN) receiving care in a well-functioning system	NS-CSHCN-2009_2010	20.6 %	NPM 11 NPM 12
NOM 19 - Percent of children in excellent or very good health	NSCH-2011_2012	86.3 %	NPM 11 NPM 12
NOM 22.1 - Percent of children ages 19 through 35 months, who completed the combined 7-vaccine series (4:3:1:3*:3:1:4)	NIS-2015	76.9 %	NPM 11
NOM 22.2 - Percent of children 6 months through 17 years who are vaccinated annually against seasonal influenza	NIS-2015_2016	72.8 %	NPM 11
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NISF-2015	66.0 %	NPM 11
NOM 22.3 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the HPV vaccine	NISM-2015	55.0 %	NPM 11
NOM 22.4 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the Tdap vaccine	NIS-2015	86.5 %	NPM 11
NOM 22.5 - Percent of adolescents, ages 13 through 17, who have received at least one dose of the meningococcal conjugate vaccine	NIS-2015	87.3 %	NPM 11

National Performance Measures



Federally Available Data	
Data Source: National Survey of Children's Health (NSCH) - CSHCN	
	2016
Annual Objective	52
Annual Indicator	47.8
Numerator	122,892
Denominator	257,254
Data Source	NSCH-CSHCN
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	55.0	57.0	60.0	63.3	66.0	69.3

Evidence-Based or –Informed Strategy Measures

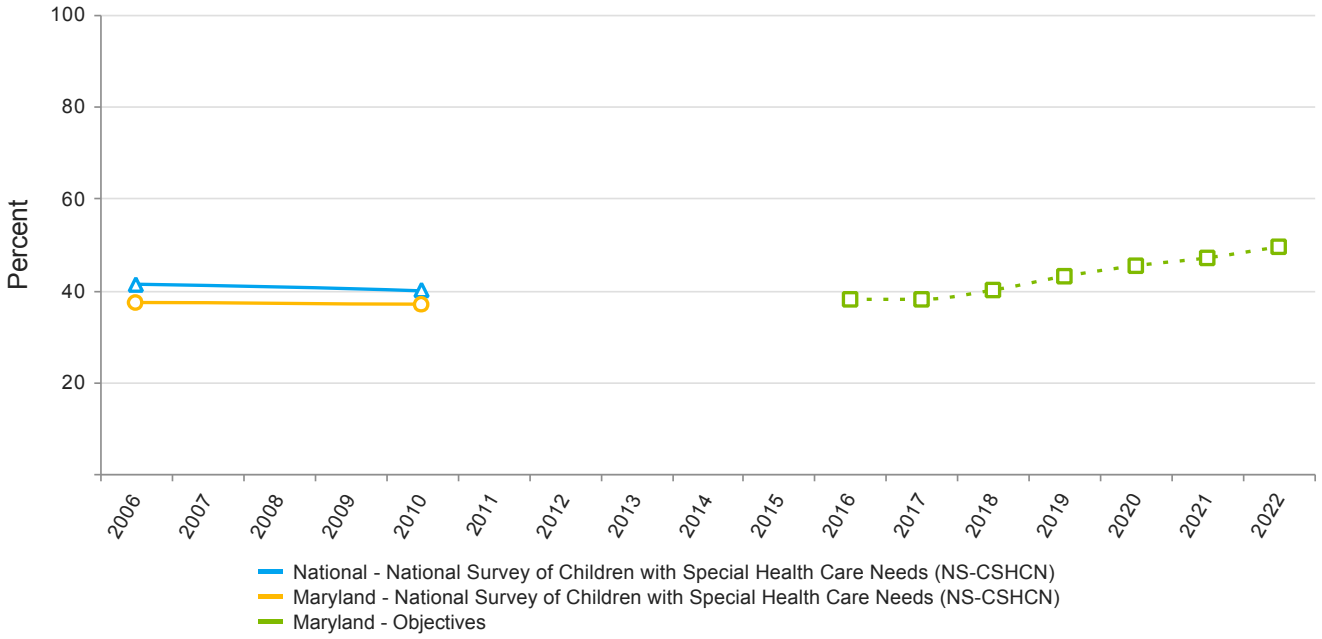
ESM 11.1 - Care Coordination Services

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	OGPSHCN Data
Data Source Year	2017
Provisional or Final ?	Provisional

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

NPM 12 - Percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care
Baseline Indicators and Annual Objectives



Federally Available Data	
Data Source: National Survey of Children with Special Health Care Needs (NS-CSHCN)	
	2016
Annual Objective	38
Annual Indicator	36.8
Numerator	30,855
Denominator	83,881
Data Source	NS-CSHCN
Data Source Year	2009_2010

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	38.0	40.0	43.0	45.3	47.0	49.4

Evidence-Based or –Informed Strategy Measures

ESM 12.1 - Health Care Transition Services

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	30,855
Numerator	
Denominator	
Data Source	NS-CSHCN
Data Source Year	2009/2010
Provisional or Final ?	Provisional

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

Children with Special Health Care Needs - Plan for the Application Year

During FY 18, the Title V Children and Youth with Special Health Care Needs Program plans to continue to enhance and improve infrastructure and system building efforts around Medical Home and Health Care Transition through the OGPSHCN grants program. The OGPSHCN plans to incorporate standardization of a Medical Home and Health Care Transition Framework. Grantees who receive funding from the office will utilize the framework to provide services to CYSHCN. The framework will identify specific target areas and outcomes for HCT and Medical Home. The framework will be developed based on the standards for systems of care for CYSHCN.

In FY 18, the OGPSHCN will incorporate a web-based, multi-stage grant management and reporting system into the grants program. The reporting system will be designed to align with the OGPSHCN's strategic plan and will allow for more accurate reporting and quality assurance. The system will enhance OGPSCHN's accountability and identify trends, programmatic improvements, challenges, and achieved outcomes.

The OGPSHCN will continue to prioritize efforts around Medical Home and Health Care Transition for CYSHCN. While identifying opportunities for improvement, advancement, and collaboration, the office will work towards achieving the outcomes and strategies outlined in the CYSHCN Action Plan.

One of the largest undertakings occurring in FY 18 is a statewide provider inventory of care coordination services for CYSHCN. In FY 17, the OGPSHCN was selected to work with the National Center for Workforce Development (NCWD) as part of the Health Transformation Cohort Project. The office selected to focus on improving care coordination for CYSHCN. The project will focus on: conducting a statewide care coordination assessment; garnering stakeholder support; and creating a document that outlines specific standards of care and tools around care coordination for CYSHCN that can be implemented uniformly regardless of the agency or provider. The long term goal of this project is to create a statewide model to be implemented and evaluated in its effectiveness at increasing access to care. During this 8 month cohort the OGPSHCN team worked with the NCWD on the initial phase of this project which included forming a full implementation team for guidance and input. In FY 18, the project will move towards statewide provider inventory and assessment.

The Health Care Transition (HCT) Program will continue efforts aimed around engaging transitional age youth, collaborating with other state agencies to incorporate HCT into program planning, and increasing overall education and awareness about HCT. In FY 18, the office plans to provide HCT training to school health nurses and school based health teams through the Maryland State Department of Education (MSDE). The OGPSHCN plans to utilize partnerships and funding to engage adult Primary Care Physicians around HCT. There are also plans to support initiatives focused on increasing adult provider education. The Health Care Transition Coordinator plans to develop educational material and trainings around the MCH six core elements to providers throughout the state.

In FY 18, the office plans to strengthen Family Engagement and Family Professional Partnership (FPP) by including FPP as a specific target area for grantees who receive funding from the office. The OGPSHCN will continue to offer family sensitivity training to internal MDH and external community partners who regularly serve CYSHCN, as well as trainings to families on finding resources and caregiver stress. The Parent Resource Coordinator (PRC) will continue to represent the OGPSHCN on advisory councils throughout the state. OGPSHCN will continue to work closely with The Parents' Place of Maryland (PPMD) to develop and implement action plans to strengthen and sustain partnerships, including the Maryland Community of Care Consortium for Children with Special Health Care Needs and related activities. The PRC is assisting PPMD with a care coordination conference aimed at educating parents of CYSHCN. In an effort to increase family engagement throughout the state, the office is partnering with PPMD to facilitate family focus groups in different regions of the state to gather family input on barriers and successes to becoming more engaged.

Children with Special Health Care Needs - Annual Report

In FY 16, the Title V Children and Youth with Special Health Care Needs (CYSHCN) Program, operated through the MCHB Office for Genetics and People with Special Health Care Needs (OGPSHCN), served an estimated 49,281 CYSCHN and their families. This includes unduplicated children and/or families served through OGPSHCN programs in the top two levels (Direct Health Care and Enabling Services) of the MCHB Pyramid. During FY 16 funds were provided for system development programs, genetics centers, complex care clinics, pediatric hematology/hemophilia programs, rural specialty care clinics, The Parents' Place of Maryland one-on-one assistance and family training, local health departments, care coordination, outreach and education, transition services, medical day care centers, the OGPSHCN Resource Line and Resource Locator, My Health Care notebooks and flash drives, infant hearing follow-up, newborn bloodspot screening follow up, Sickle Cell Disease follow up, and birth defects follow up. The OGPSHCN continued to structure activities for FY16 around the six MCHB core systems outcomes for CYSHCN: (1) Family Professional Partnerships, (2) Medical Home, (3) Adequate Insurance, (4) Early and Continuous Screening, (5) Easy to Use Services and Supports, and (6) Youth Transition to Adulthood.

Family Professional Partnerships (FPP)

In an attempt to improve our family engagement and Family Professional Partnership (FPP) efforts in FY 16, OGPSHCN assessed its programs and looked for opportunities to enhance family engagement. OGPSHCN's Parent Resource Coordinator (PRC) has helped families find local and state resources for their children, provided education and training to families of CYSHCN, and managed the Children's Resource Line (the majority of callers need help finding funding sources or respite/childcare.) Utilization of the Resource Locator including over 1,100 resources continued to expand with 1,448 website hits from May 1- June 30 of 2016. The OGPSHCN promoted use of the Resource Line as well as the Locator through partners' online listservs, newsletters and dissemination of fliers at local events. The Locator is translatable into 50 languages and uses a language link translation service for those that choose to call in for assistance. The PRC has focused on professional development in the areas of health inequities and cultural competency by attending training opportunities. This was done in order to begin collaboration with organizations that provide services to underserved populations.

In FY 16 OGPSHCN's PRC provided onsite trainings for medical providers on FPP CYSHCN (five trainings for 65 providers) using the Family Voices tool to assess their level of FPP and offer ways to improve. The PRC also provided training for families on caregiver stress and finding resources (3 trainings for 70 families). The PRC serves on family advisory committees for two major pediatric hospital facilities – Johns Hopkins Hospital and Mount Washington Pediatric Hospital, and a regional parent resource alliance on the Eastern Shore of Maryland. In an effort to build and strengthen family professional partnerships, the PRC created a list of State advisory councils/committees that are in need parent representation to send out to interested stakeholders and families.

A large portion of FPP efforts occur between the long standing partnerships between OGPSHCN and The Parents' Place of Maryland. PPMD is a non-profit, family-directed and staffed center serving parents of CYSHCN throughout the state. PPMD is also the Maryland Chapter of Family Voices and F2F. OGPSHCN and PPMD work closely to identify opportunities and plan activities to engage families and improve family professional partnerships within the state.
With the support of the OGPSHCN, in FY 2016, PPMD was able to provide 1:1 assistance and navigation services to 709 unduplicated parents of CYSHCN. In efforts to ensure families of CYSHNC have access to education, training, and mentoring to enhance their skills in caring for CYSHCN, PPMD conducted training for 7,378 families and providers. PPMD conducted 8 regional training events (conferences) for 1,019 parents. In efforts to increase partnership and advocacy skills and effective access to health care services for CYSHCN, PPMD conducted 10 workshops for a total of 648 parents of CYSHCN. In addition, PPMD conducted 2 parent leadership training programs, 1 in English and 1 in Spanish. PPMD was also able to disseminate information through its e-newsletter to 39,996 individuals.

During FY 16, funding priorities included projects that addressed one or more areas of the Systems of Care shared goals, including FPP. One program of note is the Parent Navigator Program at the Children's National Medical Center. The Parent Navigator Program helps to reduce family stress by providing peer-to-peer support, and by connecting parents or caregivers to resources, assisting with navigating care, finding educational tools for parents and children, and providing emotional support in managing a child's healthcare journey. The navigators bring a unique perspective and understanding to a child's healthcare team since they, too, are parents of children with special needs. In FY 16 the Parent Navigator Program provided support, information, education, and navigation services to over 160 families.

Medical Home (MH)

In FY 16, the Medical Home program continued to focus on education, provider training, partnerships, and awareness. The MH Coordinator expanded outreach efforts and dissemination of MH information across the state. A total of 268 individuals were educated on Medical Home implementation. The MH Coordinator presented at the Statewide School Health Interdisciplinary Program (SHIP) conference on Care Coordination Strategies in Pediatric Primary Care for CYSHCN. This presentation provided an opportunity for school health staff to understand what a Patient-Centered MH looks like and their role in coordination of care for CYSHCN. This presentation serves as catalyst for the OGPSHCN partnership with the Maryland State Department of Education. The MH Coordinator provided technical assistance and resources around medical home implementation to local health departments and pediatric practices.

In efforts to focus on access to appropriate patient and family centered care coordination, the Systems Development Unit within the office developed a steering committee of stakeholders with a wealth of experience with CYSHCN and care coordination in Maryland. The purpose of the committee was to garner input around the need for a statewide assessment of care coordination. The steering committee was able to provide direction and feedback on how the OGPSHCN can begin the process of strengthening care coordination around the state. Most stakeholders on the committee agreed that care coordination efforts are fragmented and needs to be strengthened, however the challenge lies within the approach to address this. For FY 18, the OGPSHCN plans to focus on determining the best approach by utilizing a planning team of experts that guide this effort on a longer term basis.

For FY 16, MH remains a priority for the CYSHCN program. Funding has been provided to agencies and programs that focus on the Patient Centered Medical Home model for CYSHCN. The intent of these programs is to bridge services and coordination gaps between parents, caregivers, children with special needs, providers, and community programs to ensure children's needs are met and services are accessible. Grantees are provided with education, support, and technical assistance aimed improve the quality of care and increase access to care for CYSHCN.

The OGPSHCN provided funding to CYSHCN programs at 19 Local Health Departments (LHD) throughout Maryland. LHD CSCHN programs utilize nurse care coordinators to provide care coordination services. In FY 2016, over 1,700 children received basic and/or complex care coordination and case management services. The Baltimore City Health Department developed a real-time online tool called "Provider Updates" to improve communications between prenatal, obstetric, pediatric, Maternal & Child Health: *B'more for Healthy Babies,* and community health programs. Through this listserv tool, the health department has maintained successful outreach and communication to over 540 providers including social workers, case managers, and clinic administrators who serve CYSHCN.

In addition to supporting LHDs, the OGPSHCN provides funding to private agencies and academic institutions through System Development grants. The majority of the CYSHCN program partnerships and collaborations happen through System Development grants. System Development grants are aimed to support infrastructure building for systems of care.

Children's National Medical Center (CNMC) supports medical homes by providing integrated access to services and care

coordination for Maryland children and youth with special health care needs through the Parent Navigator and Complex Care Programs (CCP). The navigators provide peer-to-peer support for families of children with special needs, and provide knowledge and resources to families to effectively navigate the system. The CCP at CNMC supports medical homes by bridging/filling the gap between primary care providers and tertiary services. In FY 2016, 160 children and families were serviced in the Parent Navigator Program.
The University of Maryland Access for Special Kids (ASK) program provides multi-disciplinary care coordination for children with complex medical needs using a medical home model approach. The goal of the program is to enhance the care of special needs children in their medical home at the University Of Maryland Department Of Pediatrics and in community based sites across the state. The ASK program provides support for families, assists care providers in serving families, serves as a bridge between families, primary care providers and specialists, identifies and links to community resources, serves as the primary point of contact for families and providers at University of Maryland Children's Hospital, optimizes integration into school and specialized day care, and serves as a Single Point of Entry to University of Maryland Medical Center and Children's Hospital Pediatric Specialists. In FY 16, 81 children and families were served through the ASK program.

Recognizing the importance of specialized child care services for CYSHCN, OGPSHCN continues to support programs such as PACT: Helping Children with Special Needs (PACT). PACT provides comprehensive childcare services utilizing the medical home model. The OGPSHCN acknowledges the importance for parents and caregivers to maintain employment while caring for a child with complex needs, and has provided funding to PACT to assist them with their extensive childcare needs. PACT provides an early intervention program for infants and toddlers who are at high risk for or who have been identified as having developmental delays. At PACT, the parents, families, and caregivers play an integral role in their children's treatment and care. PACT works closely with parents, families, and caregivers to provide them with information and training on how to best foster their child's developmental progress. All of the PACT programs offer counseling, information, and assistance in obtaining services to help children transition to other programs when they leave. During 2016, PACT served over 260 children.

Through a partnership with the Parents Place of Maryland, the OGPSHCN was able to award "Mini Grants", which are one time grants awarded to agencies to support Medical Home and Health Care Transition activities. Some of the projects focused on Medical Home and systems of care for CYSHCN that received funding were:

The Abilities Network – ***Bridging the Gap*** project. This project focused on larger inclusion of school age CYSHCN in programs that serve typically developing peers. This project focused on increasing staff knowledge and skills, changing registration paperwork to include an acknowledgement of inclusionary practices, ensuring directors gain experience in coaching and mentoring staff on inclusionary practices, and ensuring that families who enroll their child with special needs feel that their child is included and accepted.

The MedStar Franklin Square – ***Community Autism Awareness*** project. This project focused on educating communities around MedStar Franklin Square Medical Center regarding autism and the Modified Checklist for Autism in Toddlers, Revised. A bi-lingual college student served as the community educator, who delivered educational presentations targeted to organizations and child care centers where staff interact with children 15 months through 3 years old. The coordinator presented to every childcare center in the 21221 zip code, which is an underserved community in Baltimore County. The coordinator also provided training to participants in the Family Medicine Residency Program.

Pathfinders For Autism – ***Friendly First Visit: Dental Initiative*** project. The purpose of this project was to improve the experience of people with autism and other disabilities in receiving dental care. Pathfinders worked with dental health providers to increase knowledge and better understand concerns related to patients with autism and other disabilities by providing factsheets and other information/resources. Pathfinders identified providers to host a day for families to schedule a non-

treatment appointment at the dental office, for the child with autism to explore and get used to the tools, equipment, sounds, etc. The goal of the non-treatment appointments was to increase each child's comfort level before a treatment visit or check-up. This project also focused on increasing the number of dental providers in Pathfinder's database in all regions of the state. Pathfinder also developed a Parent Tip Factsheet for families, which has been distributed widely.

The OGPSHCN provides funding and support for genetic testing and services. Genetic services and testing are conducted through the University of Maryland, Children's National Medical Center, Johns Hopkins University, and Kennedy Krieger Institute Biochemical Genetics Laboratory. Genetics services are provided to reduce or prevent adverse outcomes from heritable conditions, provide opportunity for CYSHCN and their families to receive services necessary to manage genetic conditions, offer services that are culturally sensitive and family oriented, and increase the number of primary care, specialty care, and other related providers that are informed and educated about genetic contributions to health and illness and the application of genetic information to improve the health of individual and families in their care. In FY 2016, over 5,400 laboratory tests were performed and 4,763 genetic services activities were completed to ensure safety and improve access to care for CYSHCN.

Adequate Health Insurance

The OGPSHCN works through partnerships with the community, agencies, and parents to improve the adequacy of private and public health insurance coverage for CYSHCN in order to minimize financial impact on families. While adequate insurance coverage remains a challenge for families, the OGPSHCN focuses efforts on locating resources to assist families and parent education around advocacy. In FY 2016, the OGPSHCN also provided training to Special Needs Coordinators from Maryland Medicaid managed care organizations (MCOs).

PPMD and its Family-to-Family Health Information and Education Center provide health-related workshops for families on topics such as understanding public health insurance in Maryland, the ACA, and CYSHCN. In FY 2016, PPMD staff conducted training events for a total of 709 parents and over 2,000 Health Service Provider professionals around health insurance and advocacy. PPMD staff members are also available to provide individual assistance to parents of CYSHCN through telephone, email, and face-to-face meetings on any related matters to CYSHCN including insurance and financing. In FY 2016, 7% of assistance requested was related to financing, including questions or information requests related to Medicaid or MCHP, as well as questions and concerns about both public and private insurance.

OGPSHCN continued to provide payments, through Title V funds, for specialty care and related services through the Children's Medical Services Program (CMS) to CYSHCN who have chronic medical conditions, are uninsured or underinsured, and have family incomes up to 200% FPL. 99.997% of CMS recipients are undocumented children who reside with their family members and are ineligible for state or federal Medicaid, ACA, or Employer Sponsored Plans (ESP). In FY 2016, CMS processed 317 applications (6.4% increase from FY15) with 302 CYSHCN eligible for services (9.1% increase from FY15), and provided services for 209 CYSHCN (24.3% decrease from FY 2015). CMS was also able to purchase health insurance for 21 of the 317 eligible children, representing a 7% increase from FY15. These were children with the most costly diagnoses, in an effort to offer more comprehensive health coverage for services that CMS would not cover, such as general pediatric care, sick visits, emergency room visits and admissions, and dental, vision, and mental health services. For these children, CMS covered the cost of health insurance premiums and related costs of co-pays and deductibles. Additionally, there were 2 children enrolled in CMS who were also enrolled in the Kaiser Permanente Community Health Access Program (CHAP). For these 2 children, CMS covered services not covered by the CHAP Program (services outside of the Kaiser network). OGPSHCN plans to further increase the number of children covered by health insurance and to provide for all related costs - premiums, co-pays, deductibles and co-insurance costs, if any, depending on the health plan selected.

In Maryland, open enrollment for health insurance occurs between November 1st and January 31st. This is the only time during 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 eligible children not enrolled in health insurance. The CMS Program is not able to access health insurance data on paid costs for care for eligible children who are enrolled in health insurance.

Early and Continuous Screening

Newborn Screening (NBS): Maryland routinely performs two metabolic screens on infants that are born in the state. Maryland's screening rate has historically been greater than the birth rate secondary to provider offices collecting a routine repeat specimen on all babies in their practice regardless of where the baby was born. A measure of newborns who have not been screened is determined by monitoring refusals for newborn screening. Maryland has an informed dissent policy for newborn screening which requires birth facilities to notify the OGPSHCN short-term follow-up unit of any families who refuse newborn screening within 24 hours of refusal. A total of 26 babies were reported to short-term follow-up for parental refusal of newborn screening during 2016. Letters were sent to these families encouraging them to reconsider. Of these 26 babies, 19 babies (73% of the parental refusals) received newborn screening after discharge from the birth facility. A total of 7 babies were documented as not screened for metabolic disorders. Out of a total of 73,544 births, the percentage of Maryland births known to have no newborn screening is less than 0.01%.

Maryland began implementation of screening for severe combined immunodeficiency (SCID) on April 1, 2016. The pilot for this screening was performed on de-identified specimens resulting in cut-offs being established on a mixture of initial specimens collected in the hospital and repeat specimens collected in outpatient settings. Once full implementation was initiated, it was determined that there is a significant difference between the T-Cell Receptor Excision Circle (TREC) count of initial specimens and subsequent specimens. The laboratory determined that environmental influences such as humidity or length of time between collection and receipt in the lab greatly affected the TREC count. The laboratory required enough data to analyze the differences between initial and subsequent specimens in order to adjust the cut-offs for the SCID screen. As a result of the need for the supporting data to adjust SCID screen cut-offs there was a marked increase in babies requiring follow-up services for newborn screening in FY 16. The total number of babies requiring follow-up services for metabolic newborn screening was 1,753. Another factor influencing the number of babies requiring services was an increase in low carnitine levels, particularly in subsequent specimens on breastfeeding infants. Laboratory and newborn screening follow-up personnel are currently meeting with the laboratory sub-committee of the Maryland Advisory Council on Hereditary and Congenital Disorders to resolve this issue.

The OGPSHCN short-term follow-up team for newborn screenings has undergone personnel changes in FY 16. The OGPSHCN Medical Director and a part time nurse resigned their positions in February/March 2016, precipitating reorganization of the NBS Program. Two full time nurses are currently providing 95% of the follow-up services. The role of the Program Director for the Birth Defects Registry and Long Term Sickle Cell Follow-up was expanded to provide part-time coverage for NBS follow-up. A phone conference was initiated with the three hospital/university-based genetics centers serving Maryland who agreed to continue providing consultation to the director as needed in place of the in-house Medical Director. Recruitment is currently under way for a third full time nurse.

Critical Congenital Heart Disease Screening Program (CCHD): OGPSHCN provides Critical Congenital Heart Disease Screening surveillance to identify variations in hospital compliance and to determine final diagnosis for abnormal screens. In FY 16, there were 29 babies who were reported as having failed the CCHD screen. Three of these babies were identified as having a critical congenital heart disorder, six babies were identified as having delayed transition, persistent pulmonary hypertension of the newborn, or a non-critical cardiac malformation, and 20 babies have no follow-up information documented in the database. Site visits, coordinated with the Early Hearing Detection and Intervention (EHDI) Program and Birth Defects Registry, have been completed in FY 16 to discuss CCHD screening and documentation with hospitals. However, based on this analysis, it is evident that more intensive discussion with hospitals is needed to improve documentation of the outcome of failed screens. Further analysis will be conducted to determine the specific hospital(s) to target to improve documentation of outcomes. Enhancements to the database for FY 17 have been requested to facilitate analysis of outcomes for CCHD screening.

The Maryland General Assembly passed a bill during the 2016 legislative session included that will require the Maryland Newborn Screening Program to educate families about screening for additional conditions not included in the Maryland panel. This education

will be accomplished through a brochure and website. Both of these items are undergoing internal and external review prior to publication. The Maryland Advisory Council on Hereditary and Congenital Disorders received notification in November 2016 that the Maryland Secretary of Health and Mental Hygiene has accepted the recommendation of the addition of X-linked adrenoleukodystrophy, and the lysosomal storage disorders Pompe and Fabrey, to Maryland's newborn screening panel. Screening for these disorders will be implemented after funding is available and the laboratory and follow-up teams have established protocols, data systems, and personnel in place to complete the screening. Both Fabrey and X-linked adrenoleukodystrophy have late onset of symptoms, either in late childhood or as an adult, necessitating long term follow-up for these disorders. The Council is continuing to review other disorders for consideration of inclusion on the screening panel.

In June 2016, the NBS Follow-up Program and the Laboratory participated in a national meeting in Denver, CO, designed to improve timeliness in diagnosis of cystic fibrosis. Analysis of data by New Steps (national database for newborn screening data) showed that average time to diagnosis of cystic fibrosis in Maryland is significantly longer than the recommended 3 weeks of age. The primary factors for the prolonged time to diagnosis appear to be delay in receipt of the second specimen and delay in diagnosis/treatment secondary to difficulty in obtaining enough sweat for the sweat chloride test. In FY 2017, these two factors are being addressed. First, the NBS regulations have been updated to change the recommended collection time for the second specimen to 10-14 days of age from the previous 1-4 weeks of age. The earlier collection time should be beneficial for earlier identification of babies who need sweat chloride testing. Additionally, meetings have been planned with the only accredited cystic fibrosis center in Maryland to discuss how to decrease unsatisfactory sweat chloride testing and whether treatment or DNA testing can be initiated earlier if sweat chloride testing is unsatisfactory. In addition to cystic fibrosis, there is a national movement to improve timeliness to diagnosis in disorders identified by the American College of Medical Geneticists as being life threatening in the first week of life. In FY 2017, data will be entered and analyzed through New Steps to determine how the states are performing with these disorders.

Sickle Cell Disease Follow-up Program (SCDFP): The Sickle Cell Disease Follow-up Program (SCDFP) follows children diagnosed with sickle cell through age 18. The program continues to focus on childhood preventive care standards, and providing education and assistance through transition into adulthood. In 2016, 561 children were being followed in the program. In May of 2015, a pilot parent mentor program was formed to assist parents of newborns with sickle cell. This program continues to grow and develop as new parent mentors are added. Future program plans include outreach to young adults and men to encourage them to participate as a mentor.

As part of a HRSA grant: Integrating Newborn Screening Long-term Follow-up into Primary Care Practices (COILS), OGPSHCN is focusing on improving the ability of primary care practices to provide information on long term follow-up of patients identified on newborn screening. The project is focusing on sickle cell disease and hearing loss. Three primary care practices are participating and 14 patients have been recruited. Fields for electronic data sharing between primary care and public health for long term follow-up have been created, and the Principal Investigator is now based at the University of Maryland School of Medicine (UMSM). The MOU with this institution has been modified to include support from the Center for Epidemiology. UMSM staff reviewed the electronic reports of long term follow-up data that can be obtained from the primary care practices. They are building a test Sickle Cell Disease Database (SCDD) using code from the state database to determine the best method for populating the SCDD with annual updates using an electronic format. This grant is now in its final phase, as the data collected is now being analyzed.

Early Hearing Detection and Intervention (EHDI): In FY 2016, Maryland's Early Hearing Detection and Intervention (MD EHDI) Program efforts were focused on reducing the number of babies who are lost to follow-up/documentation (LTF/D) after missing or not passing the newborn hearing screen. A goal of the MD EHDI Program is to reduce the LTF/D percentage from a baseline of 31.34% (2012 MD EHDI/CDC Survey data) to less than 20% by March 31, 2017. An outreach coordinator position was created for face-to-face outreach to medical home providers to help find lost babies and to build awareness, interest, and participation in MD EHDI processes that would result in enhanced sustainability, spread, and continuous improvements for the reduction in LTF/D rates.

While the permanent follow-up coordinator position has been filled for over 9 years, the second, contractual follow-up coordinator position had been vacant periodically for a total of 21 months until three, 6-month, temporary follow-up coordinators were hired in March 2016. Hiring of the 6-month temporary employees increased the program's capacity to reduce the 21% LTF/D rate at the time of hire. By the end of April, the LTF/D rate was 20.3%. Extensive efforts to hire an outreach coordinator were not fruitful due to an inability to find a qualified candidate.

Maryland's EHDI Program is situated alongside other programs and staff which allow for effective collaboration to meet joint goals. The OGPSHCN's Family Resource Coordinator assisted with physician outreach activities allowing MD EHDI to move forward with proposed goals and objectives. A total of 20 practices were visited. Seventeen records were updated to add the patient's current physician. Seventeen records were updated with hearing test results. It was determined that one baby had a hearing follow up appointment pending. In addition to providing physicians with a list of lost babies who were either listed as patients in their practice, or whose address on file was within their region, educational information about MD EHDI, its processes, 1-3-6 timelines, hearing follow-up resource information, and OGPSHCN programs was provided. The Family Resource Coordinator was trained to answer basic questions about the MD EHDI Program. Registration forms were provided for physicians and their staff to gain access to the MD EHDI database for reporting newborn hearing screen/diagnostic results if their practice conducted testing at their site. The MD EHDI Coordinator continues to consult with a Quality Improvement (QI) coach on a regular basis to discuss, develop, and revise PDSAs to meet project goals and objectives using QI methodologies.

Birth Defects Reporting and Information Systems (BDRIS): In FY 2016, the BDRIS program continued to use the OZ systems for monitoring birth defects. Birth facility trainings were continued to make sure staff and administrators were using the system appropriately and effectively, and to increase reporting compliance rates. Since the system was relatively new and had changed from a paper reporting process to web based in May of 2013, the compliance rate for some institutions has been below expectations. These facilities were targeted for trainings throughout the fiscal year. Hospital site visits were done in collaboration with the CCHD screening program chief, to reinforce appropriate screening and reporting procedures. These site visits were also used to obtain documentation of the protocols being used by birth facilities for CCHD screening. BDRIS continues to reach out to specialty clinics to encourage reporting of birth defects that are not diagnosed until an infant is discharged from the nursery. The program continued to send out letters and fact sheets to families with infants identified as having a birth defect. The fact sheets were updated during this past year, and reviewed by the Hereditary Council. For 2016, 1,037 babies were identified via the birth defects reporting system and linked to resources.

Easy to Use Community Based Services

In efforts to increase access to specialty care in FY 16, the OGPSHCN began the program planning and development phase of the Kinera Foundation Eastern Shore Regional Hub. The Hub is designed to offer specialty care services to CYSHCN and their families. The Hub is designed to be a centralized, coordinated hub of patient/family centered care. The Hub unites providers, therapists, families and supporting agencies to ensure CYSHCN on the Eastern Shore receive the level of care they deserve, within the region in which they reside. Offering a multitude of services within one building increases access to services for Eastern Shore families and reduces the cost of care drastically, while improving the overall health of the family. During FY 16 the OGPSHCN participated in various presentations, planning, and advocacy meetings to ensure adequate implementation. The OGPSHCN was instrumental in providing funding, guidance, and expertise around the development of the Hub. The Hub opened in July of 2016. The Hub is a family friendly center that provides Speech Therapy, Occupational Therapy, Psychology Services, Pediatric G. I., DME Outfitting, Orthotics Outfitting, Assistive Technology, Resource and Lending Library, Care Coordination, Collaborative Care, Parent/ Caregiver Support, and a Sensory Quiet Room. The Hub has appointments available 6 days a week. Medicaid clients are accepted, including those enrolled in Waiver Programs.

The OGPSHCN utilizes the role of regional liaisons and the Maryland Community of Care Consortium (COC) to identify and share

community based services throughout the state. Regional liaisons provide support, education, and mentoring to LHD nurses/care coordinators within their region. They are the designated OGPSHCN local contact for stakeholders including families, and they utilize regional partners to develop an ongoing system of information collection for the region. This information will assist OGPSHCN to direct services by identifying gaps, unmet needs, and best practices for regional initiatives.

The first regional liaison partnership is in Talbot County on the Eastern Shore of Maryland. This relationship with Talbot County and the regional liaison has shown to be very beneficial. As a result of this unique partnership, all nine counties of the Eastern Shore participate in the Eastern Shore Maryland Consortium of Care quarterly meeting where nurse care coordinators receive mentoring, support, information, and guidance, and engage in activities around best practices for serving CYSHCN. As a result of the regional liaison partnership, the Kinera Hub project has gained significant momentum. Other FY 16 activities and accomplishments through the Eastern Shore regional liaison partnership include:

- The establishment of the gastrointestinal/nutrition/feeding/swallowing specialty clinic along the mid-shore. The clinic is well received 90-100% of clients appearing for appointments.

- The Hospital for Sick Children (HSC)-Mobile Rehabilitation Unit offers pediatric equipment and assistive technology services in the Mid-Shore area. The Director for this program is an active participant in the COC-Eastern Shore meetings and provides regional updates at each meeting. The Mobile Rehab unit plans to utilize a space at the Kinera Hub location.

- The regional liaisons work with the Director of Rehabilitative Services at Shore Health Systems. The Director is an active participant in the COC-Eastern Shore and has historically been an advocate for identifying ways in which the department can address the needs of CYSHCN and their families

In FY 16, the OGPSHCN reached out to multiple local health departments to identify those with the capacity to take on a regional liaison role for the office. The Medical Home Coordinator oversees these efforts. The OGPSHCN was able to partner with Calvert County Health Department and in FY 17, Calvert County will take on the 2nd regional liaison role for the Southern Region of Maryland.

The Maryland Community of Care Consortium of Children with Special Health Care Needs continues to serve as a catalyst to identify community resources and provide a forum for networking and communication among various stakeholder groups. In FY 2016, there were 3 Consortium meetings that were attended by an average of 50 stakeholders per meeting. During each Consortium meeting, local community projects and programs serving CYSHCN were presented and opportunities to collaborate were discussed. The Consortium members also gave feedback on proposed Medical Home Program activities within the OGPSHCN.

Health Care Transition (HCT)

For FY 16, the OGPSHCN Health Care Transition (HCT) Program focused efforts on education and awareness, interagency partnerships, technical assistance, and systems development activities to increase the number of youth with special health care needs (YSHCN) that receive the services necessary to make transitions to adult health care.

One of the most successful accomplishments around HCT is the growth of and interagency collaboration within the Maryland Health Care Transition Leadership Team (HCTLT). The HCTLT is comprised of key cross-agency decision makers and family representatives who work together to address challenges, provide solutions, and shape policy and practice to improve the quality and delivery of transition services. Throughout FY 16, the HCTLT worked in both large groups and small sub-groups to develop a comprehensive list of recommendations that will lead to better HCT outcomes for youth and young adults, and improve the number of

YSHCN that successfully transfer to adult care. These recommendations and strategies were incorporated into the CYSHCN five year action plan where appropriate.

The OGPSHCN provides appropriate trainings, presentations, and health education materials for use by health insurance plans, private agencies, providers, and families of YSHCN. In FY 16, The OGPSHCN continued to provide funding to Local Health Department CYSHCN programs to provide HCT related services within their counties. The OGPSHCN also collaborated with private agencies through funding opportunities on the following Health Care Transition projects throughout the state:

The Johns Hopkins Division of Pediatrics and Adolescents "J-Train: The John Hopkins Transition Independence Network" project developed a customized evidence-based best practice model for HCT to be used in the John Hopkins Medical System (JHM) Health Information Technology (HIT) system. The project customized Hopkins' electronic health record to incorporate a transition readiness assessment questionnaire for YSHCN that is being utilized in 11 of the John Hopkins Hospital clinics.

The Coordinating Center, a nonprofit organization, created the Transition Connection Initiative (TCI) Pilot to improve health care transition from pediatric to adult health care systems for YSHCN and their families. The pilot consisted of Rare and Expensive Case Management (REM) clients ages 12-25 with neurological disabilities, who are ventilator dependent and living in Baltimore City and Baltimore County. A strategy of this pilot project was to use a customized transition readiness tool to help youth identify their needs, create an individualized plan of care, and maximize their independence in all aspects of adult life. With the guidance of clinical care coordinators, youth received support and resources for identifying adult primary and specialty providers as well as adult disability services. The coordinators worked with the pediatric providers to confirm transition transfer information was complete and accurate for the new adult providers. The goal of this project was to connect YSHCN with adult providers inclined to care for this medically complex population. In FY 2016, 295 REM clients received ongoing care coordination. The Coordinating Center formed a TCI advisory board to include pediatricians, adult health care providers, youth, and family representatives to provide expert assistance with health care transition best practices and performance.

The OGPSHCN provided funding to the Children's National Medical Center - Complex Care and Parent Navigator Program. The Parent Navigator Program helps to reduce family stress by connecting parents or caregivers to resources, assisting with navigating care, finding educational tools for parents and children, and providing emotional support. In FY 16, Children's National Medical Center added a Parent Navigator Transitioning Program. The pilot program focused on providing transition related services, and identifying appropriate adult providers. The pilot project experienced some barriers in making contact with teens/families to discuss transition, however the program was successful in completing 12 readiness assessments of the 15 families who were contacted. Several of the families were not ready to be seen by an adult provider but were provided with information to increase their awareness. The program also provided training on HCT to its staff. Trainings focused on the issues associated with transitioning youth and identified ways to improve health outcomes. The program also developed a transition policy, and modified its readiness assessment guidelines.

The Maryland Community of Care Consortium for Children with Special Health Care Needs awarded "Mini Grants" during FY16 to organizations focused on health care transition. Some of the projects that received funding were:

1. **Calvert County Crossroads Project**. The purpose of the "Crossroads" Project was to facilitate a smooth, organized, and coordinated transition for adolescents with chronic health conditions from pediatric care to the adult health care system.

2. **Kennedy Krieger Children's Hospital: Health Care Transition for Youth with Special Needs.** This project focused on creating a systematic, orderly, and family centered evaluation of current healthcare needs for youth and young adults approaching transition age at The Center for Autism and Related Disorders (CARD) clinic by creating a portable healthcare document that will aid in coordination of services between pediatric and adult health care providers. This will ensure high case-by-case

personalization of care and healthcare management of the young adult with autism, and improved quality of life.

3. **The Johns Hopkins Hospital: Electronic Transition Readiness Assessment (ETRA)** to improve the quality of transition for youth with special healthcare needs in primary care. This project targeted YSHCN ages 16-25 who live in East Baltimore and receive care in the Adolescent Medicine Section of the Harriet Lane Clinic (HLC) at Johns Hopkins Children's Center. This project implemented a quality improvement project using the Plan, Do, Study, Act (PDSA) approach. The goals were to: (1) improve the quality of the transition experience of YSHCN and their families who live in the East Baltimore area; and (2) implement an ETRA in an academic primary care practice serving adolescents and young adults.

4. **Maryland Chapter of the American Academy of Pediatrics: Educational Event on Transition.** This project coordinated an educational event that provided CME credit for pediatricians and other primary care providers, many of whom are members of the Maryland Chapter of the American Academy of Pediatrics. The content focused on transition and included describing the need for deliberate and organized transition for youth with special healthcare needs, and describing strategies for the successful implementation of the "Got Transition?" tools in primary care practices.

5. **Pathfinders for Autism: Primary Care Physicians and Transitioning Youth with Special Health Care Needs – Expanding, Enhancing, and Educating Maryland's Community.** The project's target audience was Maryland's autism community and associated adult health care providers. The intent was to work at a grassroots level including conducting surveys of parents and YSHCN (specifically autism spectrum disorders), posting inquiries on social media outlets, reaching out to Pathfinders' 15,000 plus subscriber database, and working with other autism groups in Maryland, to include more primary care providers and general practitioners in the providers/services database. With this information available, Pathfinders for Autism was able to directly assist families and adults in transitioning healthcare services, and help them overcome the initial hurdle of locating a healthcare specialist in their area.

6. **Pediatric Outpatient Department, Sinai Community Care (SCC): Transitioning from the Pediatric to the Adult Medical Home for Patients in Sinai Community Care, Sinai Hospital of Baltimore**. This project designated a Transition Coordinator and introduces an Adolescent Leadership Council. The coordinator oversees the transition process to enable successful transition to adult care. SCC Pediatrics made some preliminary steps toward successful transition; with the services of a coordinator and an Adolescent Leadership Council, the program was able to build on this initial progress

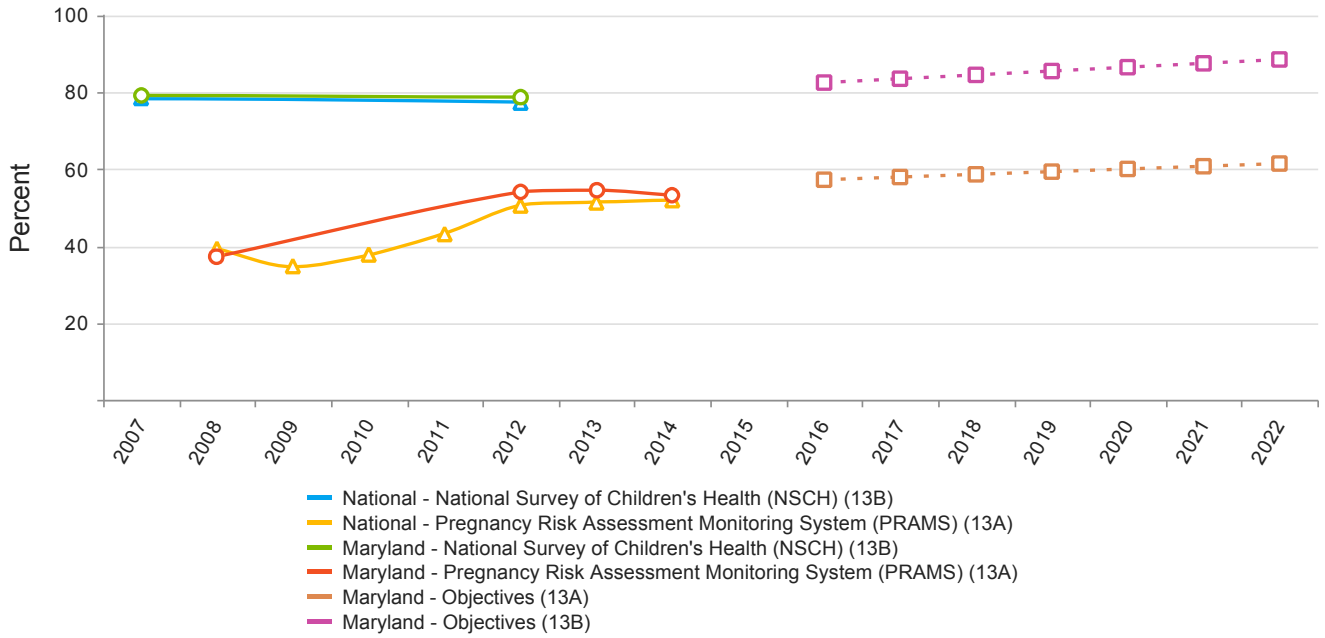
Cross-Cutting/Life Course

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID-2014	188.2	NPM 14
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS-2011_2015	23.5	NPM 14
NOM 4.1 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2015	8.6 %	NPM 14
NOM 4.2 - Percent of very low birth weight deliveries (<1,500 grams)	NVSS-2015	1.6 %	NPM 14
NOM 4.3 - Percent of moderately low birth weight deliveries (1,500-2,499 grams)	NVSS-2015	6.9 %	NPM 14
NOM 5.1 - Percent of preterm births (<37 weeks)	NVSS-2015	10.0 %	NPM 14
NOM 5.2 - Percent of early preterm births (<34 weeks)	NVSS-2015	3.1 %	NPM 14
NOM 5.3 - Percent of late preterm births (34-36 weeks)	NVSS-2015	7.0 %	NPM 14
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2015	25.0 %	NPM 14
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS-2014	7.0	NPM 14
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2014	6.5	NPM 14
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2014	4.6	NPM 14
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2014	1.9	NPM 14
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS-2014	292.2	NPM 14
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2014	89.3	NPM 14
NOM 14 - Percent of children ages 1 through 17 who have decayed teeth or cavities in the past 12 months	NSCH-2011_2012	16.2 %	NPM 13
NOM 19 - Percent of children in excellent or very good health	NSCH-2011_2012	86.3 %	NPM 13 NPM 14

National Performance Measures

NPM 13 - A) Percent of women who had a dental visit during pregnancy and B) Percent of children, ages 1 through 17 who had a preventive dental visit in the past year
Baseline Indicators and Annual Objectives



NPM 13 - A) Percent of women who had a dental visit during pregnancy

Federally Available Data	
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)	
	2016
Annual Objective	57.2
Annual Indicator	53.3
Numerator	35,180
Denominator	65,996
Data Source	PRAMS
Data Source Year	2014

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	57.9	58.6	59.3	60.0	60.7	61.4

NPM 13 - B) Percent of children, ages 1 through 17 who had a preventive dental visit in the past year

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	82.4
Annual Indicator	78.5
Numerator	994,287
Denominator	1,266,131
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	83.4	84.4	85.4	86.4	87.4	88.4

Evidence-Based or –Informed Strategy Measures

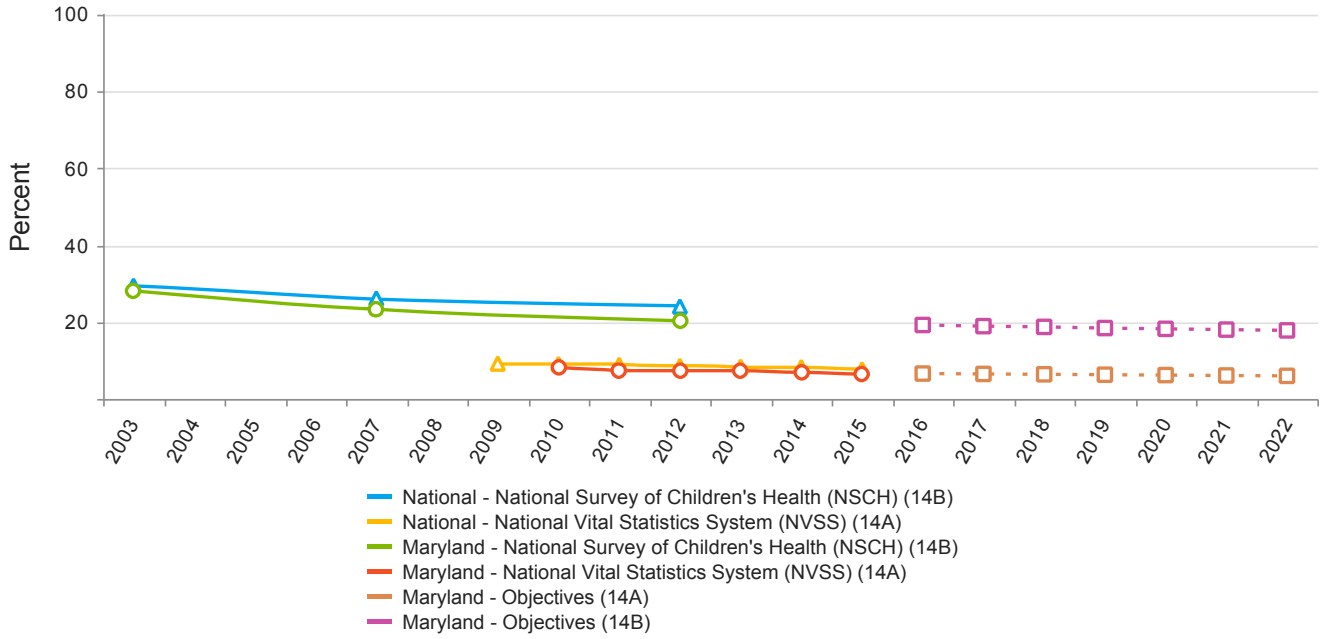
ESM 13.1 - Oral Health Provider Training

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	100.0	50.0	50.0	50.0	50.0

NPM 14 - A) Percent of women who smoke during pregnancy and B) Percent of children who live in households where someone smokes
Baseline Indicators and Annual Objectives



NPM 14 - A) Percent of women who smoke during pregnancy

Federally Available Data	
Data Source: National Vital Statistics System (NVSS)	
	2016
Annual Objective	6.7
Annual Indicator	6.5
Numerator	4,758
Denominator	73,116
Data Source	NVSS
Data Source Year	2015

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	6.6	6.5	6.4	6.3	6.2	6.1

NPM 14 - B) Percent of children who live in households where someone smokes

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	19.3
Annual Indicator	20.3
Numerator	270,091
Denominator	1,332,604
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	19.0	18.8	18.5	18.3	18.1	17.9

Evidence-Based or –Informed Strategy Measures

ESM 14.1 - Smoking Cessation

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	165
Numerator	
Denominator	
Data Source	MDH CTPC Quitline Data
Data Source Year	FY16
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	167.0	169.0	170.0	171.0	172.0	173.0

State Performance Measures

SPM 5 - Smoking Cessation During Pregnancy

Measure Status:	Inactive - Replaced

State Provided Data	
	2016
Annual Objective	
Annual Indicator	165
Numerator	
Denominator	
Data Source	MDH CTPC Quitline Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	167.0	169.0	170.0	171.0	172.0	173.0

SPM 8 - Barriers and Facilitators to Dental Care During Pregnancy

Measure Status:	Active

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	85.0	50.0	50.0	0.0	0.0	0.0

Cross-Cutting/Life Course - Plan for the Application Year

Oral Health and Pregnant Women: FY18 Title V strategies to enhance oral health among pregnant will include the continuation of our partnership with the MDH Office of Oral Health (OOH) and their HRSA- funded Perinatal and Infant Oral Health Quality Improveme (PIOHQI) grant program which aims to improve oral health care utilization during pregnancy. The MCHB will collaborate with the O the University of Maryland, School of Public Health to conduct surveys, interviews, and/or focus groups of prenatal health care provic community-based health centers regarding their oral health knowledge, understanding, attitudes, behaviors and practices. In addition, MCHB will participate on the OOH's committee to develop state "oral health during pregnancy" practice guidelines for prenatal and c health care providers. The MCHB, the OOH, and the University of Maryland School of Dentistry will partner to train prenatal health providers in select PIOHQI pilot sites throughout the state. The MCHB will also continue to support the OOH in its oral health trainir integration efforts, and in the dissemination of oral health resources to programs such as WIC, MIECHV, Early Head Start, and Administrative Care Coordination Units of the local health departments. The MCHB will also support the expansion of the Maryland Action Coalition's (MDAC) "Healthy Teeth, Healthy Kids" website to include additional information about the importance of oral heal during pregnancy and to ensure it is accessible, relevant and easily useable by pregnant women throughout the state. Annual analysis c PRAMS and Medicaid dental utilization and referral to care data for pregnant women and infants will continue to track progress.

Oral Health and Children: To address the oral health needs of children next year, Title V plans to partner with the OOH, the Marylanc Action Coalition, and the Medicaid Program to improve access to oral health care services for children. This will involve continued implementation of the Maryland Oral Health Plan (MOHP) that is targeted at increasing the number of dental service providers, expan education, prevention, and outreach initiatives, and promoting oral health literacy. The OOH is also working to increase the provision preventive, early intervention, and educational oral health services in programs serving at-risk, low income populations such as WIC, h visiting, Early Head Start, Head Start, and Title I schools, and to supplement current efforts to assure that Maryland residents receive optimally fluoridated water. Title V will continue to support and promote the OOH's Maryland Mouths Matter (MMM) Program whi provides online training to medical providers (i.e., pediatricians, family practice physicians, nurse practitioners, and physician assistants are certified in the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) program and are reimbursed by Medicaid to app fluoride varnish to children ages 9 months – 3 years. Title V will support these efforts and work toward the objective of increasing the percentage of children ages 1-17 years who had a preventive dental visit in the last year to 90% by 2020. The current baseline accorc the 2011/12 NSCH is 78.5%.

Increasing access to oral health care services for children is also a Maryland State Health Improvement Process indicator. The state has established a goal of increasing the percentage of children ages 0-20 years enrolled in Medicaid 320+ days who had a dental visit during the past year to 64.6%. The current 2013 baseline is 63.6%. Title V will partner with the OOH and the Medicaid Program to promote the use of dental services for Medicaid recipients enrolled in Title V and MIECHV programs.

Cigarette Smoking and Women: During FY18, the Center for Tobacco Prevention and Control (CTPC) will continue its pregnancy incentive rewards program for participation in the Quitline. CTPC will also continue to use a variety of media (including television, print, transit, and/or billboards) to publicize the Quitline and other cessation resources, including to pregnant women. Quitline callers and enrollees who are pregnant and postpartum will continue to be tracked. MCHB will continue to analyze data from Maryland PRAMS, BRFSS, and the Youth Tobacco and Risk Behavior Survey to monitor trends of smoking rates before and during pregnancy, and will continue to partner with CTPC on efforts to reduce smoking among pregnant women and women of childbearing age.

Household Smoking and Children: Title V will continue to partner with CTPC, early childhood programs and providers including MIECHV, and asthma control programs to monitor rates of childhood exposure to household smoking, and to determine evidence-based strategies to increase awareness of the effects of smoking on children.

Oral Health and Pregnant Women: The MDH OOH, as part of its 4-year (August 2015-July 2019) Perinatal and Infant Oral Health Quality Improvement grant program, began its partnership with the University of Maryland College Park, School of Public Health (UMCPSPH) to conduct surveys, interviews and focus groups of low-income pregnant women, WIC personnel, and prenatal and oral health care providers in Maryland. In 2015-2016, all data collection instruments, recruitment flyers/letters and consent forms were developed, submitted, and approved by the Institutional Review Boards at UMCP and MDH. In partnership with the MCHB and Title V, surveys and interviews of pregnant women at WIC sites throughout the state began in early 2016 to assess oral health knowledge, understanding, attitudes, behaviors and practices, and barriers and facilitators to receiving oral health care during pregnancy.

The OOH also collaborated with the Maryland Dental Action Coalition (MDAC) to develop a new "Healthy Teeth, Healthy Kids" (HTHK) program brochure in both English and Spanish, titled "Give Yourself a Healthy Mouth During Pregnancy," that focused on oral health during pregnancy. Title V will assist the OOH and the MDAC with dissemination of the brochures statewide to organizations that serve pregnant women.

During the months of October and November 2016, the HTHK program ran a 7-week social marketing perinatal and infant oral health literacy campaign. The campaign targeted Latinas of childbearing age via radio and online ads in three areas of Maryland with high numbers of Hispanic residents (Prince George's County, Montgomery County, and Baltimore City). A 30 second radio (audio) advertisement in Spanish was developed as well as Facebook, YouTube, and Pandora ads and banners. The radio and online campaign delivered 1,103,046 impressions (impression= how many times a consumer was exposed to the advertisement). Four interviews with a Spanish-speaking dentist on the topics of oral health during pregnancy and infant oral health also ran four times on the radio station during the 7-week period with an additional 40,000 impressions. The campaign included the following plain language messages: (1) oral health care is important during pregnancy; (2) it is important and safe to see a dentist during pregnancy; (3) schedule a dental appointment as soon as you find out you are pregnant; (4) dental care is covered by Medicaid during pregnancy; and (5) to find a dentist who accepts Medicaid, visit www.dientessanosninossanos.org (English: www.healthyteethhealthykids.org) or if you do not qualify for Medicaid, contact your county's health department to find a dentist.

In June 2016, a statewide training of Administrative Care Coordination Unit (ACCU) staff at local health departments took place on perinatal and infant oral health. Care coordinators assist at-risk, low-income pregnant women in obtaining medical/dental coverage and in locating health care services and providers. A pre-course survey was developed and disseminated electronically to all ACCU program directors prior to the presentation. Results from the survey showed that 95% of program directors felt having accurate information about preventing dental disease is very important; 98% felt very or somewhat concerned about the pregnant women in their programs getting dental care during pregnancy; and 94% rated safety of dental care during pregnancy with a score of 8 or higher (on a scale from 1-10 with 10 being the safest). Regarding dental care utilization barriers during pregnancy, 65% of the program directors felt that "client problems getting to dental appointments (transportation, childcare, getting off work, etc.)" was the most significant barrier, followed by "dentists aren't available or don't accept Medicaid" (56%) and "cost of dental care (woman has no insurance or couldn't afford it" (50%).

In partnership with the University of Maryland School of Dentistry and the OOH, a presentation on perinatal and infant oral health was developed for the OOH's annual "Ava Roberts" course for public health dental providers. This presentation will be given by Dr. Norman Tinanoff, Professor at the School of Dentistry and pediatric dental expert, in August 2016. Pre and post course surveys were also developed. The training presentation will also be used to train dental hygiene students, and will be modified in the future for prenatal health care providers.

Oral Health and Children: In the fall of 2015, the OOH, in collaboration with the University of Maryland School of Dentistry,

conducted its Oral Health Survey of Maryland School Children to assess the oral health status of children in kindergarten and 3rd grade, using a representative sample of the state population. The survey is an in-school, open mouth assessment of dental caries status and dental sealant usage. The survey showed an increase in dental caries of Maryland's public school children in kindergarten compared to the 2011-2012 survey. However, there was a decrease in untreated dental caries in 3rd grade children compared to the 2011-2012 survey. Additionally, there was an increase in dental sealants in 3rd grade children. Overall, the oral health status of children in kindergarten and 3rd grade in Maryland is good. The vast majority of Maryland's public school children have their dental treatment needs met, with only 1% of children having urgent, unmet dental needs. Title V will continue to use data from this survey to monitor the oral health status of Maryland school age children.

The OOH continues to increase medical/dental collaboration in Maryland by leveraging its highly successful Maryland Mouths Matter (MMM) program to provide training to new medical providers specifically family practice physicians, nurse practitioners, and pediatricians. The MMM program comprises trained medical who are reimbursed by Medicaid to apply fluoride varnish to children ages 9 months – 3 years old enrolled in the Medicaid program during their regularly scheduled EPSDT medical well-child visits. Title V will continue to partner with the OOH to increase the number of medical providers trained in oral health risk assessment and application of fluoride varnish. As of June 30th, 2016, over 170,000 fluoride varnish applications have been administered to children ages 9 months – 36 months since the start of the program in July 2009 with approximately 460 EPSDT providers actively providing oral health services (risk assessment, fluoride varnish, anticipatory guidance) to children and families.

The MMM program has successfully engaged non-dental professionals to implement evidence-based oral disease prevention services. To date, over 900 medical providers have completed the fluoride varnish training curriculum. The OOH will continue to offer online training to medical providers and will strive to increase enrollment of medical providers as well as increase the number of applications**.**

Smoking: In Maryland, there are continued geographic and socioeconomic disparities in tobacco use during pregnancy. According to 2014 PRAMS data, 15% of women with 12 or less years of education smoked during their last three months of pregnancy, compared to 2% of women with more than 12 years of education. PRAMS data from 2004-2013 also indicates that rates of smoking during the last three months of pregnancy are highest in rural counties and Baltimore City.

To encourage and support pregnant smokers to use The Maryland Tobacco Quitline, the MDH CTPC launched a Pregnancy Rewards Program in 2014. This incentive program offers pregnant and postpartum women (up to six months) rewards for series of completed calls with a Quit Coach. The program initially required referral by physician, however that barrier was removed so that a pregnant smoker can simply call and inform the Quitline that she is pregnant and interested in the rewards/incentive program. Pregnant and postpartum women who call the Quitline can receive up to $90 in gift cards (in four installments, based on completed calls) to stores like Babies "R" Us and Target if all 10 calls are completed.

In February and March of 2016, CTPC executed Quitline transit campaigns throughout the state targeting pregnant women. Because of their high visibility, these campaigns are highly effective in reaching the target population and sustaining general brand awareness around the Quitline.

In April 2016, using Prevention and Public Health Funding, CTPC executed two "Point Of Care Marketing" (POC) campaigns for Maryland's Medicaid and pregnancy populations with Mesmerize Marketing. POC marketing offers patients actionable information on key health conditions and lifestyle changes that directly influences the way they think about their health and encourages them to discuss condition-management with their physician. The vendor used existing pregnancy Quitline creative to reach pregnant, postpartum, and women of child-bearing age in their physician's offices, including, but not limited to, women who receive care at birthing centers. The creative was in 120 locations with 1.6 impressions.

Another POC campaign aired from May to June 2016 in 242 doctors' offices and pharmacies statewide, and achieved the following outcomes: direct messaging reached over 3 million Marylanders encouraging them to contact the Quitline; there was a nearly 14% increase in calls to the Quitline from pregnant women (compared to May-June 2015); and, over 335 callers reported hearing about the Quitline through a health professional.

As a result of all outreach efforts to pregnant women, between July 2015 and June 2016 165 pregnant smokers called the Quitline representing a more than 20% increase from the previous fiscal year, and the Quitline saw a more than 12% increase in calls from Medicaid participants.

Other Programmatic Activities

No content was entered for Other Programmatic Activities in the State Action Plan Narrative section.

II.F.2 MCH Workforce Development and Capacity

With the deluge of existing and emerging health care and public health challenges, the MCH field calls for a workforce able to adapt and rise to many transformations in the public health, health care, and health financing sectors. An adequately prepared public health workforce is essential to address MCH needs and to provide essential services to improve public health systems, community health care delivery, and ultimately the health of MCH populations. Key Title V staff attend both national and state conferences and trainings that provide opportunities to acquire new skills and strengthen existing ones as a part of funding requirements. Staff annually attend AMCHP, CityMatch, and MCH Epidemiology meetings as well as required federal grantee meetings (e.g., MIECHV, PREP, Abstinence, Title X).

MCHB supports an annual Reproductive Health Conference as well as periodic meetings and webinars for grantees on relevant topics such as perinatal health, life course perspective, reproductive health, and parental engagement. Through MCHB's MIECHV program, specific efforts are underway to expand lay professionals' capacity to provide quality community-based home visiting and health work. MCHB MIECHV's Home Visitor Training and Certificate Program (HVTCP) is an intensive and extensive training curriculum that addresses the multidimensional task demands and needs of home visitors. Participants learn: effective communication and motivation skills to promote attitude and behavior change; effective teaching methods to help families develop problem solving and coping skills; and, ways to promote supportive relationships in home and community.

Title V staff receive annual training on internal programmatic and fiscal operations such as contract monitoring, fiscal and budgetary management, and change management. Title V staff participate in the planning of the annual school health institute, the youth suicide prevention conference, and annual and periodic meetings with grantees. Title V staff training needs are assessed annually and staff are encouraged to use the MCH Navigator for training opportunities and resources on Title V generally, MCH key priorities, social determinants and public health strategies, best practices, and evidence-based models .

II.F.3. Family Consumer Partnership

Title V partners with several agencies and groups to improve perinatal health. Partners include the Maryland WIC program (preconception health, family planning outreach, breastfeeding promotion), the Center for Health Promotion (smoking cessation, injury prevention, intimate partner violence), the Office of Chronic Disease Prevention and Control (women's health, childhood obesity), the Center for Cancer Prevention and Control (cervical cancer screening, breastfeeding promotion), the Office of Oral Health (child health, perinatal health), the Behavioral Health Administration (perinatal substance abuse, Fetal Alcohol Spectrum Disorders), the Vital Statistics Administration (surveillance), the Office of the Chief Medical Examiner (child fatality, maternal mortality), and the Office of Minority Health and Health Disparities (OMHHD). OMHHD strives to promote health equity among minority populations that include African Americans, Asian Americans, Hispanic/Latino Americans, and Native Americans. OMHHD partners with organizations statewide to develop culturally specific, relevant, and actionable policies and programs that serve Maryland residents, with a goal of improving the health and wellness of individuals and achieving health equity. MCH is frequently a training partner with OMHHD and has representation on the OMHHD Maryland Health Professional Education Committee.

The Maternal and Child Health Bureau and the Vital Statistics Administration have worked jointly to implement the Maryland PRAMS project since 2000 through a cooperative agreement with the Centers for Disease Control and Prevention (CDC). The PRAMS Project Director (and Women's Health Director) has served as a mentor for medical and public health students who wish to complete a rotation working on a topic that interests them. Students from the Johns Hopkins Bloomberg School of Public Health (JHSPH) 's Maternal and Child Health Epidemiology Doctoral Training Program have worked with MCHB on the analysis of PRAMS data and have written Focus Briefs on various topics and peer reviewed research publications. Many students have also rotated from Johns Hopkins School of Medicine and University of Maryland School of Medicine. Representatives from many organizations are on the PRAMS steering committee including the March of Dimes, Chase Brexton, Center for Addiction and Pregnancy at Hopkins Bayview Hospital, and the American College of Obstetricians and Gynecologist (ACOG).

HRSA funds and administers the MIECHV and ECCS grant programs. Maryland's MIECHV Program is administratively housed in the Family Support and Early Childhood Services Unit of the Office of Family and Community Health Services in MCHB. MIECHV staff work closely with the Title V child and adolescent health staff on various childhood issues including home visiting, early childhood mental health, child abuse and neglect, developmental screening, and access to medical homes. Title V also sits on the Advisory Board for Healthy Tomorrows Grant focused on increasing access to health services for children suspected of being maltreated.

Medicaid is a key Title V Partner. The current MOU outlines agreements and guidelines on administration and policy, systems coordination, outreach and referral activities and data sharing. Local Title V supported staff worked with Medicaid's Community Liaison Care Coordination (CLCC) program and its Administrative Care Coordination (ACCU) staff in local health departments to identify and enroll eligible children and pregnant women in the Medicaid Program. ACCU serves as the central link between the beneficiary, managed care organization (MCO), healthcare provider and the Department.

OGPSHCN continued to support The Parents' Place of Maryland (PPMD), a non-profit, family-directed and staffed center serving parents of CYSHCN, which is also the Maryland Chapter of Family Voices and F2F. Through the partnership with PPMD, a Maryland Parent Survey was developed, disseminated, and evaluated statewide to provide up to date feedback from families' perspectives on CYSHCN services and systems. PPMD continues to partner with the OGPSHCN to host quarterly Community of Care Consortium (CoC) meetings. The CoC is supported with Title V funds. CoC meetings focus on engaging diverse partners in shared planning, implementation, and evaluation of strategies to achieve all six core outcomes for CYSHCN. Consortium partners include families of CYSHCN, representatives from advocacy groups, physicians, other health care providers, health care facilities, academic institutions, government and professional organizations, public payers, MCOs, policy analysts, and state governmental agencies. The CoC convenes ad hoc committees to evaluate strategies and to assist the member organizations of the CoC to

implement evidence-based practices to improve systems of care for CYSHCN. The CoC has proven to be vital in increasing family partnerships, and is the best mechanism to achieve the task of integrating components of existing community based services since all stakeholders are involved.

The OGPSHCN continues to strengthen its Family Consumer Partnerships through relationships with academic tertiary/specialty care centers and community based organizations. Through the OGPSHCN grants program, family partnership activities are an identified focus area and vital criteria for receiving funding. The OGPSHCN utilizes these partnerships to identify opportunities and to plan activities to engage families and improve family professional partnerships within the state. The OGPSHCN Family Resource Coordinator works closely with grantees to provide support and training on Family Professional Partnership and incorporating the family's perspective into services and activities.

II.F.4. Health Reform

Over the past several years as health care reform has occurred, Title V has continued to collaborate with the Medicaid Program to improve access to health care services for women and children. As a Medicaid Expansion state, Maryland has decreased the numbers of uninsured individuals over the past 3 years. Maryland's uninsured rate declined from 10.1% in 2012 to 6.7% in 2015 and is lower than the national rate (9.4% in 2015). The uninsured rate decreased for all races/ethnicities but remained highest for Hispanic/Latino individuals (23.6% in 2015). The uninsured rate also decreased for all age groups, particularly ages 45 to 54, but remains highest among ages 26 to 34[i]. As more eligible residents have received Medicaid coverage to enable them to access health care, Title V has shifted from a direct and gap filling service to more of a population and infrastructure based structure. Direct, gap filling services are largely provided by the Children's Medical Services Program to children with special health care needs who are ineligible for Medicaid services.

Maryland has had a statewide plan to reduce health disparities and improve health equity since 2006. Maryland's Health Disparities Plan of Action, led by the Office of Minority Health and Health Disparities (OMHHD), is based upon the national planning efforts of the U.S. Department of Health and Human Services, Office of Minority Health and its National Partnership for Action "Blueprint for Action." For nearly a decade, Maryland has worked to engage key stakeholders in the community to the legislative level to increase awareness of the significance of health disparities and their impact on the state and local communities, families and individuals. The OMHHD has developed deep and broad collaborations that include representatives from private hospitals, insurance providers, medical providers, public health officials, legislators, and consumers, to develop strategies and actions to improve health outcomes for Maryland's minority populations and strengthen and broaden leadership understanding of health disparities. The primary goal of the plan is to improve health and health care outcomes for racial and ethnic minorities and underserved populations and communities, as well as the coordination and use of research and evaluation data to inform systems and programs.

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[i] http://mgaleg.maryland.gov/Pubs/LegisLegal/2017-Impact-Health-Care-Reform.pdf

II.F.5. Emerging Issues

The new federal administration has demonstrated its commitment to repeal and replace the Affordable Care Act (ACA) and has submitted its revised proposal for the American Healthcare Act (AHA). Despite congressional support, passage of the AHA is uncertain as the proposal makes its way through the Senate. In these volatile and unpredictable times, Maryland MCHB continues to forge ahead with its initiatives to improve the health and wellbeing of women, children, youth, and families.

With threats looming to reduce or eliminate federal funding to Planned Parenthood Affiliates, Maryland became the only state to pass legislation (HB 1083/SB 1081) to ensure the continuity of family planning services rendered if currently funded family planning entities become ineligible for federal funding in the future. This legislation ensures that tens of thousands of women residing in our state will continue to have access to affordable comprehensive reproductive health care and family planning services.

Other emerging issues in Maryland include Zika efforts and opioid addiction in the MCH population. There is particular emphasis on managing comprehensive diffusion of Zika education and messaging to providers and all Marylanders, particularly those who are most-at-risk for Zika infection. Additionally, in May 2017, Governor Larry Hogan declared the opioid addiction crisis a state of emergency and committed millions in funding over the next five years to improve drug enforcement, prevention, and treatment services throughout the state, with an emphasis on evidence-based practices and strategies.

II.F.6. Public Input

For the 2016 annual report/2018 application, public input was garnered through existing coalitions and committees that serve Title V target populations such as women, children, adolescents, and children and youth with special health care needs. Specific strategies and proposed indicators by domain were shared with MCHB leadership and local health department leaders throughout the state.

II.F.7. Technical Assistance

Maryland is not requesting technical assistance needs at this time. However, technical assistance needs may be discussed during the August Review Meeting with the federal Maternal and Child Health Bureau as needed.

III. Budget Narrative

	2014		2015	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$11,344,311	$11,413,540	$11,562,479	$11,562,479
Unobligated Balance	$0	$0	$0	$0
State Funds	$8,605,532	$10,152,825	$8,722,572	$8,722,572
Local Funds	$0	$0	$0	$0
Other Funds	$0	$0	$0	$0
Program Funds	$0	$0	$0	$0
SubTotal	$19,949,843	$21,566,365	$20,285,051	$20,285,051
Other Federal Funds	$127,121,330		$138,439,061	$128,770,107
Total	$147,071,173	$21,566,365	$158,724,112	$149,055,158

Due to limitations in TVIS this year, States are not able to report their FY14 Other Federal Funds Expended on Form 2, Line 9. States are encouraged to provide this information in a field note on Form 2.

	2016		2017	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	$11,500,000	$11,215,832	$11,500,000	
Unobligated Balance	$0	$0	$0	
State Funds	$8,625,000	$9,720,289	$8,625,000	
Local Funds	$0	$0	$0	
Other Funds	$0	$0	$0	
Program Funds	$0	$0	$0	
SubTotal	$20,125,000	$20,936,121	$20,125,000	
Other Federal Funds	$137,586,480	$126,844,577	$128,770,107	
Total	$157,711,480	$147,780,698	$148,895,107	

	2018	
	Budgeted	Expended
Federal Allocation	$12,774,056	
Unobligated Balance	$0	
State Funds	$9,712,435	
Local Funds	$0	
Other Funds	$0	
Program Funds	$0	
SubTotal	$22,486,491	
Other Federal Funds	$126,029,712	
Total	$148,516,203	

III.A. Expenditures

During FY 2016, the Maryland joint federal-state Title V Program expended $20,936,121 for services and activities to promote the health of women, infants, and children including those with special health care needs. Federal expenditures amounted to $11,215,832 and the 30-30-10 funding requirement was met with 31.6% of federal funds allocated for preventive and primary care services for children and 44.5% allocated for children with special health care needs. Less than five percent of federal funds were used for administration.

By level of the MCH pyramid, the majority of federal FY 2016 funds supported activities at the enabling services level ($5,549,629) and public health services and systems level ($3,628,789). Enabling service expenditures during FY 2016 included salaries of local and state health department public health nurses who provided:

- Case management and care coordination services to pregnant women, 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 to women of childbearing age;
- Referrals of adolescents and women of childbearing age to 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 including linking families with state and local resources for their children, family navigation and health education through Parents' Place of Maryland, funding to specialty health care institutions to enhance medical home services and to incorporate transition readiness assessments/tools, and care coordination related to newborn screening results.

Public health services and systems expenditures covered the cost of state health department staff, who are responsible for: providing epidemiology, data, and policy support; coordinating with local health departments to ensure that activities and services support the Title V action plan; working with delivery hospitals to enhance systems of care for pregnant women and infants; coordinating Fetal and Infant Mortality Review and Child Fatality Review activities; overseeing adolescent and child health initiatives; and, working with specialty health care systems to implement policy and systems changes to better support CYSHCN including medical home, transition, and genetic testing services.

The $2,037,414 in direct services represents direct medical care for CYSCHN including pharmacy charges ($237,566), physician/office services ($1,407,762), hospital charges ($360,166), dental care ($2,620), and health insurance premiums for qualifying patients ($29,300, see CYSHCN narrative report for details).

Maryland expended $9,720,289 in matching funds in FY 2016, and exceeded its anticipated match for the year due to local health departments exceeding their match requirement for MCH services. Public health services and systems ($4,168,486) and enabling activity expenditures ($4,654,880) comprised the majority of matching fund expenditures. Public health services and systems included local oversight of Fetal and Infant Mortality Review and Child Fatality Review activities in each jurisdiction, awards to organizations to implement policy changes to enhance systems of care for pregnant women and infants (see women's and infant health narrative report for details), and state health department staff who provide epidemiology and data support, oversee women's and infant health initiatives, coordinate specific adolescent health activities (such as the state abstinence program and CoIIN), and coordinate CYSHCN activities related to systems development. Enabling expenditures included a grant to a local jurisdiction to provide home visiting for high risk pregnant women and infants as well as asthma and immunization care coordination, and state health department staff who provided care coordination for CYSHCN.

Matching direct funds in the amount of $896,923 supported physician/office services and hospital charges for CYSHCN, as well as direct reproductive health care through the Babies Born Healthy program.

III.B. Budget

Maryland's Maternal and Child Health Block Grant supports vital programs and services for women and children in Maryland, including those with special health care needs. The Title V Program is jointly administered by three offices within MCHB: the Office of Family and Community Health Services, the Office for Genetics and People with Special Health Care Needs, and the Office of MCH Epidemiology. Funding is also provided to local health department programs that support MCH populations.

Maryland's projected Title V budget for FY 2018 is $22,486,491, including $12,774,056 in federal funds and $9,712,435 in state funds. This match amount exceeds the maintenance of effort requirement of Sec. 505 (a)(4) and represents more than $3 for every $4 in federal funding requested. Maryland's request for an increase in federal funding for FY 2018 is due to increasing costs related to providing direct and enabling services to infants and children, particularly those with special health care needs.

Maryland allocates block grant funds using criteria that consider MCH priority needs, local health needs, populations most at risk, and federal and state mandates. Budgets are developed two years prior to authorized spending; during the summer of 2016, MCH budgets for FY 2018 were developed. During the 2017 Legislative Session, the FY 2018 budget was approved.

Throughout the two-year budget process, but particularly during the budget development and revision phase (based on the legislatively approved budget), the MCHB evaluates the MCH service pyramid fiscal allocation to ensure that it reflects the intent of the MCHB. During the year, quarterly meetings are held between the MCHB offices and budget personnel to monitor expenditure levels and anticipated expenditures for the remainder of the year. This partnership and ongoing review allows for timely identification of surplus funds and budget shortfalls, to ensure that funds can be reallocated as necessary. Throughout the year, all contracts and awards are tracked for appropriate and timely expenditures, and adherence to state fiscal procedures.

Throughout the budget cycle, grant funds are fiscally and programmatically monitored to ensure that the funding levels adhere to the "30-30-10" Title V requirement. For FY 2018, it is proposed that federal funding will be distributed accordingly: 30.1% for preventive and primary care for children, 48.7% for CYSHCN, and 4% for administration. Remaining funds (17.2%) will support services for women and infants. By level of the MCH pyramid, it proposed that the projected federal funding level of $12,774,056 will be distributed as follows: $2,578,560 for direct services, $6,035,005 for enabling services, and $4,160,491 for public health services and systems.

For FY 2018, a total of $2,199,361 in federal funds is budgeted for programs and services to prevent maternal and infant deaths and improve systems of care for women of childbearing age and infants under age 1. Activities and strategies will include:

- Local health department home visiting programs for high risk pregnant women and infants;
- Safe sleep and breastfeeding education and family support activities;
- Oversight of the statewide survey to improve pregnancy outcomes (PRAMS); and,
- Family planning/reproductive health services for women; and,
- Linkages to tobacco cessation, substance use treatment, and mental health care through home visiting and family planning services.

In FY 2018, a total of $3,846,931 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:

- Early Childhood initiatives including home visiting, lead case management, Infants and Toddlers Program case management, and promotion of access to a medical home;
- Local health department based school health programs including preventive health services, vision and hearing screening,

immunization, and linkage to tobacco cessation and substance use treatment (for teenagers);
- Local health department based family planning and reproductive health programs serving adolescent and teenage females; and,
- Oversight and implementation of the Adolescent and Young Adult CoIIN.

In FY 2018, a total of $6,228,470 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 - Payment for direct specialty care and related services for uninsured and underinsured children who meet the medical and financial eligibility criteria;
- Genetic Services - Funding 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) - 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 - Medical day care programs for medically fragile infants and young children;
- Local Health Department Grants - support services for CYSCHN such as gap-filling care coordination, outreach, information/referral, dissemination of resource information, and needs assessment activities;
- Parent Involvement Activities - Parents' Place of Maryland (PPMD) activities serving parents of children with disabilities and special health care needs; and,
- CYSHCN Systems-Building Activities - System-building activities include grants to specialty health care systems to support resource liaisons and policy/systems changes.

During FY 2018, the $9,712,435 proposed match will be comprised entirely of state funds, and will be used to support direct services for CYSHCN and women of childbearing age ($597,125), enabling services ($4,560,445), and public health services and systems ($4,554,865). Matching funds will support the following activities and strategies for women, infants, children, and CYSHCN:

- 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;
- Support of a state Perinatal/Neonatal Quality Collaborative to reduce low risk cesarean births and standardize the quality of care for infants born with Neonatal Abstinence Syndrome;
- Statewide voluntary Perinatal Standards and perinatal systems building activities including maternal mortality review and perinatal center review and designation;
- Interviews of families who have lost an infant from a sleep-related cause to understand how safe sleep messaging is perceived and present messaging more effectively;
- Babies Born Healthy grants to jurisdictions to reduce infant mortality and eliminate racial disparities in birth outcomes;
- Promotion of infant breastfeeding through hospital support;
- Care coordination services and home visiting for pregnant women and infants;
- Child abuse and neglect education and support for health care providers; and,
- Medical Day Care for CYSHCN - Medical day care programs for medically fragile infants and young children.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - MA MCH Cooperative Agreement 7.14.15.pdf

V. Supporting Documents

No Supporting documents were provided by the state.

VI. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Maryland

	FY18 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 12,774,056	
A. Preventive and Primary Care for Children	$ 3,846,931	(30.1%)
B. Children with Special Health Care Needs	$ 6,228,470	(48.7%)
C. Title V Administrative Costs	$ 499,294	(4%)
2. UNOBLIGATED BALANCE (Item 18b of SF-424)	$ 0	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 9,712,435	
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)	$ 9,712,435	
A. Your State's FY 1989 Maintenance of Effort Amount $ 8,262,484		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Same as item 18g of SF-424)	$ 22,486,491	
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)	$ 126,029,712	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 148,516,203	

OTHER FEDERAL FUNDS	FY18 Application Budgeted
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 831,903
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 925,121
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 144,513
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program	$ 7,392,478
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 3,869,123
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 112,766,574

	FY16 Annual Report Budgeted		FY16 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	$ 11,500,000		$ 11,215,832	
A. Preventive and Primary Care for Children	$ 4,019,132	(34.9%)	$ 3,552,812	(31.6%)
B. Children with Special Health Care Needs	$ 4,976,489	(43.3%)	$ 4,995,738	(44.5%)
C. Title V Administrative Costs	$ 561,944	(4.9%)	$ 486,973	(4.4%)
2. UNOBLIGATED BALANCE (Item 18b of SF-424)	$ 0		$ 0	
3. STATE MCH FUNDS (Item 18c of SF-424)	$ 8,625,000		$ 9,720,289	
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)	$ 8,625,000		$ 9,720,289	
A. Your State's FY 1989 Maintenance of Effort Amount $ 8,262,484				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Same as item 18g of SF-424)	$ 20,125,000		$ 20,936,121	
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)	$ 137,586,480		$ 126,844,577	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	$ 157,711,480		$ 147,780,698	

OTHER FEDERAL FUNDS	FY16 Annual Report Budgeted	FY16 Annual Report Expended
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Pregnancy Risk Assessment Monitoring System (PRAMS)	$ 126,653	$ 107,853
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Personal Responsibility Education Program (PREP)	$ 943,776	$ 1,062,788
Department of Health and Human Services (DHHS) > Administration for Children & Families (ACF) > State Abstinence Education Grant Program	$ 542,200	$ 608,568
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program	$ 7,412,419	$ 8,866,020
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Early Childhood Comprehensive Systems (ECCS): Building Health Through Integration	$ 140,000	$ 0
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	$ 100,000	$ 76,411
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	$ 4,775,110	$ 5,742,541
US Department of Agriculture (USDA) > Food and Nutrition Services > Women, Infants and Children (WIC)	$ 123,546,322	$ 110,380,396

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	**Field Name:**	**Federal Allocation, A. Preventive and Primary Care for Children:**
	Fiscal Year:	**2016**
	Column Name:	**Annual Report Expended**
	Field Note: The amount expended in FY16 is less than the amount budgeted for FY18 because the program experienced several staff vacancies during FY16 in positions that support public health systems and enabling work around preventive/primary care for children, which resulted in savings in this area. Funding is requested for a fully staffed program in FY18 to support all preventive/primary care for children activities.	
2.	**Field Name:**	**Federal Allocation, C. Title V Administrative Costs:**
	Fiscal Year:	**2016**
	Column Name:	**Annual Report Expended**
	Field Note: Due to vacancies in several federally-funded Title V positions and resulting salary savings, Maryland also had indirect cost savings which lead to spending less than anticipated on administrative costs in FY16.	
3.	**Field Name:**	**3. STATE MCH FUNDS**
	Fiscal Year:	**2016**
	Column Name:	**Annual Report Expended**
	Field Note: Several local health departments who received Title V federal funded decided to also contribute state general funds under their discretion toward their Title V/MCH activities during FY16, above and beyond what the program accounted/planned for when it estimated the annual state matching fund total.	

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	FY18 Application Budgeted	FY16 Annual Report Expended
1. Pregnant Women	$ 804,670	$ 743,506
2. Infants < 1 year	$ 935,838	$ 983,610
3. Children 1-22 years	$ 3,846,931	$ 3,552,812
4. CSHCN	$ 6,228,469	$ 4,995,738
5. All Others	$ 458,854	$ 453,193
Federal Total of Individuals Served	$ 12,274,762	$ 10,728,859

IB. Non Federal MCH Block Grant	FY18 Application Budgeted	FY16 Annual Report Expended
1. Pregnant Women	$ 2,612,357	$ 2,335,644
2. Infants < 1 year	$ 2,596,467	$ 2,632,062
3. Children 1-22 years	$ 1,932,992	$ 1,874,239
4. CSHCN	$ 1,157,946	$ 1,555,844
5. All Others	$ 1,129,989	$ 1,027,565
Non Federal Total of Individuals Served	$ 9,429,751	$ 9,425,354
Federal State MCH Block Grant Partnership Total	$ 21,704,513	$ 20,154,213

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

1.	**Field Name:**	**IA. Federal MCH Block Grant, 4. CSHCN**
	Fiscal Year:	**2018**
	Column Name:	**Application Budgeted**

Field Note:
This is a rounding issue. The actual amount for CSHCN is $6,228,469.50. When I round up to $6,228,470, it puts the total federal request $1 over Form 2 and this is the resulting error: "Federal Total of Individuals Served, Application Budgeted is not equal to Form 2 Line 1, Federal Allocation ($12,774,056) less Line 1C, Title V Administrative Costs, Application Budgeted ($499,294). Please correct." I corrected the error by rounding the CSHCN total down to $6,228,469, which then makes it $1 under the amount on Form 2. In this instance, I get the error "CSHCN, Application Budgeted does not equal Form 2, Line 1B, Children with Special Health Care Needs, Application Budgeted. Please correct or add a field-level note indicating the reason for the discrepancy," but have the option to leave a field note to explain here that it is a rounding issue.

Form 3b
Budget and Expenditure Details by Types of Services

State: Maryland

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY18 Application Budgeted	FY16 Annual Report Expended
1. Direct Services	$ 2,578,560	$ 2,037,414
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 0	$ 0
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 2,578,560	$ 2,037,414
2. Enabling Services	$ 6,035,005	$ 5,549,629
3. Public Health Services and Systems	$ 4,160,491	$ 3,628,789
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		$ 237,566
Physician/Office Services		$ 1,407,762
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 360,166
Dental Care (Does Not Include Orthodontic Services)		$ 2,620
Durable Medical Equipment and Supplies		$ 0
Laboratory Services		$ 0
Other		
Purchase of Health Insurance		$ 29,300
Direct Services Line 4 Expended Total		$ 2,037,414
Federal Total	$ 12,774,056	$ 11,215,832

IIB. Non-Federal MCH Block Grant	FY18 Application Budgeted	FY16 Annual Report Expended
1. Direct Services	$ 597,125	$ 896,923
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	$ 197,125	$ 96,923
B. Preventive and Primary Care Services for Children	$ 0	$ 0
C. Services for CSHCN	$ 400,000	$ 800,000
2. Enabling Services	$ 4,560,445	$ 4,654,880
3. Public Health Services and Systems	$ 4,554,865	$ 4,168,486
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		$ 0
Physician/Office Services		$ 780,884
Hospital Charges (Includes Inpatient and Outpatient Services)		$ 116,039
Dental Care (Does Not Include Orthodontic Services)		$ 0
Durable Medical Equipment and Supplies		$ 0
Laboratory Services		$ 0
Direct Services Line 4 Expended Total		$ 896,923
Non-Federal Total	$ 9,712,435	$ 9,720,289

Form Notes for Form 3b:

None

Field Level Notes for Form 3b:

None

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

State: Maryland

Total Births by Occurrence: 73,544

1. Core RUSP Conditions

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
Core RUSP Conditions	73,544 (100.0%)	1,440	247	247 (100.0%)

Program Name(s)				
3-Methylcrotonyl-CoA carboxylase deficiency	Carnitine uptake defect/carnitine transport defect	Classic galactosemia	Cystic fibrosis	Propionic acidemia
S,S disease (Sickle cell anemia)	S, βeta-thalassemia	Critical congenital heart disease	S,C disease	Biotinidase deficiency
Primary congenital hypothyroidism	Methylmalonic acidemia (methylmalonyl-CoA mutase)	Maple syrup urine disease	Medium-chain acyl-CoA dehydrogenase deficiency	Hearing loss

2. Other Newborn Screening Tests

Program Name	(A) Number Receiving at Least One Screen	(B) Number Presumptive Positive Screens	(C) Number Confirmed Cases	(D) Number Referred for Treatment
Malonic acidemia	73,544 (100.0%)	1	1	1 (100.0%)
Benign Hyperphenylaninemia	73,544 (100.0%)	6	4	4 (100.0%)
Short chain acyl-CoA dehydrogenase deficiency	73,544 (100.0%)	17	9	9 (100.0%)
Epimerase deficiency	73,544 (100.0%)	4	1	1 (100.0%)
other hemoglobinopathies	73,544 (100.0%)	12	12	12 (100.0%)

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

In Maryland, long term follow-up is conducted for infants identified as having a hemoglobinopathy with a sickle component. Historically, cases have been followed through 5 years of age. 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 information is mailed to the family. Community resources are provided to families who 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 to bring the child back into care are made through phone contact or use of community resources such as a local health department or special needs coordinator

Form Notes for Form 4:

The number of babies screened is always higher than Maryland births (total includes border babies with second screen in MD)

The total number of babies receiving at least one hearing screen is 69,581

Field Level Notes for Form 4:

1.	**Field Name:**	**Total Births by Occurrence**
	Fiscal Year:	**2016**
	Column Name:	**Total Births by Occurrence Notes**
	Field Note: Source = 2015 Maryland Vital Statistics	
2.	**Field Name:**	**Core RUSP Conditions - Receiving At Lease One Screen**
	Fiscal Year:	**2016**
	Column Name:	**Core RUSP Conditions**
	Field Note: Total unduplicated number of babies screened = 77,804, which includes second screens for infants born outside of Maryland & lab processing for overseas military bases (more than just the 73,544 Maryland births are screened).	

Data Alerts: None

Form 5a
Unduplicated Count of Individuals Served under Title V

State: Maryland

Reporting Year 2016

		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	84,628	55.2	5.2	32.8	6.8	0.0
2. Infants < 1 Year of Age	2,057	38.9	0.0	57.8	3.3	0.0
3. Children 1 to 22 Years of Age	98,722	29.6	0.0	65.2	5.2	0.0
4. Children with Special Health Care Needs	49,281	32.4	0.0	65.2	2.4	0.0
5. Others	1,998	38.9	0.0	57.8	3.3	0.0
Total	236,686					

Form Notes for Form 5a:

None

Field Level Notes for Form 5a:

1.	**Field Name:**	**Pregnant Women Total Served**
	Fiscal Year:	**2016**

Field Note:
Count of unduplicated pregnant women who either delivered or received a prenatal or postnatal service in a hospital setting per HSCRC CY2015 hospital data. Title V reaches all pregnant women who receive a service in a hospital setting through enabling services: Title V provides direct health education to pregnant women by providing educational brochures to hospitals to distribute to pregnant women on breastfeeding, safe sleep, and shaken baby syndrome.
Insurance breakdown based on Medicaid data for Title XIX and XXI; HSCRC data for None; and estimate for remaining Private.

2.	**Field Name:**	**Infants Less Than One YearTotal Served**
	Fiscal Year:	**2016**

Field Note:
Count of infants reached through enabling services including home visiting, case management, immunization review, home birth certification, and linkage with primary care.
Insurance breakdown based on population estimates provided by HRSA in Form 5a/5b guidance.

3.	**Field Name:**	**Children 1 to 22 Years of Age**
	Fiscal Year:	**2016**

Field Note:
Count of children ages 1 through 21 years who received an enabling service from Title V including lead case management, Infants and Toddlers Program case management, school health services, immunization review, hearing and vision screening and/or referral to specialty providers, adolescent reproductive health care, and linkage with or provision of primary care.
Insurance breakdown based on population estimates provided by HRSA in Form 5a/5b guidance.

4.	**Field Name:**	**Children with Special Health Care Needs**
	Fiscal Year:	**2016**

Field Note:
Count of all CYSHCN who received a direct clinical service, care coordination, Title V funded care at a specialty clinic, and/or genetic services or testing.
Insurance breakdown based on population estimates provided by HRSA in Form 5a/5b guidance.

5.	**Field Name:**	**Others**
	Fiscal Year:	**2016**

Field Note:
Count of women of childbearing age who received enabling reproductive health care services through Title V.
Insurance breakdown based on population estimates provided by HRSA in Form 5a/5b guidance. Estimates for pregnant women are used since that is the closest population category to women of childbearing age for which estimates are available.

Form 5b
Total Recipient Count of Individuals Served by Title V

State: Maryland

Reporting Year 2016

Types Of Individuals Served	Total Served
1. Pregnant Women	84,628
2. Infants < 1 Year of Age	72,907
3. Children 1 to 22 Years of Age	1,585,416
4. Children with Special Health Care Needs	66,336
5. Others	0
Total	1,809,287

Form Notes for Form 5b:

None

Field Level Notes for Form 5b:

1.	**Field Name:**	**Pregnant Women**
	Fiscal Year:	**2016**
	Field Note: Count of unduplicated pregnant women who either delivered or received a prenatal or postnatal service in a hospital setting per HSCRC CY2015 hospital data. Title V reaches all pregnant woman who receive a health care service in a hospital setting through enabling activities reported on form 5a, as well as by funding public health activities including: maintaining a system of risk-appropriate perinatal care designations; partnering with birth hospitals to implement policy changes to reduce NTSV cesareans; and partnering with birth hospitals to implement policy changes to support breastfeeding.	
2.	**Field Name:**	**Infants Less Than One Year**
	Fiscal Year:	**2016**
	Field Note: Count of all infants in Maryland (US Census 2015 data). Title V reaches all infants by funding public health activities including maintaining a system of risk-appropriate perinatal care designations; partnering with hospitals to implement breastfeeding support & Baby Friendly policies; and administering the state newborn screening program.	
3.	**Field Name:**	**Children 1 to 22 Year of Age**
	Fiscal Year:	**2016**
	Field Note: Count of all children ages 1 through 21 years (US Census 2015 data). All children in Maryland benefit from Title V funded public health activities, including Child Fatality Review teams in every local jurisdiction that meet at least quarterly to review cases and recommend/implement local level systems changes in statute, policy, or practice to prevent future child deaths (reaches all 1,585,416 children). Other public health level activities that are Title V funded include: -Partnership with office of oral health in its child oral health services including fluoride varnish for young children (170,000 fluoride varnish applications administered to children as of June 2016) -Oversight and partnership with WIC at the bureau leadership level (more than 143,000 women, infants, children served) -Enhancement of Baltimore City's childhood immunization registry (19,428 children impacted) -Oversight and partnership with abstinence education program (1,500 adolescents reached during FY16)	
4.	**Field Name:**	**Children With Special Health Care Needs**
	Fiscal Year:	**2016**
	Field Note: Source = OGPSHCN program data on number of CYSHCN who were impacted by public health activities. OGPSHCN funds local health departments to advance systems of care around Medical Home and HCT.	

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

State: Maryland

Reporting Year 2016

I. Unduplicated Count by Race

	(A) Total All Races	(B) White	(C) Black or African American	(D) American Indian or Native Alaskan	(E) Asian	(F) Native Hawaiian or Other Pacific Islander	(G) More than One Race Reported	(H) Other & Unknown
1. Total Deliveries in State	73,544	43,382	24,238	192	5,593	0	0	139
Title V Served	73,544	43,382	24,238	192	5,593	0	0	139
Eligible for Title XIX	46,737	13,007	19,856	136	1,864	46	0	11,828
2. Total Infants in State	72,907	41,504	25,649	704	5,050	0	0	0
Title V Served	72,907	41,504	25,649	704	5,050	0	0	0
Eligible for Title XIX	39,452	7,838	12,688	118	1,091	45	0	17,672

II. Unduplicated Count by Ethnicity

	(A) Total Not Hispanic or Latino	(B) Total Hispanic or Latino	(C) Ethnicity Not Reported	(D) Total All Ethnicities
1. Total Deliveries in State	61,666	11,739	139	73,544
Title V Served	61,666	11,739	139	73,544
Eligible for Title XIX	34,909	6,923	4,905	46,737
2. Total Infants in State	60,457	12,450	0	72,907
Title V Served	60,457	12,450	0	72,907
Eligible for Title XIX	21,780	1,152	16,520	39,452

Form Notes for Form 6:

None

Field Level Notes for Form 6:

1.	**Field Name:**	**1. Total Deliveries in State**
	Fiscal Year:	**2016**
	Column Name:	**Total All Races**
	Field Note: Source = 2015 Maryland Vital Statistics Administration Asian = Asian and/or Pacific Islander (reported together for Maryland)	
2.	**Field Name:**	**1. Title V Served**
	Fiscal Year:	**2016**
	Column Name:	**Total All Races**
	Field Note: Source = Title V program records- see forms 5a/b Asian = Asian and/or Pacific Islander (reported together for Maryland)	
3.	**Field Name:**	**1. Eligible for Title XIX**
	Fiscal Year:	**2016**
	Column Name:	**Total All Races**
	Field Note: Source = 2015 Medicaid Enrollment Data Maryland receives Medicaid data by slightly different categories. Hispanic ethnicity is reported as its own, separate racial/ethnic category. Col D = Native American Col F = Pacific Islands/Alaskan Col H = 6,923 Hispanic, 4,905 Unknown	
4.	**Field Name:**	**2. Total Infants in State**
	Fiscal Year:	**2016**
	Column Name:	**Total All Races**
	Field Note: Source = 2015 CDC WONDER Asian = Asian and/or Pacific Islander (reported together for Maryland)	
5.	**Field Name:**	**2. Title V Served**
	Fiscal Year:	**2016**
	Column Name:	**Total All Races**

	Field Note: Source = Title V program records- see forms 5a/b Asian = Asian and/or Pacific Islander (reported together for Maryland)	
6.	**Field Name:**	**2. Eligible for Title XIX**
	Fiscal Year:	**2016**
	Column Name:	**Total All Races**
	Field Note: Source = 2015 Medicaid Enrollment Data Maryland receives Medicaid data by slightly different categories. Hispanic ethnicity is reported as its own, separate racial/ethnic category. Col D = Native American Col F = Pacific Islands/Alaskan Col H = 1,152 Hispanic, 16,520 Unknown	

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

State: Maryland

A. State MCH Toll-Free Telephone Lines	2018 Application Year	2016 Reporting Year
1. State MCH Toll-Free "Hotline" Telephone Number	(800) 456-8900	(800) 456-8900
2. State MCH Toll-Free "Hotline" Name	MCH Hotline	MCH Hotline
3. Name of Contact Person for State MCH "Hotline"	Maryland HealthChoice (Medicaid)	Maryland HealthChoice (Medicaid)
4. Contact Person's Telephone Number	(800) 456-8900	(800) 456-8900
5. Number of Calls Received on the State MCH "Hotline"		11,010

B. Other Appropriate Methods	2018 Application Year	2016 Reporting Year
1. Other Toll-Free "Hotline" Names		
2. Number of Calls on Other Toll-Free "Hotlines"		
3. State Title V Program Website Address	https://phpa.health.maryland.gov/mch/Pages/titlev.aspx	
4. Number of Hits to the State Title V Program Website		
5. State Title V Social Media Websites		
6. Number of Hits to the State Title V Program Social Media Websites		

Form Notes for Form 7:

None

Form 8
State MCH and CSHCN Directors Contact Information

State: Maryland

1. Title V Maternal and Child Health (MCH) Director	
Name	Courtney Lewis, MPH
Title	Director, Maternal and Child Health Bureau
Address 1	201 W. Preston St.
Address 2	Room 312
City/State/Zip	Baltimore / MD / 21201
Telephone	(410) 767-5596
Extension	
Email	courtney.lewis@maryland.gov

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Jed Miller, MD, MPH
Title	Acting Director, Office for Genetics and People with Special Health Care Needs
Address 1	201 W. Preston St.
Address 2	
City/State/Zip	Baltimore / MD / 21201
Telephone	(410) 767-5592
Extension	
Email	jed.miller1@maryland.gov

3. State Family or 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 2018

No.	Priority Need
1.	Optimize the health and well-being of girls and women across the life span using preventive strategies
2.	Improve perinatal and infant health in Maryland by reducing disparities
3.	Improve access to preventive, primary, specialty and behavioral health services for Maryland children including those with special health care needs
4.	Improve the health and well-being of adolescents and young adults in Maryland including those with special health care needs by addressing risk behaviors
5.	Improve the health of children and youth with special health care needs
6.	Reduce substance use/abuse across the life span for MCH populations including use of tobacco products, alcohol, prescription drugs and opioids
7.	Improve the oral health status of MCH populations across the life span

Form 9 State Priorities-Needs Assessment Year - Application Year 2016

No.	Priority Need	Priority Need Type (New, Replaced or Continued Priority Need for this five-year reporting period)	Rationale if priority need does not have a corresponding State or National Performance/Outcome Measure
1.	Optimize the health and well-being of girls and women across the life span using preventive strategies	Continued	
2.	Improve perinatal and infant health in Maryland by reducing disparities	Replaced	Maryland has made great strides in reducing infant mortality and improving birth outcomes; however, significant disparities remain to be addressed.
3.	Improve access to preventive, primary, specialty and behavioral health services for Maryland children including those with special health care needs	Continued	
4.	Improve the health and well-being of adolescents and young adults in Maryland including those with special health care needs by promoting positive youth development strategies	New	The needs assessment identified the need to improve adolescent health outcomes, particularly those related to behavioral health issues
5.	Improve the health and health care system for children and youth with special health care needs	Continued	
6.	Reduce substance use/abuse across the MCH life span including use of tobacco products, alcohol, prescription drugs and illegal substances	New	Linked to national performance measure on Smoking
7.	Improve the oral health status of MCH populations across the life span	New	Linked to oral health performance measure

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 10a
National Outcome Measures (NOMs)

State: Maryland

Form Notes for Form 10a 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
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%, 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
2014	188.2	5.3 %	1,263	67,123
2013	200.7	5.6 %	1,321	65,818
2012	211.2	5.7 %	1,400	66,276
2011	215.0	5.8 %	1,407	65,440
2010	195.2	5.5 %	1,290	66,089
2009	197.4	5.5 %	1,339	67,842
2008	187.6	5.3 %	1,301	69,362

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
2011_2015	23.5	2.5 %	86	365,466
2010_2014	25.7	2.7 %	94	365,651
2009_2013	24.5	2.6 %	90	366,789
2008_2012	25.5	2.6 %	95	372,125
2007_2011	25.7	2.6 %	97	377,337
2006_2010	24.1	2.5 %	92	381,738
2005_2009	21.9	2.4 %	84	382,917

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 4.1 - 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
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%, or >10% missing data and should be interpreted with caution

NOM 4.1 - Notes:

None

Data Alerts: None

NOM 4.2 - Percent of very low birth weight deliveries (<1,500 grams)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	1.6 %	0.1 %	1,202	73,585
2014	1.6 %	0.1 %	1,186	73,878
2013	1.6 %	0.1 %	1,156	71,913
2012	1.7 %	0.1 %	1,245	72,839
2011	1.8 %	0.1 %	1,280	73,037
2010	1.7 %	0.1 %	1,273	73,766
2009	1.8 %	0.1 %	1,339	75,014

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 4.2 - Notes:

None

Data Alerts: None

NOM 4.3 - Percent of moderately low birth weight deliveries (1,500-2,499 grams)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	6.9 %	0.1 %	5,095	73,585
2014	7.0 %	0.1 %	5,159	73,878
2013	6.9 %	0.1 %	4,932	71,913
2012	7.1 %	0.1 %	5,172	72,839
2011	7.1 %	0.1 %	5,186	73,037
2010	7.1 %	0.1 %	5,201	73,766
2009	7.3 %	0.1 %	5,497	75,014

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 4.3 - Notes:

None

Data Alerts: None

NOM 5.1 - Percent of preterm births (<37 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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	10.3 %	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%, or >10% missing data and should be interpreted with caution

NOM 5.1 - Notes:

None

Data Alerts: None

NOM 5.2 - Percent of early preterm births (<34 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	3.1 %	0.1 %	2,263	73,567
2014	3.0 %	0.1 %	2,239	73,871
2013	3.1 %	0.1 %	2,213	71,758
2012	3.2 %	0.1 %	2,325	72,698
2011	3.2 %	0.1 %	2,352	72,875
2010	3.1 %	0.1 %	2,273	73,613
2009	3.2 %	0.1 %	2,385	74,936

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 5.2 - Notes:

None

Data Alerts: None

NOM 5.3 - Percent of late preterm births (34-36 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	7.0 %	0.1 %	5,117	73,567
2014	7.1 %	0.1 %	5,216	73,871
2013	6.7 %	0.1 %	4,840	71,758
2012	7.1 %	0.1 %	5,136	72,698
2011	7.0 %	0.1 %	5,117	72,875
2010	7.3 %	0.1 %	5,389	73,613
2009	7.3 %	0.1 %	5,435	74,936

Legends:

Indicator has a numerator <10 and is not reportable

Indicator has a numerator <20, a confidence interval width >20%, or >10% missing data and should be interpreted with caution

NOM 5.3 - 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
2015	25.0 %	0.2 %	18,376	73,567
2014	24.6 %	0.2 %	18,160	73,871
2013	24.7 %	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%, 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
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:

Indicator results were based on a shorter time period than required for reporting

NOM 7 - Notes:

None

Data Alerts: None

NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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
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
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
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
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 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy

Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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 has a confidence interval width that is inestimable or >20% and should be interpreted with caution

NOM 10 - Notes:

None

Data Alerts: None

NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 delivery hospitalizations

Data Source: HCUP - State Inpatient Databases (SID)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	21.4	0.6 %	1,434	67,130
2013	17.8	0.5 %	1,173	65,826
2012	18.6	0.5 %	1,230	66,286
2011	14.3	0.5 %	938	65,464
2010	13.4	0.5 %	883	66,111
2009	13.3	0.5 %	905	67,870
2008	12.5	0.4 %	867	69,389

Legends:

Indicator has a numerator ≤10 and is not reportable

Indicator has a numerator <20 and should be interpreted with caution

NOM 11 - Notes:

None

Data Alerts: None

NOM 12 - Percent of eligible newborns screened for heritable disorders with on time physician notification for out of range screens who are followed up in a timely manner. (DEVELOPMENTAL)

FAD Not Available for this measure.

NOM 12 - Notes:

None

Data Alerts: None

NOM 13 - Percent of children meeting the criteria developed for school readiness (DEVELOPMENTAL)

FAD Not Available for this measure.

NOM 13 - Notes:

None

Data Alerts: None

NOM 14 - Percent of children ages 1 through 17 who have decayed teeth or cavities in the past 12 months

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	16.2 %	1.3 %	205,003	1,265,954

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% 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
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
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
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
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

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	19.7 %	1.4 %	264,729	1,343,898
2007	20.1 %	1.3 %	274,296	1,361,936
2003	18.3 %	1.0 %	251,328	1,373,206

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% 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) receiving care in a well-functioning system

Data Source: National Survey of Children with Special Health Care Needs (NS-CSHCN)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2009_2010	20.6 %	1.9 %	39,904	193,718

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

NOM 17.2 - Notes:

None

Data Alerts: None

NOM 17.3 - Percent of children 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
2011_2012	1.3 %	0.3 %	14,690	1,133,155
2007	0.7 %	0.2 %	7,983	1,133,977

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width that is inestimable or >20% and should be interpreted with caution

NOM 17.3 - Notes:

None

Data Alerts: None

NOM 17.4 - Percent of children 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
2011_2012	8.3 %	1.0 %	93,793	1,133,648
2007	8.6 %	1.0 %	97,020	1,130,073

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width that is inestimable or >20% and should be interpreted with caution

NOM 17.4 - Notes:

None

Data Alerts: None

NOM 18 - Percent of children 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
2011_2012	60.6 %	6.5 %	54,168	89,436
2007	60.0 %	6.7 %	57,628	96,077
2003	59.9 %	5.1 %	52,863	88,242

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

NOM 18 - Notes:

None

Data Alerts: None

NOM 19 - Percent of children 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
2011_2012	86.3 %	1.2 %	1,160,287	1,343,898
2007	90.1 %	1.1 %	1,227,016	1,361,936
2003	87.8 %	0.9 %	1,206,111	1,373,206

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width that is inestimable or >20% and should be interpreted with caution

NOM 19 - Notes:

None

Data Alerts: None

NOM 20 - Percent of children and adolescents who are overweight or obese (BMI at or above the 85th percentile)

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

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2011_2012	31.6 %	2.4 %	188,943	597,387
2007	28.8 %	2.2 %	177,195	615,357
2003	29.9 %	1.8 %	175,794	587,372

Legends:

Indicator has an unweighted denominator <30 and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

Data Source: WIC

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	33.1 %	0.2 %	16,238	49,008
2012	33.0 %	0.2 %	16,995	51,503
2010	34.3 %	0.2 %	17,597	51,280
2008	32.9 %	0.2 %	13,348	40,557

Legends:

Indicator has a denominator <50 or a relative standard error ≥30% and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	26.5 %	0.3 %	60,387	228,179
2013	25.8 %	0.3 %	59,590	231,036
2011	27.4 %	1.2 %	67,205	245,278
2009	27.3 %	1.7 %	70,390	257,496
2007	27.9 %	1.8 %	71,210	254,909
2005	28.6 %	1.2 %	71,301	249,623

Legends:

Indicator has an unweighted denominator <100 and is not reportable

Indicator has a confidence interval width >20% and should be interpreted with caution

NOM 20 - Notes:

None

Data Alerts: None

NOM 21 - Percent of children without health insurance

Data Source: American Community Survey (ACS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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 that is inestimable or >20% and should be interpreted with caution

NOM 21 - Notes:

None

Data Alerts: None

NOM 22.1 - Percent of children ages 19 through 35 months, who completed the combined 7-vaccine series (4:3:1:3*:3:1:4)

Data Source: National Immunization Survey (NIS)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	76.9 %	3.0 %	81,048	105,465
2014	74.4 %	3.9 %	78,663	105,698
2013	75.8 %	4.1 %	80,931	106,838
2012	67.1 %	3.6 %	72,864	108,635
2011	73.8 %	2.8 %	81,892	110,903
2010	51.1 %	3.8 %	58,181	113,785
2009	45.2 %	4.2 %	52,974	117,120

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.1 - Notes:

None

Data Alerts: None

NOM 22.2 - Percent of children 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
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	67.5 %	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 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.2 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen (Female)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	66.0 %	4.6 %	122,779	186,115
2014	57.9 %	5.1 %	108,095	186,730
2013	50.0 %	5.9 %	93,831	187,816
2012	42.7 %	5.5 %	80,555	188,552
2011	45.7 %	4.2 %	86,960	190,360
2010	41.6 %	4.8 %	78,201	187,861
2009	39.6 %	6.0 %	75,755	191,216

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

Data Source: National Immunization Survey (NIS) - Teen (Male)

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
2015	55.0 %	4.8 %	106,691	194,131
2014	46.9 %	4.9 %	90,974	194,122
2013	34.2 %	5.2 %	66,845	195,196
2012	20.2 %	3.8 %	39,685	196,548
2011	14.0 %	3.2 %	27,780	198,972

Legends:

Estimate not reported because unweighted sample size for the denominator < 30 or 95% confidence interval half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.3 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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 half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.4 - Notes:

None

Data Alerts: None

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

Data Source: National Immunization Survey (NIS) - Teen

Multi-Year Trend

Year	Annual Indicator	Standard Error	Numerator	Denominator
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 half-width/estimate > 0.6

Estimates with 95% confidence interval half-widths > 10 might not be reliable

NOM 22.5 - Notes:

None

Data Alerts: None

Form 10a
National Performance Measures (NPMs)

State: Maryland

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

Federally Available Data	
Data Source: National Vital Statistics System (NVSS)	
	2016
Annual Objective	29.5
Annual Indicator	29.9
Numerator	7,249
Denominator	24,240
Data Source	NVSS
Data Source Year	2015

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	29.0	28.5	28.1	27.4	27.1	26.9

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2020**
	Column Name:	**Annual Objective**
	Field Note: Edited 5/18/17 to reflect accurate 2020 objective based on original 2013 baseline of 30.5% per NVSS. Projected new 2021 and 2022 objectives based on 10% reduction from updated 2015 baseline per NVSS.	
2.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Objective = 10% reduction from 2015 NVSS indicator (same methodology for original 2020 objective, 10% reduction from 2013 NVSS indicator)	

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

Federally Available Data	
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)	
	2016
Annual Objective	78.6
Annual Indicator	76.0
Numerator	49,042
Denominator	64,531
Data Source	PRAMS
Data Source Year	2014

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	79.0	79.3	79.7	80.0	80.8	81.6

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Objective = 1% increase from previous year	
2.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Objective = 1% increase from previous year	

NPM 6 - Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	33.4
Annual Indicator	31.8
Numerator	108,620
Denominator	341,810
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	33.8	34.2	34.6	35.0	35.4	35.8

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Objective = 1% increase from previous year target	
2.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Objective = 1% increase from previous year target	

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

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	86.6
Annual Indicator	85.2
Numerator	389,842
Denominator	457,466
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	87.0	87.3	87.7	88.0	88.4	88.7

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2021**
	Column Name:	**Annual Objective**
	Field Note: Updated to reflect continued trend from past objectives	
2.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Updated to reflect continued trend from past objectives	

NPM 11 - Percent of children with and without special health care needs having a medical home

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH) - CSHCN	
	2016
Annual Objective	52
Annual Indicator	47.8
Numerator	122,892
Denominator	257,254
Data Source	NSCH-CSHCN
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	55.0	57.0	60.0	63.3	66.0	69.3

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Objective = 5% increase from 2021	

NPM 12 - Percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care

Federally Available Data	
Data Source: National Survey of Children with Special Health Care Needs (NS-CSHCN)	
	2016
Annual Objective	38
Annual Indicator	36.8
Numerator	30,855
Denominator	83,881
Data Source	NS-CSHCN
Data Source Year	2009_2010

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	38.0	40.0	43.0	45.3	47.0	49.4

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**

Field Note:
Objective = 5% increase from 2021 target

NPM 13 - A) Percent of women who had a dental visit during pregnancy

Federally Available Data	
Data Source: Pregnancy Risk Assessment Monitoring System (PRAMS)	
	2016
Annual Objective	57.2
Annual Indicator	53.3
Numerator	35,180
Denominator	65,996
Data Source	PRAMS
Data Source Year	2014

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	57.9	58.6	59.3	60.0	60.7	61.4

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Objective = 1.2% increase from 2021 target	

NPM 13 - B) Percent of children, ages 1 through 17 who had a preventive dental visit in the past year

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	82.4
Annual Indicator	78.5
Numerator	994,287
Denominator	1,266,131
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	83.4	84.4	85.4	86.4	87.4	88.4

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**

Field Note:
Objective = 1.2% increase from 2021 target

NPM 14 - A) Percent of women who smoke during pregnancy

Federally Available Data	
Data Source: National Vital Statistics System (NVSS)	
	2016
Annual Objective	6.7
Annual Indicator	6.5
Numerator	4,758
Denominator	73,116
Data Source	NVSS
Data Source Year	2015

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	6.6	6.5	6.4	6.3	6.2	6.1

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**

Field Note:
Objective = 1.2% reduction from 2021 target.

NPM 14 - B) Percent of children who live in households where someone smokes

Federally Available Data	
Data Source: National Survey of Children's Health (NSCH)	
	2016
Annual Objective	19.3
Annual Indicator	20.3
Numerator	270,091
Denominator	1,332,604
Data Source	NSCH
Data Source Year	2011_2012

Annual Objectives						
	2017	**2018**	**2019**	**2020**	**2021**	**2022**
Annual Objective	19.0	18.8	18.5	18.3	18.1	17.9

Field Level Notes for Form 10a NPMs:

1.	**Field Name:**	**2022**
	Column Name:	**Annual Objective**
	Field Note: Objective = 1.2% reduction from 2021 target	

Form 10a
State Performance Measures (SPMs)

State: Maryland

SPM 1 - Low Risk Cesarean Deliveries

Measure Status:	Inactive - Replaced

State Provided Data	
	2016
Annual Objective	
Annual Indicator	29.9
Numerator	
Denominator	
Data Source	NVSS
Data Source Year	2015
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	29.0	28.5	28.1	27.4	27.1	26.9

Field Level Notes for Form 10a SPMs:

None

SPM 2 - Safe Sleep

Measure Status:	Inactive - Replaced

State Provided Data	
	2016
Annual Objective	
Annual Indicator	76
Numerator	
Denominator	
Data Source	PRAMS
Data Source Year	2014
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	79.0	79.3	79.7	80.0	80.5	81.0

Field Level Notes for Form 10a SPMs:

None

SPM 3 - Receipt of Primary Care During Early Childhood

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	66.3
Numerator	27,004
Denominator	40,723
Data Source	Medicaid
Data Source Year	2016 (CY)
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	67.4	68.5	69.6	70.7	71.8	72.9

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
2016 baseline of Medicaid patients age 15 months who had 5 or more well child visits during the first 15 months of life = 66.3%; 2022 objective = 10% increase, 72.9%

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

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	Medicaid
Data Source Year	CY 2016
Provisional or Final ?	Provisional

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Title V is still in the early process of developing adolescent health measures through its participation in the AYAH CoIIN, and this is a brand new SPM for Maryland. This SPM has been selected to complement NPM 10 (preventive health visits), and to begin to track the % of Medicaid patients who receive mental/behavioral health screens. Since the SPM is new as of June 2017, data has not been collected from Medicaid yet, however Title V will begin to collect the data from Medicaid during FY18 and will set objectives during FY18 based on the baseline.

SPM 5 - Smoking Cessation During Pregnancy

Measure Status:	Inactive - Replaced

State Provided Data	
	2016
Annual Objective	
Annual Indicator	165
Numerator	
Denominator	
Data Source	MDH CTPC Quitline Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	167.0	169.0	170.0	171.0	172.0	173.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
2022 objective = 5% increase from 2016 baseline

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

Measure Status:	Active

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	71.2	74.6	74.6	74.6	74.6	74.6

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**Annual Objective**

Field Note:
4th quarter 2016 baseline = 67.8% (21/31 hospitals), 2018 objective = 10% increase in compliance = 74.6%
This project will end in late 2018, so the objective for 2018 will be maintained for future years.

SPM 7 - Hospital Policy Changes to Improve Quality of Care for Infants with Neonatal Abstinence Syndrome

Measure Status:	Active

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	26.0	32.0	32.0	32.0	32.0	32.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**Annual Objective**

Field Note:
4th quarter 2016 baseline: 20 hospitals reported using a protocol; 2018 objective = all 32 hospitals will use a protocol
Future year objectives will maintain 32 hospitals using a protocol

SPM 8 - Barriers and Facilitators to Dental Care During Pregnancy

Measure Status:	Active

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	85.0	50.0	50.0	0.0	0.0	0.0

Field Level Notes for Form 10a SPMs:

1.	**Field Name:**	**2017**
	Column Name:	**Annual Objective**

Field Note:
In 2015-2016, data collection instruments, recruitment flyers/letters, and consent forms were developed, submitted, and approved by IRBs. Interviews of pregnant women began during 2016 and into FY17 with 85 women interviewed. More interviews are planned during FY18/FY19.

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

State: Maryland

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

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	31
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	31.0	31.0	31.0	31.0	31.0	31.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
As of 2016, 31 of 32 delivery hospitals in Maryland have agreed to participate on the Maryland Perinatal Neonatal Collaborative effort focused on reduction of low-risk cesarean deliveries. MCHB's objective is to maintain the provision of technical assistance annually to the 31 hospitals.

ESM 5.1 - Safe Sleep Parental Interviews

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	25.0	25.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Interviews are scheduled to take place in CY 2017 and CY 2018 (25 per year)

ESM 6.1 - Developmental Screening Education

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	2,785
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	2,832.0	2,878.0	2,925.0	2,971.0	3,018.0	3,064.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
2022 objective = 10% increase in number of parents who received developmental screening education from 2016 baseline
2016 baseline = 2,785; 2022 objective = 3,064

ESM 10.1 - Adolescent Health Measures

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	2016
Data Source Year	MCHB Data
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	2.0	5.0	5.0	5.0	5.0	5.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
This work is being done through the AYAH CoIIN, which began in April 2017 and will continue through fall 2018
2016 baseline = 0 measures identified/tracked, 2018 objective = 5 measures identified/tracked

ESM 11.1 - Care Coordination Services

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	OGPSHCN Data
Data Source Year	2017
Provisional or Final ?	Provisional

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
This is a newly revised ESM. We have bugun collecting this data in July of 2016 and will have this data available for FY17. We will use the FY17 data as our baseline for setting future year objectives.

ESM 12.1 - Health Care Transition Services

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	30,855
Numerator	
Denominator	
Data Source	NS-CSHCN
Data Source Year	2009/2010
Provisional or Final ?	Provisional

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	0.0	0.0	0.0	0.0	0.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
ESM has been revised. We have begun collecting this information in July 2016 for FY 2017. We will utilize our Parent Survey and OGPSHCN programmatic data as the data source and will use this FY17 data as our baseline for setting future objective targets. The figure provided is from the 2009/2010 National Survey on CSHCN.

ESM 13.1 - Oral Health Provider Training

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	0
Numerator	
Denominator	
Data Source	MCHB Data
Data Source Year	2016
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	0.0	100.0	50.0	50.0	50.0	50.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
Oral health during pregnancy and infancy practice guidelines were in development during 2016/2017, and dissemination will begin in late 2017 or 2018. 2016 baseline = 0 trained because they are still in development.

ESM 14.1 - Smoking Cessation

Measure Status:	Active

State Provided Data	
	2016
Annual Objective	
Annual Indicator	165
Numerator	
Denominator	
Data Source	MDH CTPC Quitline Data
Data Source Year	FY16
Provisional or Final ?	Final

Annual Objectives						
	2017	2018	2019	2020	2021	2022
Annual Objective	167.0	169.0	170.0	171.0	172.0	173.0

Field Level Notes for Form 10a ESMs:

1.	**Field Name:**	**2016**
	Column Name:	**State Provided Data**

Field Note:
2022 objective = 5% increase from 2016 baseline

Form 10b
State Performance Measure (SPM) Detail Sheets

State: Maryland

SPM 1 - Low Risk Cesarean Deliveries
Population Domain(s) – Women/Maternal Health

Measure Status:	Inactive - Replaced
Goal:	Eliminate low-risk cesarean deliveries
Definition:	**Numerator:** Cesarean delivery among term (37+ weeks), singleton, vertex births to nulliparous women **Denominator:** All term (37+ weeks), singleton, vertex births to nulliparous women **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	By 2020, reduce decrease the NTSV cesarean delivery rate by at least 10% from the 2013 baseline of 30.5%
Data Sources and Data Issues:	2015-2019 Vital Statistics
Significance:	Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots--risks that compound with subsequent cesarean deliveries. Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. This low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the ACOG, The Joint Commission (PC-02), National Quality Forum (Number 0471), Center for Medicaid and Medicare Services (CMS)- CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement.

SPM 2 - Safe Sleep
Population Domain(s) – Perinatal/Infant Health

Measure Status:	Inactive - Replaced
Goal:	To increase the number of infants placed to sleep on their backs
Definition:	**Numerator:** Mothers reporting that they most often place their baby to sleep on their back (Excludes multiple responses of back and combination with side or stomach sleep positions) **Denominator:** Live Births **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	By 2020, increase the % of infants placed on their back to sleep to 80% (current baseline is 77% 2012 PRAMS Survey) Identical to Maternal, Infant and Child Health (MICH) Objective 20: Increase the proportion of infants placed to sleep on their backs (Baseline: 76.9%, Target 84.1%)
Data Sources and Data Issues:	2014-2018 PRAMS
Significance:	Sleep-related infant deaths, also called Sudden Unexpected Infant Deaths (SUID), are the leading cause o infant death after the first month of life and the third leading cause of infant death overall. Sleep-related SUIDs include Sudden Infant Death Syndrome (SIDS), unknown cause, and accidental suffocation and strangulation in bed. Due to heightened risks of SIDS when infants are placed to sleep on side (lateral) or stomach (prone) sleep positions, the AAP has long recommended the back (supine) sleep position. However in 2011, AAP expanded its recommendations to help reduce the risk of all sleep-related deaths through a safe sleep environment that includes use of the back-sleep position, on a separate firm sleep surface (room-sharing without bed sharing), and without loose bedding. Among others, additional higher-level recommendations include breastfeeding and avoiding smoke exposure during pregnancy and after birth. These expanded recommendations have formed the basis of the National Institute of Child Health and Development (NICHD) Safe to Sleep Campaign.

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:	**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 **Unit Type:** Percentage **Unit Number:** 100
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 - Identification of Mental and Behavioral Health Needs in Adolescents
Population Domain(s) – Adolescent Health

Measure Status:	Active
Goal:	All adolescents in Maryland will be screened for mental and behavioral health needs
Definition:	**Numerator:** Number of Medicaid patients ages 11-18 years who received a mental or behavioral health screen in the past year **Denominator:** Number of Medicaid patients ages 11-18 **Unit Type:** Percentage **Unit Number:** 100
Healthy People 2020 Objective:	Increase the proportion of children with mental health problems who receive treatment to 75.8% in 2020.
Data Sources and Data Issues:	Medicaid Data
Significance:	The prevalence of mental/behavioral health conditions has been increasing among children and has been found to vary by geographic and socio-demographic factors. However, a significant portion of children diagnosed with a mental health condition do not receive treatment. Further, the receipt of treatment is generally dependent on socio-demographic and health related factors. Title V will work with Medicaid to begin to collect data on the % of patients ages 11-18 who received a mental or behavioral health screen in the past year, as a means of identifying mental/behavioral health conditions in the adolescent population and linking with treatment.

SPM 5 - Smoking Cessation During Pregnancy
Population Domain(s) – Cross-Cutting/Life Course, Women/Maternal Health

Measure Status:	Inactive - Replaced
Goal:	By 2022, increase by 5% the number of pregnant smokers who call the quitline annually.
Definition:	**Numerator:** Number of pregnant smokers who call the Maryland tobacco quitline **Denominator:** N/A (count only- number of pregnant smokers who call the Maryland tobacco quitline) **Unit Type:** Count **Unit Number:** 200
Healthy People 2020 Objective:	Increase the percent of pregnant smokers who stopped smoking during the first trimester of their pregnancy and stayed off cigarettes for the rest of their pregnancy from 11.3% to 30% by 2020.
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 State Performance Measure will track the impact of the Pregnancy Rewards Program and accompanying media campaigns on the number of pregnant Quitline callers.

SPM 6 - Hospital Policy Changes to Reduce Low-risk Cesarean Deliveries
Population Domain(s) – Women/Maternal Health

Measure Status:	Active
Goal:	Maintain technical assistance to Maryland delivery hospitals (including annual and quarterly data on individual hospital cesarean rates & AIM resources) on low-risk cesarean reduction, and increase the % of hospitals implementing policy changes
Definition:	**Numerator:** # of delivery hospitals that report compliance with the AIM Safe Reduction of Primary Cesarean Birth patient safety bundle **Denominator:** # of delivery hospitals **Unit Type:** Percentage **Unit Number:** 100
Data Sources and Data Issues:	MCHB and Maryland Patient Safety Center Data
Significance:	Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots - risks that compound with subsequent cesarean deliveries. Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. The low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the ACOG, The Joint Commission (PC-02), National Quality Forum (Number 0471), Center for Medicaid and Medicare Services (CMS)- CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement. MCHB will target hospital-level policy and practice changes to impact the entire population of pregnant women in Maryland. This will be supported by providing technical assistance to delivery hospitals across the state including resources from the Alliance to Improve Maternal Health (AIM) and ACOG, as well as quarterly and annual hospital-level data on cesarean birth rates. MCHB has access to several process measures but chose AIM cesarean reduction safety bundle compliance as the most relevant and important. The project is anticipated to last through the end of 2018 and the objective for 2018 will be sustained beyond that year.

SPM 7 - Hospital Policy Changes to Improve Quality of Care for Infants with Neonatal Abstinence Syndrome
Population Domain(s) – Perinatal/Infant Health

Measure Status:	Active
Goal:	Increase the number of delivery hospitals participating in Maryland's Perinatal Neonatal Quality Collaborative that integrate a policy or practice change to improve the care of infants with NAS to 32 (of 32 total)
Definition:	**Numerator:** # of delivery hospitals that report utilizing a protocol for initiation, escalation, and weaning of medications for treatment of NAS **Denominator:** N/A **Unit Type:** Count **Unit Number:** 32
Data Sources and Data Issues:	MCHB and Maryland Patient Safety Center
Significance:	Substance use during pregnancy is a significant problem in Maryland and increases the risk for poor pregnancy outcomes and Neonatal Abstinence Syndrome (NAS) in exposed newborns, as well as maternal and fetal death. According to the Maryland Health Services Cost Review Commission, the number of infants born with NAS in Maryland has increased annually since 2009 when 958 infants were born with NAS, compared with 1,419 infants in 2015. In 2016, 2,157 infants were born with NAS, however this was the first year of ICD-10 coding which may account for some of the increase. MCHB continues to collaborate with the Maryland Patient Safety Center (MPSC) to support the Maryland Perinatal Neonatal Quality Collaborative. Thirty-one of the 32 delivery hospitals plus one chronic care hospital with an NAS treatment program are participating in the current Collaborative effort to standardize care of infants with NAS. The goals of this initiative are to reduce length of stay and length of treatment with medication, to reduce 30 day readmissions for NAS, and to reduce transfers to a higher level of care. The MPSC has partnered with the Vermont Oxford Network (VON) to utilize their NAS Implementation Package statewide. This provides Collaborative participants with access to evidence-based education modules and resources for improving outcomes and increasing the quality and safety of the care provided to infants with NAS and their families. MCHB will continue to support the Collaborative with technical assistance and education, and with the MPSC will track the number of hospitals that implement policy or practice changes to improve the care of infants with NAS. MCHB has access to multiple process measures related to policy/practice changes to improve NAS care, but chose this particular measure for an SPM due to its relevance. This project is anticipated to continue through the end of 2018.

SPM 8 - Barriers and Facilitators to Dental Care During Pregnancy
Population Domain(s) – Cross-Cutting/Life Course

Measure Status:	Active
Goal:	Interview pregnant women across Maryland to assess oral health knowledge, understanding, attitudes, behaviors and practices, and barriers and facilitators to receiving oral health care during pregnancy
Definition:	**Numerator:** # of pregnant women surveyed/interviewed **Denominator:** N/A **Unit Type:** Count **Unit Number:** 200
Data Sources and Data Issues:	MDH Office of Oral Health Program Data
Significance:	Oral health is key to overall health and well-being for children and adults. Appropriate oral care is especially important during pregnancy, when both the woman's own and her future child's oral health can be affected. Title V is partnering with the Office of Oral Health to survey and interview low-income pregnant women in Maryland about oral health knowledge, understanding, attitudes, behaviors and practices, and barriers and facilitators to receiving oral health care during pregnancy. These findings will be used to inform future efforts to improve access to and receipt of oral health care during pregnancy.

Form 10b
State Outcome Measure (SOM) Detail Sheets

State: Maryland

No State Outcome Measures were created by the State.

Form 10c
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Maryland

ESM 2.1 - Hospital Technical Assistance on Low-risk Cesarean Delivery Reduction
NPM 2 – Percent of cesarean deliveries among low-risk first births

<table>
<tr><td>Measure Status:</td><td>Active</td></tr>
<tr><td>Goal:</td><td>Maintain technical assistance to Maryland delivery hospitals (including annual and quarterly data on individual hospital cesarean rates, ACOG guidelines, AIM resources, and policies/strategies) on low-risk cesarean reduction.</td></tr>
<tr><td>Definition:</td><td>
<table>
<tr><td>Numerator:</td><td>Number of delivery hospitals that receive technical assistance on low-risk cesarean birth reduction</td></tr>
<tr><td>Denominator:</td><td>Number of delivery hospitals</td></tr>
<tr><td>Unit Type:</td><td>Count</td></tr>
<tr><td>Unit Number:</td><td>32</td></tr>
</table>
</td></tr>
<tr><td>Data Sources and Data Issues:</td><td>MCHB and Maryland Patient Safety Center Data</td></tr>
<tr><td>Significance:</td><td>Cesarean delivery can be a life-saving procedure for certain medical indications. However, for most low-risk pregnancies, cesarean delivery poses avoidable maternal risks of morbidity and mortality, including hemorrhage, infection, and blood clots—risks that compound with subsequent cesarean deliveries. Much of the temporal increase in cesarean delivery (over 50% in the past decade), and wide variation across states, hospitals, and practitioners, can be attributed to first-birth cesareans. Moreover, cesarean delivery in low-risk first births may be most amenable to intervention through quality improvement efforts. This low-risk cesarean measure, also known as nulliparous term singleton vertex (NTSV) cesarean, is endorsed by the ACOG, The Joint Commission (PC-02), National Quality Forum (#0471), Center for Medicaid and Medicare Services (CMS) – CHIPRA Child Core Set of Maternity Measures, and the American Medical Association-Physician Consortium for Patient Improvement. MCHB will target hospital-level policy and practice changes to impact the entire population of pregnant women in Maryland. This will be supported by providing technical assistance to delivery hospitals across the state including resources from the Alliance to Improve Maternal Health (AIM), as well as quarterly and annual hospital-level data on cesarean birth rates.</td></tr>
</table>

ESM 5.1 - Safe Sleep Parental Interviews
NPM 5 – Percent of infants placed to sleep on their backs

Measure Status:	Active
Goal:	Conduct 50 parental interviews for Sudden Unexpected Infant Death (SUID) cases between January 2017 and December 2018 to inform safe sleep and SIDS prevention activities.
Definition:	**Numerator:** Number of interviews conducted of parents who experienced a SUID loss. **Denominator:** N/A- count **Unit Type:** Count **Unit Number:** 50
Data Sources and Data Issues:	MCHB Data
Significance:	Sleep-related infant deaths, also called Sudden Unexpected Infant Deaths (SUID), are the leading cause of infant death after the first month of life and the third leading cause of infant death overall. Sleep-related SUIDs include Sudden Infant Death Syndrome (SIDS), unknown cause, and accidental suffocation and strangulation in bed. Due to heightened risk of SIDS when infants are placed to sleep in side (lateral) or stomach (prone) sleep positions, the AAP has long recommended the back (supine) sleep position. However, in 2011, AAP expanded its recommendations to help reduce the risk of all sleep-related deaths through a safe sleep environment that includes use of the back-sleep position, on a separate firm sleep surface (room-sharing without bed sharing), and without loose bedding. Among others, additional higher-level recommendations include breastfeeding and avoiding smoke exposure during pregnancy and after birth. These expanded recommendations have formed the basis of the National Institute of Child Health and Development (NICHD) Safe to Sleep Campaign. MCHB has contracted with a vendor to conduct parental interviews for SUID cases to understand barriers to new parents adopting safe sleep recommendations, to direct future SIDS prevention efforts. MCHB's objective is to conduct 25 interviews annually in CYs 2017 and 2018.

ESM 6.1 - Developmental Screening Education
NPM 6 – Percent of children, ages 10 through 71 months, receiving a developmental screening using a parent-completed screening tool

Measure Status:	Active
Goal:	Increase the number of parents who recieve education about developmental screening tools.
Definition:	**Numerator:** Parents that receive education about developmental screening tools **Denominator:** N/A- count **Unit Type:** Count **Unit Number:** 5,000
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 - Adolescent Health Measures
NPM 10 – Percent of adolescents, ages 12 through 17, with a preventive medical visit in the past year.

Measure Status:	Active
Goal:	Identify and track a set of adolescent health measures through CoIIN efforts around access and quality of care, and use to drive future activities/improvements
Definition:	**Numerator:** Number of AYAH measures that are identified by the CoIIN team and tracked/monitored by Title V **Denominator:** N/A **Unit Type:** Count **Unit Number:** 100
Data Sources and Data Issues:	MCHB/CoIIN Data
Significance:	In February 2017, Maryland was selected to participate in the second cohort of the Adolescent and Young Adult Health (AYAH) Collaborative Improvement and Innovation Network (CoIIN). The Maryland team will identify measures currently used in Maryland with relevance to well visits for adolescents and young adults, and determine if there are opportunities for alignment of measures used within the State and/or with national measure sets. Receipt of adolescent well visits is an existing measure within the State Health Improvement Process and has been a priority area for the Medicaid program as well. The Maryland Team will also look at opportunities related to design of State-specific measures that could drive improvements in access to and quality of well visits for adolescents and young adults, including sustained access to and utilization of well care. This ESM will report the number of measures that the Maryland AYAY CoIIN team identifies and begins to track. The objective for 2018 is 5 measures, which will continue to be tracked in the following years after the CoIIN ends.

ESM 11.1 - Care Coordination Services
NPM 11 – Percent of children with and without special health care needs having a medical home

Measure Status:	Active
Goal:	Increase the number of CYSHCN who receive patient and family-centered care coordination services (CCS).
Definition:	**Numerator:** Number of CYSHCN who received CCS **Denominator:** N/A **Unit Type:** Count **Unit Number:** 70,000
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 - Health Care Transition Services
NPM 12 – Percent of adolescents with and without special health care needs who received services necessary to make transitions to adult health care

Measure Status:	Active
Goal:	Increase the number of YSHCN and their families who participating in transition planning activities for their YSHCN
Definition:	**Numerator:** Number of YSHCN and families that participate in transition planning activities. **Denominator:** N/A **Unit Type:** Count **Unit Number:** 50,000
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 - Oral Health Provider Training
NPM 13 – A) Percent of women who had a dental visit during pregnancy and B) Percent of children, ages 1 through 17 who had a preventive dental visit in the past year

Measure Status:	Active
Goal:	Increase the number of OBGYN and dental health providers who receive state oral health during pregnancy and infancy guidelines and training
Definition:	**Numerator:** Number of providers trained **Denominator:** N/A **Unit Type:** Count **Unit Number:** 1,000
Data Sources and Data Issues:	MCHB/Oral Health Data
Significance:	Oral health is key to overall health and well-being for children and adults. Appropriate oral care is especially important during pregnancy, when both the woman's own and her future child's oral health can be affected. Title V is partnering with the Office of Oral Health to develop Maryland oral health during pregnancy and infancy practice guidelines for medical and dental professionals. This ESM will report on the number of providers who receive/are trained on the new guidelines, which are still in development. The goal is to begin dissemination of guidelines to health care providers in Fall/Winter 2017. Objective targets may be updated during FY18 based on initial roll-out.

ESM 14.1 - Smoking Cessation
NPM 14 – A) Percent of women who smoke during pregnancy and B) Percent of children who live in households where someone smokes

Measure Status:	Active
Goal:	By 2022, increase by 5% the number of pregnant smokers who call the quitline annually.
Definition:	**Numerator:** # of pregnant smokers who call the Maryland tobacco quitline **Denominator:** N/A **Unit Type:** Count **Unit Number:** 200
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

State Action Plan Table

State: Maryland

Please click the link below to download a PDF of the full version of the State Action Plan Table.
State Action Plan Table

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State: Maryland

Priority Need: Optimize the health and well-being of girls and women across the life course using preventive strategies.						
Objectives	**National Outcome Measures**	**National Performance Measures**	**Evidence Based or Informed Strategy**	**Evidence Based or Informed Strategy Measures**	**State Performance Measures**	**State Outcome Measures**
By 2020, reduce the low risk cesarean delivery rate by at least 10% from the 2013 baseline of 30.8% (MVSA)	Severe maternal morbidity per 10,000 delivery hospitalizations(HSCRC) Maternal death rate per 100,000 live births (NVSS)	NPM 2: % of low risk cesarean deliveries among low risk first births (NVSS)	Support MD Perinatal-Neonatal Quality Collaborative in efforts to identify areas of improvement and implement strategies to reduce cesarean deliveries Participate in Alliance to Improve Maternal Health (AIM), Primary C-Section Reduction Monitor very low birth weight and neonatal mortality rates	% and # of birth hospitals participating in collaborative that prioritize low risk cesarean reduction % and # of hospitals that receive technical assistance (including data on individual hospital rates, ACOG guidelines, and policies/strategies) on low risk cesarean reduction % and # of very low birth weight births at level I and II hospitals (MVSA)	% of hospitals that integrate service practices/ policies to support the reduction of low risk cesarean deliveries	# of low risk cesarean deliveries (MVSA)

			by birth hospital neonatal level of care via MVSA			

Priority Need: Improve perinatal and infant health in Maryland by reducing disparities.						
Objectives	**National Outcome Measures**	**National Performance Measure**	**Evidence Based or Informed Strategy**	**Evidence Based or Informed Strategy Measures**	**State Performance Measures**	**State Outcome Measures**
By 2020, reduce the Black/White gap in infant mortality by 10%	Infant mortality per 1,000 live births (NVSS) Neonatal	NPM 5: % of infants placed on their back to sleep (PRAMS)	Educational Safe Sleep Campaign in Baltimore City, integrated in hospital perinatal services	# of hospitals that integrate safe sleep educational services within perinatal services	# and % of infants placed on backs to sleep (PRAMS)	# of SUIDs (NVSS) Rate of infant mortality (NVSS) Average length of

from the 2013 baseline of 2.3 (NVSS) By 2020, increase the % of infants placed on their back to sleep to 80% (current baseline is 77%; 2012 PRAMS Survey) (PRAMS) By 2020, increase the % of Black infants placed on their back to sleep to 66% (current baseline is 63%; 2012 PRAMS Survey) (PRAMS)	mortality per 1,000 live births (NVSS) Post neonatal mortality per 1,000 live births (NVSS) Sleep-related SUID mortality per 1,000 live births (NVSS)		Concentrate educational resources in communities of greatest need Conduct parental interviews for SUID cases to inform future safe sleep efforts Encourage the use of most effective contraception options Support the MD Perinatal-Neonatal Quality Collaborative in efforts to standardize identification, evaluation, treatment, and discharge management of infants with NAS	# and type of communities that receive safe sleep educational resources # of interviews conducted # of Title V grantees providing most effective contraception options to women of childbearing age % and # of birth hospitals participating in the collaborative that prioritize standardization of care for infants with NAS	% and # of hospitals that integrate service practices/ policies to improve the quality of care for substance exposed infants	stay for infants born with neonatal abstinence syndrome (NAS) (HSCRC/Collab) Average length of time on medication management for infants born with NAS (HSCRC/Collab)

Priority Need: Improve access to preventive, primary, specialty and behavioral health services as well as medical homes for Maryland children including those with special health care needs.						
	National	**National**		**Evidence Based or Informed**	**State**	

Objectives	Outcome Measures	Performance Measure	Evidence Based or Informed Strategy	Strategy Measures	Performance Measures	State Outcome Measures
By 2020, increase the % of children, ages 10-71 months, receiving a developmental screening by at least 10% from 2011/12 baseline of 31.8% (NSCH) By 2020, increase the % of children with a medical home by 10% (baseline of 57.2% in 2011/2012) (NSCH) Increase screening and diagnostic services for behavioral health (data and baseline TBD)	Percent of children in excellent or very good health (NSCH) Percent of children meeting the criteria developed for school readiness (MSDE)	NPM 6: % of children, ages 10-71 months, receiving a developmental screening using a parent completed screening tool (NSCH)	Educate parents/ caregivers about resource/service availability Track developmental screening rates, and disparities when possible, across early childhood systems Disseminate “Birth to 5: Watch me Thrive” materials statewide to parents and other stakeholders via web Partner with AAP, MSDE, Medicaid, MIECHV (HV programs) in their efforts to improve screening rates	# of parents that received screening tools (LHDs) # of parents that receive screening educational materials (LHDs)	% of Medicaid patients, age 15 months, who had 5 or more well child visits during the first 15 months of life (Medicaid)	% of children, ages 10-71 months, receiving a developmental screening (NSCH)

Priority Need: Improve the health and well-being of adolescents and young adults in Maryland including those with special health care needs by addressing risk behaviors.						
Objectives	**National Outcome Measures**	**National Performance Measure**	**Evidence Based or Informed Strategy**	**Evidence Based or Informed Strategy Measures**	**State Performance Measures**	**State Outcome Measures**
Increase the percentage of adolescents receiving preventive well visits from baseline of 85% in 2011/12 to 88% in 2020 (NSCH) Develop one State Plan to improve adolescent health	Percent of adolescents in excellent or very good health (NSCH) Rate of death in adolescents 12-20 per 100,000 (NVSS) Percent of adolescents in grades 9-12 who used tobacco (YTRBS) Percent of adolescents with mental health problems who receive treatment (NSCH)	NPM 10: % of adolescents with a preventive services visit within the past year (NSCH)	Develop an Adolescent Health Strategy for the State Through participation in AYAH CoIIN, collaborate with stakeholders to identify/ track a set of measures related to access to and quality of adolescent preventive care, and use the measures to drive improvements Partner with individual Local Health Improvement Coalitions to increase receipt and quality of adolescent well visits in local jurisdictions Collaborate with current State	Adolescent Health Strategy developed # of adolescent health measures re- access and quality of care identified/ tracked # of Local Health Improvement Coalition partners # of relevant OFCHS programs that integrate positive youth development	% of Medicaid patients, ages 11-18, who received a mental or behavioral health screen in the past year (Medicaid)	Improved health status of adolescents (NSCH)

			adolescent initiatives (e.g., Medicaid, school health, Chronic Diseases, Immunizations, Injury prevention, reproductive health, substance abuse, mental health) through the AYAH CollN Promote positive youth development principles across state funded adolescent health programs			

Priority Need: Improve the health of children and youth with special health care needs.						
Objectives	**National Outcome Measures**	**National Performance Measure**	**Evidence Based or Informed Strategy**	**Evidence Based or Informed Strategy Measures**	**State Performance Measures**	**State Outcome Measures**
Medical Home: Increase by 5 % the percentage of CSHCN and	Systems of care for children with special health care needs: percent of children and	NPM 11: % of children with and without special health care needs having a	Assess state of care coordination in Maryland Develop statewide model of care coordination based on	# of CYSHCN who receive patient and family centered care coordination services	% of families who report being satisfied with their child's care coordination services	# of children who receives care coordination services

their families who have access to appropriate patient and family centered care coordination by FY 2020 By 2020, evaluate parent involvement with care coordination	youth with special health needs receiving care and in a well-functioning system	medical home	findings and support implementation through a standardized framework Support the expansion and implementation of CYSHCN regional liaison roles to additional regions throughout the state of MD to facilitate partnership and coordination between regions Include a comprehensive shared plan of care component as a Target Area in the Office grants program. Provide technical assistance to grantees on how to implement. Strengthen our Family Professional Partnership Unit by	# of providers who participate in statewide inventory and mapping care coordination services # of families who report being satisfied with their child's Care Coordination services # of CYSHCN who have a developed care plan		

services in Maryland and increase parent satisfaction with care coordination by 5% Expand stakeholder			implementing a client satisfaction parent feedback and evaluation component, to measure quality of services of office funded grant projects. Support grantees and practices with technical assistance on developing and implementing family engagement activities. Facilitate regional family focus group focused on care coordination and parent satisfaction. Conduct state-wide MD Parent Survey	# of parents who participate in MD parent survey and feedback evaluations # of individuals OGPSHCN trains about family engagement, cultural competency, and family sensitivity # of parents/families that report being able to access community-based services			

collaboration of care coordination for CYSHCN by creating an implementation team to identify best practices that can translate into consistent implementation strategies used by a variety of service providers by 2020			Utilize Maryland Community of Care Consortium (COC) and Care Coordination implementation team to vet input from diverse stakeholders, support existing initiatives, and collaborate around Medical Home implementation and improve systems of care for CSHCN	# of identified OGPSHCN partners who attend and participate in COC (Community of Care) and Care Coordination implementation team meetings			
Maintain follow up procedures to track infants who missed or did not pass the birth hearing screening through 2020 so that LTF/D			Implement QI strategies including face to face visits with medical home providers in target regions where loss to follow up/ documentation rates are highest	% of infants who are LTF/D who did not pass an initial hearing screen			

does not exceed 17% Increase access to specialty care services for CYSHCN in underserved areas through partnerships with the Kinera Hub on the Eastern Shore, to establish a facility and expand service offerings progressively in to 2020			In collaboration with Maryland's Home Visiting and WIC programs, track and locate LTF/D infants and provide resource information to the families about the benefits of performing a hearing screen and address their concerns Increase the capacity for rural areas to regionalize services for CYSHCNthrough the eastern shore regional hub model targeted to specific local needs Update, maintain, and improve accessibility to CYSHCN resource locator database; Develop and promote platforms and mechanisms that will allow for accessibility of resources and services	# of clients who access the Eastern Shore Regional Hub for specialty care # of new identified services added to OGPSHCN resource locator database yearly # of resource locator users		

Provide education to health care professionals using the National Center for Medical Homes implementation guide through regional trainings at 13 local health departments by 2020			In collaboration with the Maryland Office on Oral Health, increase awareness about oral health issues impacting CYSHCN and develop an education plan around oral health for children with special health care needs Provide training and technical assistance to to private and public health workforce to effectively and efficiently address care coordination Develop a group of stakeholders/interested parties focused on efforts to secure full insurance coverage for un-insured CSHCN.	# of health service providers that received training and technical assistance support for Medical Home implementation		
Youth Transitioning into Adulthood: Increase by 10% the number of CSHCN	Percent of adolescents with and without special health care needs who have received the services	NPM 12% of adolescents with and without special health care needs who received services necessary to	Engage youth and their families by leveraging the power of social media tools and focus groups to disseminate resources and information as well as gather input on HCT	#of YSHCN and families who participate in transition planning activities	# CSHCN families who report participating in transition planning activities for their YSHCN	# of youth who successfully transition from adolescent to adult health care

families who are participating in health care transition planning for their YSHCN by 2020	necessary to make transitions to all aspects of adult life, including adult health care, work, and independence	make transitions to adult health care	Utilizing the 6 Core Elements, develop educational materials and tools in multiple languages that introduce Health Care Transition and highlight the importance of family participation and planning of HCT for CYSHCHN Participate on the Governor's Interagency Transition Council (IATC) to ensure information and resource access				

Assess the number of YSHCN ages 12-17 who have a transition readiness assessment and comprehensive plan of care in order to increase the			Through OGPSHCN program grants, partner with and support pediatric, adult, LHD and academic tertiary care centers in efforts to include family participation and planning into HCT activities and services Collaborate and partner with Maryland State Department of Education and other school based health care teams (School Nurses and administration, IEP coordinators) provide training seminars and technical assistance Promote and encourage the use of the Got Transitions HCT policy, care plan and readiness assessment tools in collaboration with school health, F2F and other family agencies	# of YSHCN who have completed a transition readiness assessment # of facilities/agencies using a HCT policy, care plan and readiness assessment			

number from the identified baseline by 5% in 2020 Develop and implement a comprehensive outreach and education plan to increase awareness and support of HCT among different audiences by 2020			Provide expertise, tools, resources and technical assistance to pediatric health care, youth, and family service providers as well as other state and local agencies on adoption and implementation of the standard transition readiness assessment Utilize the Maryland Health Care Transition Leadership Team to address HCT challenges, provide solutions, share best practices and shape policy and practice to improve the quality and delivery of services Conduct trainings and presentations for pediatric and adult health care providers and staff who provide transition services to YSHCN. The use of training webinars and CMEs will be utilized to engage providers	# of individuals that receive training and education on HCT # of community events, presentations, meetings in which participants received education around Health Care Transition		

			Develop a brochure that introduces Title V CSHCN and HCT that is available to adult and primary care providers across the state Provide education on condition-specific HCT milestones to youth and families at local HCT events Explore best practices used by hospitals/special care centers for disease-specific transition milestones and activities to add to care plans Based on findings, create educational materials for condition-specific milestone activities for transitioning youth			

Priority Need: Improve the oral health status of MCH populations across the lifespan.						
	National Outcome	**National Performance**	**Evidence Based or Informed**	**Evidence Based or Informed Strategy**	**State Performance**	**State Outcome**

Objectives	Measures	Measure	Strategy	Measures	Measures	Measures
By 2020, increase the % of women who had a dental visit during	Child Health Status (% of children in excellent or very good health)	NPM 13A: % of women who had dental visit during pregnancy (PRAMS)	Survey/interview medical and dental providers, pregnant women and WIC staff about oral health knowledge,	Survey/interview findings of medical and dental providers, pregnant women, and WIC staff	# of pregnant women surveyed/ interviewed on barriers and facilitators to	% of children ages 1-6 who have decayed teeth or cavities in the past 12 months (NSCH)

pregnancy by 10% (PRAMS) Increase the % of children who had a dental visit in the last year to 90% by 2020 (NSCH) By 2020, determine barriers and facilitators to dental care of low-income pregnant women throughout MD (OOH) By 2020, develop MD state oral health during pregnancy and infancy practice guidelines for medical and dental professionals, and disseminate statewide (OOH)	(NSCH)	NPM 13B: % of infants and children, ages 1 to 17 years, who had a preventive dental visit in the last year (NSCH)	practices and barriers and facilitators to care Oral health during pregnancy social marketing campaign targeting Hispanic women of childbearing age Education and training of OBGYNs and dental providers Partner with Office of Oral Health (OOH) to implement the Perinatal and Infant Oral Health QI (PIOHQI) grant Promote the MD Medicaid Helpline for pregnant women that assists women in accessing oral health care during pregnancy Continue oral health social marketing campaign for young children Partner with the	# of Hispanic women who receive targeted messages (impressions) # targeted messages developed and disseminated # of social media outlets # of OBGYN and dental providers who receive state oral health during pregnancy and infancy guidelines and training # of local health department staff trained and who received oral health resources # of partners in the PIOHQI collaborative	dental care (OOH) # of referrals of pregnant women (who called the MD Medicaid Helpline for pregnant women) to local health departments for assistance in finding a dentist (Medicaid) # and % of WIC sites that provide oral health information and educational materials to clients (OOH)	# of women who receive dental care during pregnancy (PRAMS) # of infants and children, ages 1-17 years, who receive dental care once within 12 months (NSCH)

			OOH, Medicaid and others to increase use of preventive services Provide training and oral health resources to LHD administrative care coordination unit (ACCU) staff on oral health during pregnancy			

Priority Need: Reduce substance use/abuse (including tobacco, alcohol, prescription drugs, and opioids) across the lifespan for MCH populations						
Objectives	**National Outcome Measures**	**National Performance Measure**	**Evidence Based or Informed Strategy**	**Evidence Based or Informed Strategy Measures**	**State Performance Measures**	**State Outcome Measures**
Reduce the % of women smoking during pregnancy by 10% by 2020 (baseline of 7%; 2012 PRAMS Survey) Increase # of referrals from providers to	Severe maternal morbidity Maternal mortality LBW & VLBW rates Preterm, early preterm &	NPM 14A:% of women who smoke during Pregnancy NPM 14B:% of children who live in households where someone smokes	Connect women of childbearing age and pregnant women to services and incentives offered to them when they call the Quitline Offer incentives to women who call the Quitline and complete calls with a counselor	# of pregnant women using the Quitline # of pre-delivery incentives and post-partum incentives awarded # of referrals to the Maryland Tobacco Quitline	# pregnant women enrolled in local health tobacco treatment programs # of Maryland local health departments who offer in person smoking	# and % of women who smoke during pregnancy (NVSS) # and % of women who remain tobacco free post- partum (PRAMS)

Maryland Tobacco Quitline by 5% Increase the # of calls from pregnant or postpartum women to the Maryland Tobacco Quitline by 5% Increase access to services for alcohol and substance abuse treatment, and smoking cessation for women of childbearing age and pregnant women Prevent/reduce substance use/abuse among teens	late preterm rates Early term birth rate IMR and related measures % of children in excellent or very good health		Collaborate with Legal Resource Center and MD Landlords on ways to make apartment buildings smoke free Connect women of childbearing age and women who breastfeed to Quitline services Partner with CTPC to reduce household smoking Develop annual health communications plans including interventions with call to action: “Call the Maryland Tobacco Quitline” or “Visit smokingstopshere.com”	# of health communication interventions and/or media campaigns implemented # of “point of care” campaign impressions # of teens between the ages of 13-17 who have received smoking cessation assistance # of pregnant women counseled	cessation assistance	# and % of children who reside in smoke-free households (NSCH)