

**Maternal and Child
Health Services Title V
Block Grant**

Northern Mariana Islands

**FY 2020 Application/
FY 2018 Annual Report**

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I. General Requirements

I.A. Letter of Transmittal



Commonwealth Healthcare Corporation
Commonwealth of the Northern Mariana Islands
1 Lower Navy Hill Road Navy Hill, Saipan, MP 96950



June 27, 2019

CEO -L19- 424

Michelle Lawler, Director
Division of State and Community Health
Maternal and Child Health Bureau, HRSA
5600 Fisher Lane, Room 18-31
Rockville, MD 20857

Subject: HRSA Announcement No. HRSA-20-001/ Tracking No. 163946

Dear Ms. Lawler:

The Commonwealth of the Northern Mariana Islands' Commonwealth Healthcare Corporation (CNMI-CHCC) is pleased to submit the FY 2020 Title V Block Grant Application / 2018 Annual Report.

The CNMI is grateful for the opportunity to provide a report on the projects and activities that have taken place in the Northern Mariana Islands to improve the health of mothers, children and adolescents, and children with special healthcare needs. The CNMI will continue to use Title V MCH Block Grant funds to provide preventive and primary health care services to the women and children in the CNMI.

We thank you for your continued leadership and support of the CNMI MCH Title V Program.

Sincerely,

A handwritten signature in blue ink that reads "Esther L. Muna".

Esther L. Muna, MHA, FACHE
Chief Executive Officer

I.B. Face Sheet

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

I.C. Assurances and Certifications

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

I.D. Table of Contents

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

II. Logic Model

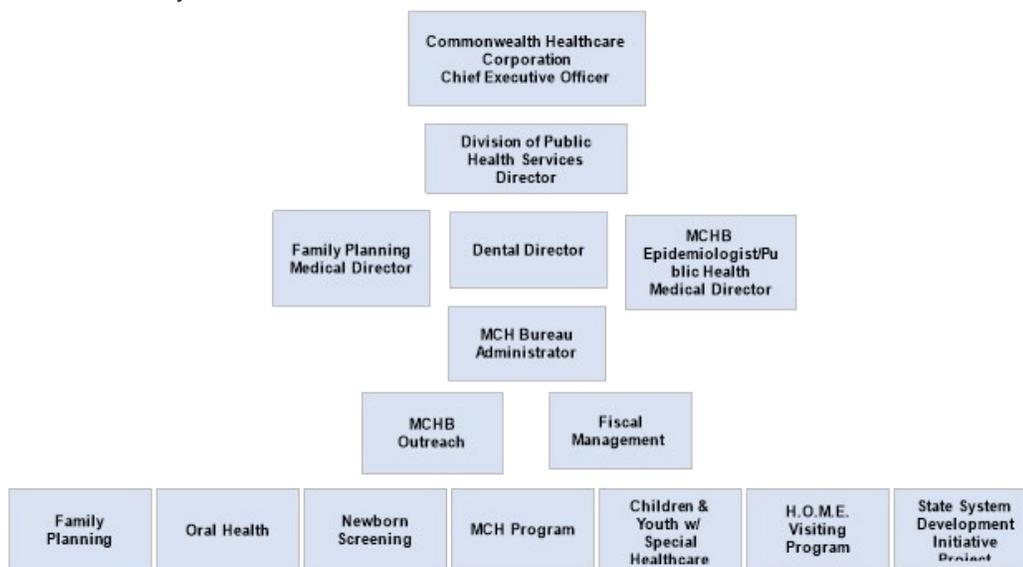
Please refer to figure 4 in the "Title V Maternal and Child Health Services Block Grant To States Program Guidance and Forms," OMB No: 0915-0172; Expires: December 31, 2020.

III. Components of the Application/Annual Report

III.A. Executive Summary

III.A.1. Program Overview

The mission of the Maternal and Child Health (MCH) Bureau is to promote and improve the health and wellness of women, infants, children, including children with special health care needs, adolescents, and their families through the delivery of quality prevention programs and effective partnerships. The Northern Mariana Islands MCH Bureau manages the MCH Title V Program, Healthy Outcomes for Maternal and Early Childhood (H.O.M.E.) Visiting Program, Family Planning Program, Newborn Screening, Children with Special Healthcare Needs Program, Oral Health Program, and State Systems Development Initiative Project. The CNMI MCH Bureau receives approximately \$458,000 each year from the Title V Maternal and Child Health Services Block Grant.



The MCH Bureau is a unit within the Division of Public Health under the Commonwealth Healthcare Corporation (CHCC). Established in 2011, the CHCC is a semi-autonomous quasi-governmental corporation and is the operator of the Commonwealth of the Northern Mariana Islands' (CNMI) healthcare system and primary provider of healthcare and related public health services in the CNMI. The CHCC provides management and oversight of the CNMI's only hospital, public health programs and mental and behavioral health programs. And, while budget constraints and workforce issues continue to challenge the CHCC, it's organizational composition is positioned to effectively integrate medical, mental/behavioral health, and public health services.

The CNMI MCH continues to collect and analyze data through the various programs under the CNMI MCHB, CHCC hospital, CNMI Health and Vital Statistics Office, and other partners such as the CNMI Public School System and WIC. MCH continues to work with members of the MCH Needs Assessment Steering Committee to assess the impact of strategies implemented towards addressing the priority needs of the populations served. Focus groups with key stakeholders and interviews with medical providers and other program managers are also conducted to gather information in assessing the needs of the MCH populations.

The changing MCH population demographics, emerging health trends and shifting of program capacity require that

the MCH Bureau routinely engage in assessing the needs of the CNMI. In 2015 the CNMI MCHB completed a 5-year comprehensive needs assessment in which we examined areas of priority and alignment between local MCH priority needs and the national Title V National Outcome Measures (NOMs) and National Performance Measures (NPMs). The process resulted in the selection of at least one NPM in each of the five population health domains for programmatic focus over the 5 year cycle and development of State Performance Measures (SPMs) for priorities not addressed by NPMs.

PRIORITY	PERFORMANCE MEASURE
<i>Women's/Maternal Health</i>	
Improve women's health through breast, cervical, and anemia screening.	NPM 1 Percent of women with a past year preventive medical visit
	SPM 1 Percent of women of childbearing age with anemia
<i>Infant/Perinatal Health</i>	
Improve perinatal/infant outcomes through early and adequate prenatal care services and promoting breastfeeding and safe sleep	NPM 4 Percent of infants who are ever breastfed and percent of infants who are breastfed exclusively till 6 months
	SPM 2 Percent of deliveries to resident women receiving prenatal care beginning in the first trimester of pregnancy
<i>Child Health</i>	
Improve child health through providing vaccinations and screening for developmental delays	NPM 6 Percent of children ages 9 to 35 months, receiving developmental screening using a parent completed screening tool
	SPM 3 Percent of children receiving routine vaccines
Improve oral health of children	NPM 13.2 Percent of children ages 1 through 17 who had a preventive dental visit in the past year.
<i>Adolescent Health</i>	
Improve adolescent health by promoting healthy adolescent behaviors and reducing risk behavior (i.e. drug and alcohol use, bullying) and poor outcomes (i.e. teen pregnancy, injury, suicide)	NPM 9 Percent of adolescents ages 12 to 17, who are bullied or who bully others
	SPM 4 Percent of high school students that report thoughts of suicide
	SPM 5 Pregnancy Rate among 15-17 year olds
<i>Children with Special Health Care Needs</i>	
Provide a medical home for children identified as Children with Special Health Care Needs	NPM 11 Percent of children with and without special health care needs having a medical home.
Improve insurance status of children and pregnant mothers	NPM 15 Percent of children ages 0 through 17 who are adequately insured.

Through Title V Block Grant funds, the CNMI MCH Bureau works to support and assure comprehensive, coordinated and family-centered services, including services for children with special healthcare needs, by providing infrastructure- building services (policy development, monitoring, training, and information systems), population-based services (newborn screening, oral health promotion, public education and outreach), and enabling services (clinic outreach, health education, family support services, case management/coordination). These activities are coordinated through partnerships with local programs across systems that serve the MCH populations in the CNMI. Formal partnerships established between the CNMI MCH Bureau and partner programs include: Medicaid, WIC, Division of Youth Services, DCCA Child Care Development Fund, Public School System, Early Intervention Program, Head Start & Early Head Start, Community Guidance Center, Commonwealth Office of Transit Authority, and other non-profit and/or non-governmental organizations. These partnerships are critical in the MCH Bureau's efforts in expanding its reach for serving target groups and for integrating services to support a comprehensive systems of care for the women, children, and their families.

The information submitted in the CNMI Title V Block Grant Annual Report/Application reflects the efforts over the past year in implementing strategies identified in the State Action Plan to address CNMI MCH Priorities across the five health domains: Women/Maternal Health, Perinatal/Infant Health, Child Health, Adolescent Health, and Children with Special Healthcare Needs. The following is a summary of accomplishments during 2018, challenges, and plans for the 2020.

Maternal/Women Health

Priority: Improve women's health through cervical and breast cancer and anemia screening.

Accomplishments:

- Continue offering preventive screening and health education (Breast and Cervical Cancer, Diabetes, Hypertension, and Anemia Screening) as part of Clinic Outreach events to women who may have not accessed preventive care otherwise. A total of 10 clinic outreach events were conducted in 2018 in partnership with the Family Planning and Breast and Cervical Cancer Screening programs.
- Conduct community awareness activities through radio and social media advertisements and partner with the Centers for Disease Control and Prevention on the development of culturally appropriate health information material.
- Facilitate the 4th Annual CNMI Women's Health Month highlighting women's preventive healthcare providing preventive health screenings to 330 community members.
- Increase the number of women of reproductive age who access preventive health and reproductive life planning services through Family Planning from 10.4% in 2017 to 14.1% in 2018.

Challenges:

- Provider turnover and nursing staff shortage continues to challenge access to women preventive healthcare.
- Mobile clinic was repositioned to the island of Rota as a response to damages to the Rota community from typhoon Mangkhut. Lack of mobile clinic on Saipan is a challenge for clinic outreach.
- The Medicaid cap and depletion and expiration of the Affordable Care Act Medicaid expansion funding is a threat to healthcare across all population health domains.

Plans for 2019:

- Strengthen clinic outreach efforts by offering preventive medical services and screenings at designated village centers on a monthly basis.
- Promote reproductive life planning and preconception care throughout the CNMI.
- Increase access to anemia screening.

Perinatal/Infant Health

Priority: Improve perinatal/infant health through early and adequate prenatal care services and promoting breastfeeding and safe sleep.

Accomplishments:

- MCH was able to continue its longstanding partnership with the WIC program in improving breastfeeding rates. In 2017, based on data gathered from the CNMI Health & Vital Statistics Office, 94.7 % of infants in the CNMI were breastfed and in 2018 there was an increase with 95.8% of infants being reported to have been breastfed.
- Ninety-nine percent (99%) of babies in the CNMI completed a hearing screen before discharge after birth.
- Almost half of all Home Visiting Program participants (45.1%) were reporting to be breastfeeding their babies through 6 months of age.
- Increase in the number of pregnant women accessing prenatal care during the first trimester of pregnancy,

from 45.8% in 2017 to 47.5% in 2018.

- Conducted capacity building/training in partnership with WIC for Labor & Delivery and OB unit nurses and partners such as the Division of Youth Services, Home Visiting, Family Planning on Breastfeeding/Lactation Education and Support.

Challenges:

- Population transportation challenges for accessing preventive healthcare such as prenatal and postpartum care.
- Newborn bloodspot screening rate at just 50%. Limitations around shipping of blood specimens to Oregon Public Health impact these rates. Additionally, patients seen by private providers have a lower screening rate.

Plans for 2019:

- Increase access to breastfeeding support and education by integrating support and education materials into outpatient clinics at the Women's and Children's Clinic at various time points after birth.
- Increase the number of community agency partners that are aware and offer information to clients and the community on available breastfeeding support services (i.e WIC Breastfeeding Peer Counselor).
- Increase community awareness campaigns on the importance of early and adequate prenatal care.
- Offer Free Pregnancy Testing to support early identification of pregnancy and early entry in care.

Child Health

Priority: Improve child health by increasing vaccination and developmental screening rates.

Accomplishments:

- Increase in the number of children receiving a developmental screening through the use of an evidence based, parent administered developmental screening tool called the ASQs from 10.2% in 2017 to 12.1% in 2018.
- For children seen at the CHCC Children's Clinic, there was an increase the percentage of children who completed a developmental screening, from 53.6% in 2017 to 61.2% in 2018.
- Newborn packets were disseminated to all women who had babies at CHCC which included information on monitoring for child development.
- Provided training to 15 child care centers/providers on developmental screening
- Expand preventive dental programs to the islands of Tinian and Rota. The school based dental sealant program is now provided to all 2nd and 6th public school students on Tinian and Rota.

Challenges:

- The lack of a centralized data system for ASQ developmental screening continues to pose a challenge for accurately assessing developmental screening rates.
- Limited pool of dental professionals in the CNMI is a barrier for increasing access to public health dental programs.

Plans for 2019:

- Develop and implement centralized developmental screening database to improve data capacity, management of screening programs, and referrals for services.
- Expand access to developmental screening by increasing training for early care and education providers and clinics
- Partner with the CHCC Public Health Dental clinic to expand school based oral health prevention programs to 1st graders and middle and high school students.

Adolescent Health

Priority: Improve adolescent health by promoting healthy adolescent behaviors to reduce risk behavior (i.e. drug use, alcohol, and bullying) and poor outcomes (i.e. teen pregnancy, injury, suicide).

Accomplishments:

- Provided training on bullying prevention to agency partners such as the Division of Youth Services and the Office on Youth Affairs.
- Conducted community awareness through print and social media advertisements on bullying prevention.
- Partnered with the Public School System on the Middle School Conference which provided training/presentation to middle school students and their parents on various teen health issues, including adolescent mental health and sexual and reproductive health.
- Provided teen health clinic outreach to all high schools in the CNMI in partnership with the Family Planning and HIV/STD Prevention programs. Teens were able to access free, confidential services from medical professionals on school campus.

Challenges:

- Coordinating school based clinics is a challenge.
- Limited access to youth friendly clinics.

Plans for 2019:

- Expand the use of evidence based bullying prevention curriculum throughout the public school system.
- Increase parent engagement in bullying prevention activities/efforts.
- Increase teen access and awareness of mental/behavioral health supports.
- Increase access to confidential youth friendly health services.

Children with Special Health Care Needs (CSHCN)

Priority: Provide a medical home for children identified as having a special healthcare need.

Accomplishments:

- In 2018, 99% of babies born in the CNMI received a newborn screening prior to discharge.
- There was a 23% increase in the number of referrals to the Early Intervention Program as part of child find activities.
- Continued case management and service coordination for children enrolled in Early Intervention Services approximately 80 families served through Early Intervention.
- A total of 365 children seen through the Shriner's Honolulu Hospital Outreach to the CNMI, 49 children received orthotics, and 9 were referred to the Honolulu Shriner's Hospital for Children for surgery.

Challenges:

- One of the main challenges for the CNMI special needs population is the lack of specialty care on islands. Families are referred off-island for care which adds financial burden.

Plans for 2019:

- Increase awareness among community members and families regarding medical homes.
- Increase family engagement among families of children and youth with special healthcare needs.
- Conduct child find activities and initiate referral and enrollment to early intervention services and supports for children identified as having a special healthcare need or disability.
- Continue providing service coordination for all families enrolled in early intervention programs.

- Coordinate Shriners Children's Hospital of Honolulu outreach for families in the CNMI.

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

MCH Block Grant funds are used to support the overall MCH efforts in the Northern Mariana Islands. Primarily, Block Grant funds support Enabling Services to improve and increase access to health care and improve health outcomes of the CNMI MCH population. The types of enabling services supported include: Care/Service Coordination for Children of Special Healthcare Needs, Laboratory Supplies for Newborn Screening, Eligibility Assistance, Health Education and Counseling for Individuals, Children, and Families, Outreach, and Referrals.

Public Health Services and Systems are also supported through MCH Block Grant dollars. Supporting activities and infrastructure to carry out core public health functions in the CNMI is critical for the efforts being made towards improving population health. Specifically, MCH Block Grant funds are used to support policy development, annual and five year needs assessment activities, education and awareness campaigns, program development, implementation and evaluation. Additionally, funds are used to support workforce development towards building capacity among MCHB staff, nurses, and partners who impact CNMI Title V priorities.

III.A.3. MCH Success Story

Response to Super Typhoon Yutu

Characterized as the strongest storm to impact any part of the United States since 1935, category 5 Super Typhoon Yutu devastated the Northern Mariana Islands on October 24, 2018, leaving severe destruction to infrastructure services and hundreds of families displaced or homeless.



Electricity and water services were cut off for weeks, ports in and out of the CNMI were closed for over 2 weeks due to extensive damage, and the entire territory prioritized response & recovery.

As hundreds of families, including many women and children, took refuge in public schools turned into disaster shelters immediately following the storm, MCHB prioritized plans for reaching MCH populations. Outreach to families displaced in shelters throughout the islands of Saipan and Tinian included distribution of hygiene kits and cribs to families with infants with no safe space to sleep. In addition, staff of MCH Bureau Programs were instrumental in assessing the needs of families and linking them to services such as prenatal care, vaccines and flu shots, family planning, other needed medical care.

Prompt response to the needs of the MCH population displaced due to the Super Typhoon Yutu would not have been possible without the resiliency and determination of the CNMI Title V staff, whom many of which endured the same traumatic experience and loss as those served.

III.B. Overview of the State

The Commonwealth of the Northern Mariana Islands (CNMI) is a U.S. Commonwealth formed in 1978, formerly of the United Nation's Trust Territory of the Pacific region of Micronesia within Oceania. The CNMI is comprised of 14 islands with a total land area of 176.5 square miles spread out over 264,000 square miles of the Pacific Ocean, approximately 3,700 miles west of Hawaii, 1,300 miles from Japan, and 125 miles north of Guam. The CNMI's population lives primarily on three islands; Saipan, the largest and most populated island, is 12.5 miles long and 5.5 miles wide. The other two populated islands are Tinian and Rota, which lie between Saipan and Guam. The nine far northern islands are very sparsely inhabited with few year-round inhabitants and no infrastructure services. The islands have a tropical climate, with the dry season between December and June, and the rainy season between July and November. Due to the CNMI's position in the Pacific Ocean, the islands are vulnerable to typhoons. There are also active volcanoes on the islands of Pagan and Agrihan. Saipan, Rota and Tinian are the only islands with paved roads, and inter-island transport occurs by plane or boat.



In October 2011, Public Law 16-51 dissolved the Department of Public Health and created the Commonwealth Healthcare Corporation (CHCC). CHCC is a quasi-governmental corporation, and while it is a part of the CNMI Government, it is semiautonomous. The CHCC is now the operator of the Commonwealth's healthcare system and the primary provider of healthcare and related public health services in the CNMI. This law transferred all the functions and duties of the CNMI Department of Public Health including management of federal health related grants to the Commonwealth Healthcare Corporation, so that the CHCC is the successor agency to the now defunct Department of Public Health. The only hospital in the CNMI is also administered by CHCC. The Chief Executive Officer of CHCC is the authorized representative for the CNMI MCH Title V Program. There are three divisions under the corporation: 1) Public Health -- provides preventive and community health programs in which many are federally funded; 2) Hospital; and 3) Community Guidance Center. The Director of Public Health Services also provides oversight to all the public health programs, including the MCH Title V Program.

Demographics

According to the 2010 U.S. Census, the population of the Commonwealth of the Northern Mariana Islands (CNMI) is 53,883. This reflects a 22.2 percent decline (15,338) between 2000 and 2010. This trend contrasts the previous decade, when the CNMI's population increased by 59.7 percent to 69,221 residents. Today the majority of the population resides on the island of Saipan 48,220, followed by Tinian with 3,136 (6 percent), then Rota with 2,527 (5 percent). By age group, the largest proportion of the decline is among women between ages 20 and 34 (26 percent). This may be due to the closing of

garment factories on Saipan since 2000 that employed a majority of temporary workers from abroad.

Single ethnic groups that accounted for the majority population in the CNMI were identified as Filipino (35 percent), followed by Chamorro (24 percent) and Chinese-except Taiwanese (7 percent). Carolinians make up about 5 percent of the total population. Asians were the largest group representing nearly half of the total population. Native Hawaiian and Other Pacific Islanders made up about 35 percent and Caucasians less than 2 percent. About 13 percent of CNMI's population were of two or more ethnic origins or races.

Table 1 MCH Population

Population	1990	2000	2010
Infants (less than 1)	824	1,297	1,138
Children (1-12)	8,372	12,701	11,124
Adolescents (13-17)	2,709	3,735	4,372
Women (15-44)	13,669	25,836	12,522

Source: U.S. Census Bureau

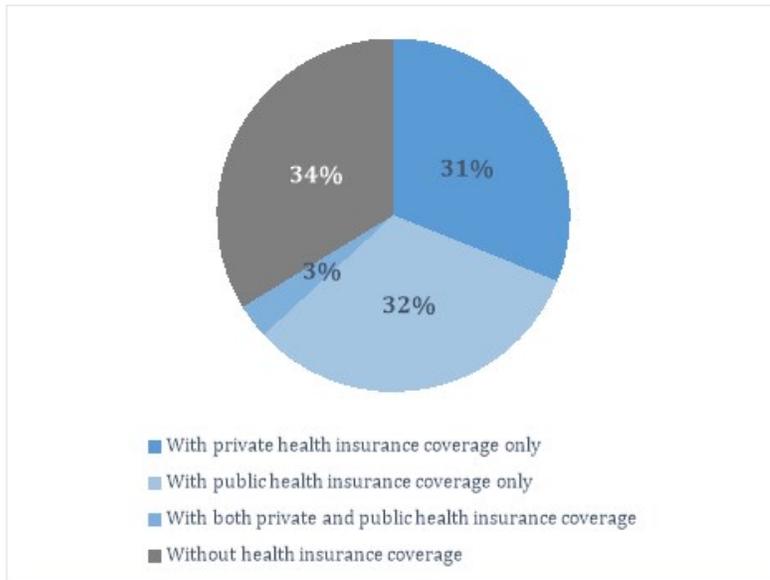
Table 2 CNMI Population by Ethnicity

Ethnicity	1990	2000	2010
Chamorro	12,555	14,749	12,902
Carolinian	2,348	2,652	2,461
Filipino	14,160	18,141	19,017
Chinese	2,881	15,311	3,659
Caucasian	875	1,240	1,343
Other Pacific Islanders	3,663	4,600	3,437
Other Asians	4,291	5,158	4,232
Others	2,572	7,370	6,832

Source: U.S. Census Bureau

CNMI has a large percentage of the population that are uninsured. The 2010 U.S. Census reports the uninsured population in the CNMI at 34 percent, more than double the 15 percent uninsured rate in the United States. A challenge with the uninsured population is the status of the immigrant contract workers who are ineligible for Medicare and Medicaid. In the CNMI, based on 2010 US Census data, residents with Medicaid constitute 32 percent of the population, double the Medicaid rate of the U.S. at 16 percent.

Figure 1. Insurance Coverage in the CNMI- 2010 US Census

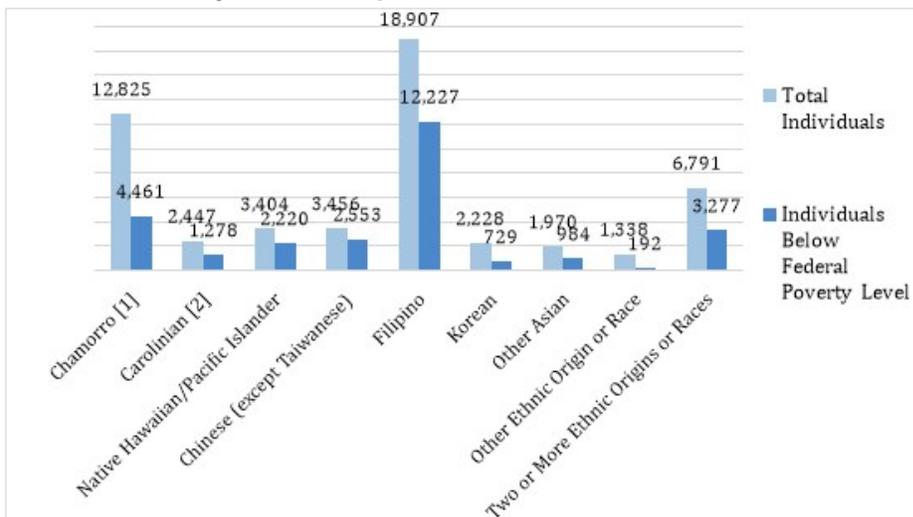


Source: US Census Bureau

Economy

Since 1998, the CNMI's economy has suffered one long continuous, downward spiral. A variety of factors contributed to the current circumstance, including the loss of tourism-related business, the effects of rising fuel costs across all of the CNMI, the closing of the garment manufacturing industry, and the implementation of federal Public Law 110-229, which removed local control over immigration. As a result of this confluence, the CNMI government's revenues have fallen drastically causing the CNMI's annual budget to drop 56 percent - more than \$90 million dollars, over the last 12 years. As such, many jobs have been lost resulting in many people without the financial means, education, and experience needing to relocate to the U.S. mainland. According to the 2010 U.S. Census, 4,061 families in the CNMI had an income that was below poverty level with related children under 18 years old. Approximately 52 percent of the total population lived below the federal poverty level. Specifically, 11,693 individuals were living below 50 percent of poverty level, 32,885 individuals below 125 percent of poverty level and 40,368 individuals below 185 percent of poverty level. Approximately 65 percent of the Filipino population, the largest ethnic group, were living below the poverty line.

Figure 2. Income Level by Ethnic Group in the CNMI- 2010 US Census



Healthcare for the MCH Population

Commonwealth Healthcare Corporation (CHCC)

The sole hospital in the Commonwealth of the Northern Mariana Islands (CNMI) was initially established as the Department of Public Health and Environmental Services (DPH) in 1978 by Public Law 1-8. In 2009, DPH was re-organized into the Commonwealth Healthcare Corporation, a public corporation, under the “Commonwealth Healthcare Corporation Act of 2008” by Public Law 16-51. The CNMI established the Commonwealth Healthcare Corporation (CHCC), a public corporation in 2011. The organization of both clinical and public health services in a public corporation is unique in the United States. The CHCC is responsible for the Commonwealth Health Center hospital; ancillary services; the Rota and Tinian Island Health Centers; and Public Health functions and programs.

The Commonwealth Legislature cited a desire for the hospital to be an “independent public health care institution that is as financially self-sufficient and independent of the Commonwealth Government as is possible.” Although the CHCC now exists as a quasi-independent institution, it remains a public corporation charged with the responsibility of providing essential health care to the people of the CNMI. Yet, since its inception, the CHCC has struggled with the transition from a government agency to a public corporation. In 2017 CHCC had approximately 726 personnel. The CHCC provides 100 percent of inpatient services and 80 percent of ambulatory services in CNMI.

- Services for Pregnant Women, Mothers, Infants

The Women's and Children's Clinics located at Commonwealth Healthcare Center (CHCC) provide comprehensive primary and preventive services for MCH target group. There are currently four OB/GYN working at the CHCC Women's Clinic and four mid-level providers. There are currently seven pediatricians and one mid-level pediatric provider at CHCC. The MCH Program supports services at both clinics such as case management of high risk patients, development of educational materials including posters and brochures, and staff to assist with developmental screenings and health coverage applications. The HIV/STD screening program, Family Planning Program, and Breast and Cervical Cancer screening program are also offered through the Women's Clinic. Dental health services are made available to women and infants through the CHCC Dental Clinic.

- Services for Children and Adolescents

Health care services for children and adolescents are provided at the Children's Clinic. Dental health services are also provided at CHCC Dental Clinic. Again, MCH Program provides enabling services such as transportation, translation, referrals, incentives, and educational materials. Through home visiting initiatives, the MCH Program helps families navigate through state programs. Majority of families seek assistance for WIC, NAP, and Medicaid. As previously stated, MCH Program plans to address barriers to health services for all MCH groups in the CNMI. The utilization of a mobile clinic and expansion of clinical sites offering primary and public health services are planned strategies to improving services for children and adolescents.

- Services for Children and Youth with Special Health Care Needs

One of the main challenges with the CNMI special needs population is the lack of specialty care on island. Families are referred off-island for care which adds financial burden. Through partnerships with Shriners Hospital in Honolulu and the Public School System certain specialty care are offered on island including Audiology, ENT, and selected surgeries. The Shriner's Children's Hospital of Honolulu conducts clinic outreach to the CNMI twice a year.

Early intervention services for infants and toddlers with special healthcare needs ages zero to three years are provided

through a collaborative effort of the CNMI Public School System and the Commonwealth Healthcare Corporation. Funding for services for early intervention services is provided through Part C of the Individuals with Disabilities Act. The CNMI Public School Systems is designated by the CNMI Governor as the Lead Agency for carrying out the general administration, supervision, and monitoring of the early intervention program and activities in the CNMI. Services for children with special healthcare needs age three to five years are provided through the CNMI Public School System's Early Childhood Program and for those ages five through 21 years through the Part B, Special Education Program. The following services are available for children with special healthcare needs in the CNMI: audiology services, occupational therapy, physical therapy, service coordination, sign language services, speech-language pathology services, vision services, psychological services, and counseling. During the 2016-2017 school year, there were 50 infants and toddlers enrolled in Early Intervention Services program, 48 enrolled in the Early Childhood Special Education program, and 796 enrolled in the Special Education program.

Rota Health Center

The Rota Health Center is the only medical facility on the island of Rota and services the entire population of about 2,500. At present the Rota Health Center has two full time physicians who alternate every two weeks, two registered nurses, five licenses practical nurses and six nursing assistants. The auxiliary staff includes two x-ray technicians, two lab technicians and twenty-three administrative support staff. The Rota Health Center has emergency, outpatient clinic, pharmacy, laboratory, and radiology units. Public Health services such as the MCHB Family Planning Program, Breast and Cervical Cancer Screening, and HIV/STD Screening are available at the Rota Health Center.

Tinian Health Center

The Tinian Health Center is the only medical facility on the island of Tinian and services the entire population of about 3,200. At present, the clinic has a total staff of 31 personnel including two providers: one doctor and one nurse practitioner alternating every two weeks, four registered nurses, five licensed practical nurses, and one nursing assistant. The Tinian Health Center operates an emergency, outpatient clinic, pharmacy, laboratory, and radiology units. Public Health services such as MCHB Family Planning Program, Breast and Cervical Cancer Screening, and HIV/STD Screening are available at the Tinian Health Center.

Kagman Community Health Center (KCHC)

The establishment of the Kagman Community Health Center, a federally qualified health center (FQHC), in 2012 located in one of the remote villages in the southeast part of Saipan has improved access to healthcare services for the MCH population. The KCHC provides outpatient services such as: general primary care, basic diagnostic laboratory, screenings, family planning, well-child, gynecological care, obstetric care, preventive dental, case management, health education and outreach.

Challenges that Impact Access to Healthcare

There have been cuts in services including staff as a result of the transition of the Department of Public Health to the Commonwealth Healthcare Corporation. Federal public health grants have been the primary source of funding for services, activities, and infrastructure for programs in the DPHS. The budget cuts, combined with issues surrounding federal immigration policies for healthcare staff causes impedance to securing or retaining nearly any type of medical personnel. The CNMI is also a Health Professional Shortage Area (HPSA) for primary care, dental, and mental health and a medically underserved area. The CNMI licensure regulations require that physicians and mid-level providers hold United States medical credentials in order to practice medicine in the CNMI. This creates a challenge in recruiting and retaining clinicians because salaries are not comparable with similar positions in the US mainland.

Uninsured Population

CNMI has a large percentage of the population that is uninsured. The 2010 U.S. Census, administered prior to the implementation of the Patient Protection and Affordable Care Act (PPACA), reports the CNMI uninsured population at 34 percent, more than double the 15 percent of uninsured in the US. In 2013, CNMI Public Law 17-92 was passed, which

released employers from the responsibility for providing health insurance coverage to non-U.S. qualified workers (legally-present foreign workers). The rate of the uninsured has not been reassessed since this law was passed but has likely increased after this policy change.

Inter-Island Medical Referral Services

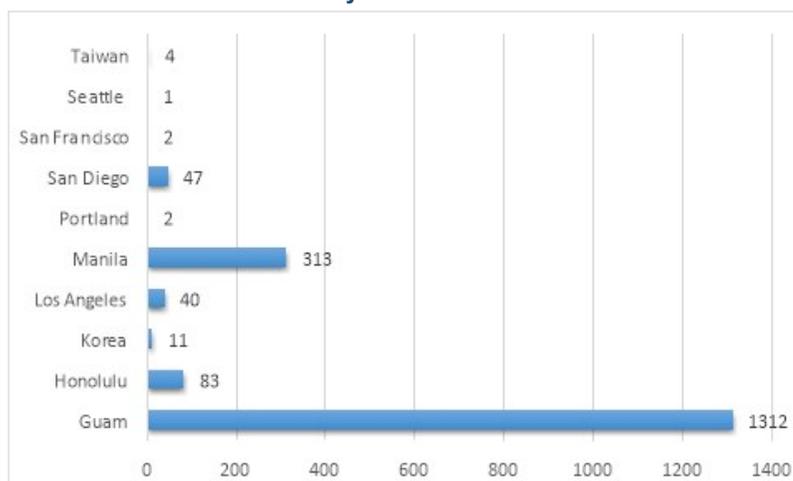
The Tinian Health Center and the Rota Health Center, which is under the CHCC organizational structure has limited providers and no specialized services. Inter-island referrals are covered by the CHCC and the Mayor’s Office of Rota or Mayor’s Office of Tinian. The CHCC pays for the airfare of patients referred from Tinian or Rota and the respective Mayor’s Office pays for the hotel and subsistence expenses for the patient and escort.

Off-island Referrals

Treatment services, including access to diagnostic services, not readily available in the CNMI are handled through the Medical Referral Program. Patients are referred to healthcare facilities in Guam, Philippines, Hawaii, or the US mainland. In 2004 the number of off-island medical referrals was 437 patients and since that time the number of referrals has increased steadily to 565 patients in 2007, 924 patient referrals in 2009, and 1,117 patients in 2010. There was a 155% increase in the number of patients referred for off-island care between 2004 and 2010. In an interview with the CNMI Medical Referral Office Director, Ronald Sablan, it was noted that the rise in medical referral patients is largely attributed to a lack of medical maintenance among patients. Patients are increasingly forgoing preventive care and seeking medical attention when health conditions or diseases are at their worst stages and requiring care not readily available on island^[i]. An economic crisis that began in the year 2000 impacted both the CNMI population’s ability to be able to access healthcare, more importantly, preventive healthcare and government spending, including spending on healthcare. In the year 2000, the CNMI’s garment manufacturing industry began to slowly close its doors until it eventually completely phased out in 2006. In addition to this, tourism, the CNMI’s second largest industry experienced a major decline. Together, the tourism and garment manufacturing industries accounted directly and indirectly for about 80 percent of all employment in the CNMI in 1995 and made up a large part of the government revenues^[ii]. The economic condition of the CNMI during the early 2000s is one in which many individuals were out of employment and the government had little to no means of extending support or relief to community members in response to the economic crisis. Studies have shown that unemployment rates are linked to preventive healthcare utilization, with increases in unemployment corresponding to decreases in individuals completing preventive health services such as pap smears, mammograms, and annual check ups^[iii].

Data from the CNMI Medical Referral Program for 2018 indicates that there were a total of 1,815 patient referrals for medical care outside of the Northern Mariana Islands.

Figure 3. 2018 CNMI Medical Referrals by Referral Location



Source: CNMI Medical Referral Program

Referral data indicates that 72 percent of referrals are sent to the neighboring island of Guam, with oncology being the major reason for referral. Overall, the major health categories for referrals include oncology, orthopedics, cardiology, Radiology, and MRI studies. In May of 2019, the CHCC expanded specialty care to include oncology, therefore it is anticipated that there will be an overall decrease in referrals and particularly for reason related to oncology.

Health Coverage for MCH Population

As a territory, enrollment in the ACA is not available. However, enrollment into the Medicaid program is enhanced for eligible persons. The CNMI Medicaid program is unique to the CNMI and other US territories and jurisdictions. The program is “capped” by the US federal government and limited to a set dollar amount allotted to the CNMI. This limited funding severely affects access, cost, and quality of health care for all residents of the CNMI. The current state plan limits use of CHIP money to the event where the general program has exhausted its standard funding. This is a federal restriction imposed on the CNMI based on information verified by local health officials. CHCC is the primary provider for all Medicare and Medicaid beneficiaries in the CNMI, thus restrictions on services are currently enforced on private clinics.

Medicaid

Medicaid was first implemented in 1979 and covers approximately 16,000 lives in the CNMI and uses Supplemental Security Income (SSI) as the resource threshold rather than the federal poverty level (FPL) as in most states. As a result, the maximum resource eligibility for the CNMI Medicaid program is slightly less than 100 percent of the FPL. Medicaid is furnished to SSI beneficiaries, and income-eligible individuals who are U.S. citizens, or “qualified aliens” defined under the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), or non-qualified aliens for treatment of emergency medical condition, or lawfully present pregnant women.

The framework for Medicaid financing in the CNMI resembles that of the fifty states: the cost of the program (up to a point) is shared between the federal government and the Territory and the federal government pays a fixed percentage of the CNMI Medicaid costs. For the CNMI, that fixed percentage is 55 percent. However, unlike the 50 states, the federal government pays a fixed percentage of the CNMI Medicaid costs within a fixed amount of federal funding. If CNMI Medicaid expenditures exceed the territory’s federal Medicaid cap, which was \$6.3 in FY 2017, the CNMI becomes responsible for 100 percent of Medicaid costs going forward. Moreover, the CNMI receives a relatively low fixed percentage, which is known as the Federal Assistance Percentage, or FMAP. The FMAP rate for the CNMI is and historically has been lower than most of the 50 states. The formula by which the FMAP is calculated for the 50 states is based on the average per capita income for each state’s relative to the national average. Thus, the poorer the state, the higher the federal share, or FMAP, is for the jurisdiction in a given year. However, due to the statutory restrictions on Medicaid financing for the Northern Mariana Islands, the FMAP provided the CNMI is not based on per capital income of residents, thus the territories’ FMAP does not reflect the financial need of the CNMI in the same ways that the 50 states’ financial needs if represented. Pre-PPACA, the CNMI and other territories were statutorily capped at 50 percent. In 2011, the rate increased to 55 percent FMAP and jumped again to 57.20 percent until December of 2015, and has dropped again to 55 percent FMAP. In contrast, some states receive over 80 percent FMAP.

According to the Medicaid and CHIP payment and Access Commission (MACPAC), in fiscal years 2011 thru 2017, the federal spending for Medicaid in the Northern Mariana Islands exceeded the annual funding ceiling. This spending reflects the use of the additional funds available under the PPACA. The CNMI Medicaid Office has exhausted the additional funds made available by the PPACA in April 2019. As a result of this, all healthcare for Medicaid population has been directed towards the CHCC away from private clinic providers. The CHCC Women’s and Children’s clinic has experienced an influx of patients due to this policy resulting in clinic appointment availability extending from one and half to two months out.

Private Insurance

There are several private insurance companies (StayWell, TakeCare, SelectCare, Moylan’s NetCare, Aetna) in the CNMI

that provide health insurance to the local government, other employers, and the general public, but individual health insurance plans are not guaranteed to be available to all residents. Private health insurers in the CNMI are not restricted from denying coverage due to health status or other factors.

Policies and Regulations that impact MCH Populations

Public Law 12-75 "To require the Commonwealth Health Center to provide free counseling and screening of pregnant woman in order to prevent the prenatal transmission of Human Immunodeficiency Virus (HIV) and to provide for clear authority for medical care providers to provide medical care related to the testing and counseling of sexually transmitted diseases, who request such care without parental consent."

Public Law 13-58. CNMI Health Improvement Act of 2003. For monies in the Tobacco Control Fund to implement programs and services as follows: (a) Department of Public Health for the CNMI Comprehensive State-Based Tobacco Control Program, the CNMI Chronic Disease-Diabetes Control Program, the CNMI Cancer Registry, the Breast and Cervical Cancer Program, and the Bureau of Environmental Health for the enforcement of local tobacco control regulations; (b) CNMI Office of the Attorney General for overseeing the Master Settlement Agreement and future litigation; (c) Rota Health Center and the Rota youth organization; and (d) Tinian Health Center and the Tinian youth organization.

Public Law 15-50. The Vital Statistics Act of 2006. To adopt the "Model State Vital Statistics Act and Regulation Revision" as recommended by the National Center for Health and Statistics and the Centers of Disease Control to establish a uniform system for handling records that satisfy legal requirements as well as meet statistical and research needs at local, state, and national levels.

^[i] Deposa, M. (2014). Off-island Medical Referral on the Rise in CNMI. Saipan Tribune. Retrieved on August 26, 2018 from <http://www.pireport.org/articles/2014/01/09/island-medical-referral-cases-rise-cnmi>

^[ii] Office of the Governor, Commonwealth of the Northern Mariana Islands. (2008). Economic Impact of Federal Laws on the Commonwealth of the Northern Mariana Islands. Retrieved on August 26, 2018 from https://marianaslabor.net/news/economic_impact.pdf

^[iii] State-Level Unemployment and the Utilization of Preventive Medical Services, Nathan Tefft and Andrew Kageleiry. *Health Services Research*. Article first published online: 16 JUL 2013 | DOI: 10.1111/1475-6773.12091

III.C. Needs Assessment

FY 2020 Application/FY 2018 Annual Report Update

Annual Needs Assessment Update

Process

MCH continues to collect and analyze data through the various programs under the CNMI MCHB, CHCC hospital, CNMI Health and Vital Statistics Office, and other partners such as the CNMI Public School System and WIC.

Active participation in community events and partner meetings allows the program to interact with stakeholders and gather valuable qualitative information that is used to further guide program activities.

In addition, membership on local groups and committees such as the Disability Network Providers (DNP), Early Intervention Services Program's Interagency Coordinating Council, and the Head Start Advisory Council (HSAC) provides MCH the opportunity to network with agency partners for obtaining updates on annual plans, objectives, needs, and any emerging issues occurring through partner programs.

MCH conducts a monthly review on Health & Vital Statistics Data, periodic review of hospital admissions data, and conducts chart reviews to help inform ongoing needs assessment processes.

Work was initiated to develop an MCH jurisdictional survey to assist the CNMI, and other US territories, on reporting of national performance measures and other MCH indicators necessary for MCH outcomes. This survey will be implemented in the CNMI in 2020.

MCH Population Needs

Perinatal/Infant Health- Breastfeeding

While breastfeeding initiation rates in the CNMI of 95.8 percent is higher than US national rate of 83.2 percent^[1], its 6 months breastfeeding rate (38 percent) trails behind the US average of 57.6 percent. A review of data on CNMI infants breastfed indicates that 54 percent of infants are breastfed at 3 months, 38 percent at 6 months of age, and 23 percent at 12 months. And while there was a 3 percent increase in the number of infants who are reported to be breastfed at 3 months, there were decreases in percentages of infants breastfed at 6 and 12 months of age. High breastfeeding initiation rates indicates that a vast majority of mothers in the CNMI want to breastfeed and start out doing so. However, despite the recommendations for exclusive breastfeeding through 6 months, only a little over 50 percent of infants are being breastfed by 3 months of age and by 6 months, less than 40 percent are breastfed.

Many factors contribute to success in continued breastfeeding and support to breastfeeding moms is critical. Having to return to work is one factor and women typically return to work before a baby is 3 months of age. Little is known about the types and level of breastfeeding support provided by local employers. The WIC program is the only program in the CNMI that provides peer counseling services dedicated to supporting moms in breastfeeding. Unfortunately, peer breastfeeding counseling services are not available before 7:30am, after 4:30 pm, and on weekends.

Child Health- Obesity

According to the World Health Organization, childhood obesity is associated with a greater likelihood of premature death and disability in adulthood. The most significant health consequences of childhood overweight or obesity, that often do not become apparent until adulthood are: cardiovascular diseases, diabetes, musculoskeletal disorders, and certain cancers^[iii].

Review of available data on overweight and obesity rates in the CNMI illustrates a steady increase in the number of young children and teens who are reported to be overweight or obese.

In 2018, 395 (22.89 percent) of young children ages 2 to 5 years old enrolled in the CNMI WIC program out of a total of 1,726 were reported to have Body Mass Index (BMI) levels between the 84.9 and 94.9 percentiles. This number of children enrolled in WIC identified as overweight has gradually increased since 2016, where a little over 18 percent (329 out of 1,764 children) were reported to be overweight.

In 2018, 10.25 percent (122) of a total of 1,726 children ages 2 to 5 years enrolled in WIC were reported to be obese with BMI levels at the 95th percentile or higher. The number of children enrolled in WIC identified as obese has also gradually increased since 2016 (8.45 percent).

The CNMI has also seen a steady increase in the number of teens reporting to be overweight or obese on the Youth Risk Behavior Survey (YRBS). A review of the 10-year trends on data available through the CNMI YRBS, both the number of middle school and high school students who reported to be overweight or obese had increased by almost 10 percent since 2007.

The burden of non-communicable diseases in the Northern Mariana Islands and its impact on the overall quality of life of many families in our communities in the addition to the continued rise in overweight and obesity among children demonstrates the significance for interventions and programs to address this need/issue.

Emergency Preparedness for MCH Population

In October of 2018, the Northern Mariana Islands was again struck with a major super typhoon, this time categorized as the strongest storm to have hit any part of the United States since 1935. Yutu was a category five (5) super typhoon with wind speeds reported upwards of 180 miles per hour. The resulting damage was reported to have been more severe than what was experienced just three (3) years prior during typhoon Soudelor with two (2) fatalities and dozens of injuries reported. An emerging need that has been identified is prioritizing the development and implementation of a disaster response plan that specifically addresses the needs of Women, Children, including children with special healthcare needs during emergencies. The MCH program will need to develop protocol and identify processes in order to effectively integrate a plan for addressing MCH population group priorities within the overall Northern Mariana Islands emergency preparedness plan in addition to addressing the needs of staff members affected by disasters. Focus areas will include: Reproductive Health, Access to Contraception, Pregnancy Estimation Tools, Communication Capacity, Psychosocial Effects of Disasters, Data Collection during Emergencies, Safe Sleep, Infant & Young Child Feeding, etc.

Title V Program Capacity

Organizational Structure & Leadership

The Title V Block Grant is administered within the Division of Public Health of the Commonwealth Healthcare

Corporation (CHCC). The CHCC has a Governor-appointed Board of Directors and in that way is part of the central government of the CNMI.

The CHCC is the operator of the Commonwealth's healthcare system and the primary provider of healthcare and related public health services in the CNMI, including management of federal health related grants. The Chief Executive Officer of CHCC is the authorized representative for the MCH Program. The Public Health Medical Director also provides oversight to the program. There are three divisions under the corporation: 1) Public Health - provides preventive and community health programs of which many are federally funded; 2) Community Guidance Center; and 3) Hospital. The following are senior leadership positions: Ms. Esther Muna, Chief Executive Officer; Ms. Margarita Torres-Aldan, Director of Public Health Services; and Dr. Ngoc-Phuong Luu, Medical Director of Public Health.

The Division of Public Health provides management oversight to the Maternal and Child Health Bureau. The Title V Block Grant is administered through the MCH Bureau, which was formed in 2014. The MCH Program is one of the six programs under the Maternal Child Health Bureau along with Family Planning, HRSA and CDC funded Universal Newborn Hearing Screening/Early Hearing Detection and Intervention Programs, Public Health Dental Clinic, H.O.M.E. Visiting, and State System Development Initiative. The Administrator of the MCH Bureau also serves as the MCH Program Coordinator.

All MCH services are provided at the Tinian and Rota Health Centers either directly or through Resident Directors or rotating physicians.

Agency Capacity

The MCH Program through its partnership with the CHCC Women and Children's Clinic and the Community Guidance Center provide primary and preventive health services to the community. Services include medical, dental, mental health, substance abuse counseling, women's health, nutrition counseling, and family planning. Collaboration with other Public Health programs and community partners make it possible to bring health services out into the community. This work is supplemented by enabling services including outreach, case management, educational materials, and transportation for MCH target populations. The MCH Program has strong collaborative relationships with key physician providers for the MCH populations. The Chief Obstetrician/Gynecologist, Chief Pediatrician, Family Planning Medical Director, Chief Dentist, and Public Health Medical Director all guide and support the program.

MCH Workforce Development and Capacity

Medical Director of Public Health/ Epidemiologist: Ngoc-Phuong Luu, MD, MHS joined the Division of Public Health in 2016. She graduated from the University of Washington School of Medicine in 2010 and completed a Master's in Health Sciences with a focus on Clinical Epidemiology from Johns Hopkins University Bloomberg School of Public Health in 2015. Her position is supported by CNMI state funding. Dr. Luu provides assistance to the CNMI Title V MCH program by assisting with reviewing data collection processes and data analysis.

MCH Program Coordinator/MCH Bureau Administrator: Heather Santos Pangelinan, assumed the role as MCH Program Coordinator and MCH Bureau Administrator in August of 2016. As Administrator, she works closely with the several MCHB Program/Project Coordinators to manage the programs under MCHB. Mrs. Pangelinan has a MS in Counseling from Grand Canyon University and started in MCHB as the Data Specialist

for the MIECHV Home Visiting program. She later served as the CNMI Early Childhood Comprehensive Systems program coordinator. Mrs. Pangelinan has been with the Division of Public Health Services since 2014.

SSDI Project Coordinator: Richard R. Sablan graduated from California State University San Bernardino with a BS in Health Science, with emphasis in Public Health Education. Related coursework completed included: Statistics for the Health Sciences, Research Methodology in Health Science and Health Program Planning, Implementation and Evaluation. The SSDI Project Coordinator is responsible for managing and improving MCH data collection, analysis, and reporting. The incumbent in this position works closely with the Public Health Medical Director/MCH Epidemiologist.

MCH Services Coordinator: Tony Yarobwemal holds a BS in Education. Prior to his role as MCH Services Coordinator, Mr. Yarobwemal was the Health, Nutrition and Mental Health Manager for the CNMI PSS Head Start Program. As MCH Services Coordinator, Mr. Yarobwemal is responsible to managing referrals to the MCHB, including conducting risk and other needed assessments to be able to assist women, children, and families access health services.

Child Health Coordinator/CSHCN Project Director: Danielle Youn Jung Su holds a Master's of Science in Education in Rehabilitation Counseling and a Bachelor of Art's degree in English Language Arts, both from Hunter College of City University of New York. As the Child Health Coordinator, her work focus on development, coordination, implementation and evaluation of children, including children and youth with special health care needs programs and related activities.

Partnerships, Collaboration, and Coordination

The CNMI Public School System continues to be a major partner for strategies and activities targeting children ages zero through 17 years. The PSS Early Intervention Services Program and the Early Head Start program serve children from birth through 3 years. PSS serves children ages 3 through 5 years in Head Start programs and children ages 6 through 17 years are enrolled in PSS K through 12th grade programs. The CNMI Division of Public Health Services has formal MOUs with the PSS to collaborate on programs serving children enrolled throughout the system. MCHB collaborates with PSS to offer school based oral health services for children enrolled in Early Head Start, Head Start, and elementary school. Other initiatives that MCHB has partnered with PSS are: Developmental Screenings, Bullying Prevention, Teen Pregnancy Reduction, Improving Immunization rates, Nutrition, and Physical Activity.

The Child Care Development Fund (CCDF), a program serving low income families through child care subsidies, is an additional key partner in the MCH program's work for serving children and families. MCH continues to partner with CCDF in the CNMI wide implementation of standardized developmental screening.

The MCH and WIC Programs have worked collaboratively for many years to improve breastfeeding rates, lower childhood obesity rates, and increase access to prenatal care.

The Disability Network Partners (DNP) consists of programs that provide services to individuals with special healthcare needs and their families. The Northern Marianas College's University Centers of Excellence in Developmental Disabilities, CNMI Office of Vocational Rehabilitation, and Developmental Disabilities Council are

the agencies that form that core group of the DNP. Other partners involved in the DNP include the Northern Marianas Protection and Advocacy Systems Inc. (NMPASI), Public School System SPED, Center for Living Independently (CLI), and the MCH Bureau. The DNP meet on a quarterly basis and work on projects such as the CNMI Disability Resource Directory, Annual Transition Conferences, etc.

The CNMI Department of Public Safety and the Division of Fire and Emergency Services are also key partners in promoting the health and safety of the MCH population. MCH partners with the Department of Public Safety on child passenger safety initiatives, which include workforce capacity building that enable child passenger safety technician certification for MCH Bureau staff.

Partnership with programs under the umbrella of the Division of Public Health also help to strengthen efforts of the MCH program. MCH works closely with the CNMI Immunization Program in increasing community awareness on the importance of vaccines and in increasing access to immunizations through collaborations on community outreach events. Collaboration with the NCD Bureau Breast and Cervical Cancer Screening Program positively contributes in the MCH program's efforts for increasing preventive screening rates among women in the CNMI. Other collaborative efforts include Diabetes, Cancer, Tobacco Control and other chronic disease prevention and health promotion.

The program coordinates with the Health & Vital Statistics Office, CHCC IT Department, CHCC Medical Records Department, and Medicaid Office on initiatives involving access and improving quality of population based data.

^[1] Centers for Disease Control and Prevention. (2018). Breastfeeding Report Card.

^[2] World Health Organization. (2019). Global Strategy on Diet, Physical Activity and Health. Retrieved on June 19, 2019 from https://www.who.int/dietphysicalactivity/childhood_consequences/en/

FY 2019 Application/FY 2017 Annual Report Update

Annual Needs Assessment Update

Process

MCH continues to collect and analyze data through the various programs under the CNMI MCHB, CHCC hospital, CNMI Health and Vital Statistics Office, and other partners such as the CNMI Public School System and WIC. MCH works with members of the MCH Needs Assessment Steering Committee to assess the impact of strategies implemented towards addressing the priority needs of the populations served. Focus groups with key stakeholders and interviews with medical providers are also conducted to gather information in assessing the needs of the MCH populations.

Active participation in community events and partner meetings allows the program to interact with stakeholders and gather valuable qualitative information that is used to further guide program activities.

In addition, membership on local groups and committees such as the Disability Network Providers (DNP), Early Intervention Services Program's Interagency Coordinating Council, and the Head Start Advisory Council (HSAC) provides MCH the opportunity to network with agency partners for obtaining updates on annual plans, objectives, needs, and any emerging issues occurring through partner programs.

MCH periodically analyzes Health & Vital Statistics Data, hospital admissions data, and conducts chart reviews to help inform ongoing needs assessment processes. The program conducts quarterly reviews of data on insurance coverage rates among those with live births, prenatal care rates, teen pregnancy rates, and other perinatal health indicators.

In 2017, the SSDI Project received approval on a five year grant cycle to support MCH data collection and capacity building. Work to develop a Maternal and Child Health survey for the CNMI began late in 2017 and efforts to finalize a survey tool is currently ongoing. Development of the survey is being conducted by NORC at the University of Chicago in partnership with local SSDI and MCH programs. Implementation of the survey will assist the CNMI Title V programs in collecting needed information to assess progress towards goals. The survey will address challenges around data collection and will allow for prepopulating of National Outcome Measures and National Performance Measures on annual reporting.

MCH Population Needs

Review of pap exam rates indicates a decrease in the number of cervical cancer screening between 2016 and 2017. Provider turnover and female population preference in receiving care from female providers may be contributing factors. Both in discussion with Women's Clinic providers and review of pap exam data, female providers at CHCC see more patients and conduct more pap exams compared to their male counterparts. In 2017, two female providers from the CHCC Women's Clinic relocated to the US. In addition to provider turnover, insecurity around visa status for majority of the nursing workforce continues to be a challenge for the CNMI health system. A decrease in the number of nurses employed in the CNMI will dramatically impact the level and amount of preventive services available to the population. Efforts are currently being made at the national level on the passage of legislation that would improve job security to our healthcare workforce.

Recent changes to the availability of flights to and from the Northern Mariana Islands has been a cause for alarm. According to CHCC Pediatricians, the limited flight availability puts critically ill patients at risk, including infants and children with special healthcare needs that require medical attention through off-island specialty care. Pediatric patients under the CNMI's Medicaid program often fly to Rady's Children's Hospital in San Diego, California for treatment having to undertake a three-leg journey with stops in Guam and Honolulu. With the recent reduction in number of available flights, patients are now encountering an extra 24 hour layover on Guam. For patients, including infants, who cannot breathe on their own and have to be manually ventilated, the present situation presents imminent risk.

As part of continuous efforts to assess the needs of the MCH population, the program conducted surveys throughout

the community during Women's Health Month in May. The purpose of the surveys was to engage the community in identifying healthcare priorities across the five MCH health domains. A total of 339 surveys were completed at seven different village locations during Women's Health Month. Seventy two percent of survey respondents were women, in which 34.7 percent reported being uninsured and 31.2 percent indicated having Medicaid insurance. Information gathered from respondents who participating in the health priority survey indicated that preventive screenings and health insurance remain top priorities for the Maternal/Women's Health domain. Quality education and child care services were identified within the top three selected for both the Child Health and CSHCN domains. Access to specialists and health insurance were also indicated as health priority areas for CSHCN. Top three adolescent health priorities included increasing healthy eating, increasing physical activity and bullying prevention.

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SSDI Project Coordinator: Richard R. Sablan graduated from California State University San Bernardino with a BS in Health Science, with emphasis in Public Health Education. Related coursework completed included: Statistics for the Health Sciences, Research Methodology in Health Science and Health Program Planning, Implementation and Evaluation. Mr. Sablan was the former Safety Officer for the Mayor of Saipan and a retired member of the United States Marine Corps. Mr. Sablan has over 10 years of experience in managing Safety and Health programs. The SSDI Project Coordinator is responsible for managing and improving MCH data collection, analysis, and reporting. The incumbent in this position works closely with the Public Health Medical Director/MCH Epi.

MCH Services Coordinator: Tony Yarobwemal holds a BS in Education. Prior to his role as MCH Services Coordinator, Mr. Yarobwemal was the Health, Nutrition and Mental Health Manager for the CNMI PSS Head Start Program. As MCH Services Coordinator, Mr. Yarobwemal is responsible to managing referrals to the MCHB, including conducting risk and other needed assessments to be able to assist women, children, and families access health services.

Children with Special Health Care Needs Coordinator: Ann Marie Satur administers all activities for CSHCN. She attended Old Dominion University in Norfolk, VA from 2007-2009. Ms. Satur has been working with CHCC since 2011 as an Early Intervention Services Coordinator. The CSHCN Coordinator is responsible for overseeing the implementation of strategies and activities identified under the CSHCN domain of the CNMI Title V State Action Plan.

Partnerships, Collaboration, and Coordination

The CNMI Public School System continues to be a major partner for strategies and activities targeting children ages zero through 17 years. The PSS Early Intervention Services Program and the Early Head Start program serve children from birth through 3 years. PSS serves children ages 3 through 5 years in Head Start programs and children ages 6 through 17 years are enrolled in PSS K through 12th grade programs. The CNMI Division of Public Health Services has formal MOUs with the PSS to collaborate on programs serving children enrolled throughout the system. MCHB collaborates with PSS to offer school based oral health services for children enrolled in Early Head Start, Head Start, and elementary school. Other initiatives that MCHB has partnered with PSS are: Developmental Screenings, Bullying Prevention, Teen Pregnancy Reduction, Improving Immunization rates, Nutrition, and Physical Activity.

The Child Care Development Fund (CCDF), a program serving low income families through child care subsidies, is an additional key partner in the MCH program's work for serving children and families. MCH continues to partner with CCDF in the CNMI wide implementation of standardized developmental screening.

The MCH Program works with the Kagman Community Health Center FQHC to improve accessibility and expand primary care services for low-income and vulnerable populations.

The MCH and WIC Programs have worked collaboratively for many years to improve breastfeeding rates, lower childhood obesity rates, and more recently in the implementation of the Centering Pregnancy prenatal care model.

The Disability Network Partners (DNP) consists of programs that provide services to individuals with special healthcare needs and their families. The Northern Marianas College's University Centers of Excellence in Developmental Disabilities, CNMI Office of Vocational Rehabilitation, and Developmental Disabilities Council are the agencies that form that core group of the DNP. Other partners involved in the DNP include the Northern Marianas Protection and Advocacy Systems Inc. (NMPASI), Public School System SPED, Center for Living Independently (CLI), and the MCH Bureau. The DNP meet on a quarterly basis and work on projects such as the CNMI Disability Resource Directory, Annual Transition Conferences, etc.

The CNMI Department of Public Safety and the Division of Fire and Emergency Services are also key partners in

promoting the health and safety of the MCH population. MCH partners with the Department of Public Safety on child passenger safety initiatives, which include workforce capacity building that enable child passenger safety technician certification for MCH Bureau staff.

Partnership with programs under the umbrella of the Division of Public Health also help to strengthen efforts of the MCH program. MCH works closely with the CNMI Immunization Program in increasing community awareness on the importance of vaccines and in increasing access to immunizations through collaborations on community outreach events. MCH works with the NCD Bureau on Let's Move Marianas Initiatives for increasing physical activity and improving nutrition among the CNMI's Youth. Collaboration with the NCD Bureau Breast and Cervical Cancer Screening Program positively contributes in the MCH program's efforts for increasing preventive screening rates among women in the CNMI. Other collaborative efforts includes Diabetes, Cancer, Tobacco Control and other chronic disease prevention and health promotion.

The program coordinates with the Health & Vital Statistics Office, CHCC IT Department, CHCC Medical Records Department, and Medicaid Office on initiatives involving access and improving quality of population based data.

FY 2018 Application/FY 2016 Annual Report Update

Annual Needs Assessment Update

II.B.1 Process

MCH continues to collect and analyze data through the various programs under the CNMI MCHB, CHCC hospital, CNMI Health and Vital Statistics Office, and other partners such as the CNMI Public School System and WIC. MCH continues to work with members of the MCH Needs Assessment Steering Committee to assess the impact of strategies implemented towards addressing the priority needs of the populations served. Focus groups with key stakeholders and interviews with medical providers are also conducted to gather information in assessing the needs of the MCH populations.

Active participation in community events such as the Behavioral Health Summit, Annual Women's Summit, Comprehensive Cancer Control Program (CCCP) Public Forum, and public hearings for programs or services related to the MCH populations allows the program to interact with stakeholders and gather valuable qualitative information that is used to further guide program activities.

In addition, membership on local groups and committees such as the Disability Network Providers (DNP), Early Intervention Services Program's Interagency Coordinating Council, and the Head Start Advisory Council (HSAC) provides MCH the opportunity to network with agency partners for obtaining updates on annual plans, objectives, needs, and any emerging issues occurring through partner programs.

MCH periodically analyzes Health & Vital Statistics Data, hospital admissions data, and conducts chart reviews to help inform ongoing needs assessment processes. The program conducts quarterly reviews of data on insurance coverage rates among those with live births, prenatal care rates, teen pregnancy rates, and other perinatal health indicators.

Commonwealth of the Northern Mariana Islands Non-Communicable Disease and Risk Factor Hybrid Survey Report- In 2016, the CNMI Non- Communicable Disease Bureau conducted the CNMI NCD Hybrid Survey to assess the NCD risk factors and NCD conditions, including cancer screening rates. The objective of the survey was to be able to provide informational data to the community regarding NCD and risk factor prevalence, use survey data to inform decision making, support further research on NCDs, and determine baseline data for monitoring progress in the fight against NCDs in the CNMI. Results of the survey indicated that many CNMI residents are currently suffering from various NCDs and that life style choices, such as smoking, betel nut chewing, low fruit and vegetable consumption, and being overweight/obesity contribute to this. Prevalence rates for diabetes and hypertension for adults in the CNMI are 19 and 50 percent, respectively. The report noted that the rate of NCDs among community members may be impacted by the limited amount of medical resources available in the small island territory, resulting in low prevalence of medical screenings. Priority areas identified through the survey were: 1. Reduce overweight and obesity; 2. Improve diet/nutrition and increasing physical activity; 3. Address tobacco and betel nut use; and 4. Improving screening programs among adults.

II.B.2 Findings

II.B.2.a: MCH Population Needs

Preventive Visits

In 2016, data review of visits to the Family Planning Program and the CHCC Women's Clinic indicate that just 9.5 percent of women ages 18 through 44 completed a preventive doctor's visit at CHCC. Screenings are critical in early identification, prevention, and treatment of disease. Diseases of the circulatory system, neoplasms, and diabetes are the top three causes of death for adults, even for women, in the CNMI based on Health and Vital Statistics data for the period of 2008 thru 2016. Interviews conducted with CHCC Women's Clinic providers indicate that obesity is another major health risk seen in many of the women who come to the CHCC Women's Clinic. Providers report that many of the complications seen in prenatal women are associated with obesity.

The 2016 CNMI NCD & Risk Factor Hybrid Survey indicates that for women ages 21 thru 65 years old, just 43.2 percent

reported being up to date with pap testing. This is 39 percent less as compared to US national data, as reported on the 2014 BRFSS.

Accessing early and adequate prenatal care continues to be a need for pregnant women. In 2016, just 43 percent of pregnant resident women received prenatal care during the first trimester of pregnancy. Lack of transportation, not having insurance, and no child care are top three reasons provided for not going to prenatal care appointments. Eighty four percent of individuals who responded to the NCD Hybrid Survey reported that they avoided medical care due to costs associated with a doctor's visit.

Mental/Behavioral Health Services

Services to address substance use disorders and other mental health issues are very limited in the CNMI. The CNMI has experienced an increase in the number of babies with prenatal exposure to methamphetamine. Illicit drug use, particularly methamphetamine, in the CNMI has increased in the past few years resulting in the establishment of the first Drug Court program in 2016 with the Commissioner for the Department of Public Safety proclaiming a "War on Ice" as a response to increase crime rates related to illicit drugs. Data obtained from the CNMI Office of Attorney General indicates an overall increase in the number of criminal cases filed in 2016 as compared to 2015, with a 39 percent increase in the number of drug related cases. While there are numerous efforts around substance abuse prevention, treatment services are lacking.

Adolescent Health

Teen focus groups were conducted to assess needs for the adolescent population. Teens from the islands of Tinian, Rota, and Saipan participated in the discussions coordinated through a partnership of the Public School System and MCH. Three separate sessions were held, with one session on each island. Teens reported that bullying, drugs and alcohol, and not having support at home and lack of mental health support as major issues affecting teen health. Teens also reported that increased school programs, such as presentations, preventive services being offered on campus, and increasing awareness and training for parents on teen health risks would be the best approach for improving teen health.

II.B.2.b: Title V Program Capacity

i. Organizational Structure

The MCH Program is administered within the Division of Public Health of the Commonwealth Healthcare Corporation (CHCC). The CHCC has a Governor-appointed Board of Directors and in that way is part of the central government of the CNMI.

The CHCC is the operator of the Commonwealth's healthcare system and the primary provider of healthcare and related public health services in the CNMI, including management of federal health related grants. The Chief Executive Officer of CHCC is the authorized representative for the MCH Program. The Medical Director also provides oversight to the program. There are three divisions under the corporation: 1) Public Health -- provides preventive and community health programs of which many are federally funded; 2) Community Guidance Center; and 3) Hospital. The following are senior leadership positions: Ms. Esther Muna, Chief Executive Officer; Ms. Margarita Torres-Aldan, Director of Public Health Services; and Dr. Ngoc-Phuong Luu, Medical Director of Public Health.

The Division of Public Health is responsible for administering the Title V MCH Program. The MCH Program is situated within Maternal Child Health Bureau, which was formed in 2014. The MCH Program is one of the six programs under the Maternal Child Health Bureau along with Family Planning, HRSA and CDC funded Universal Newborn Hearing Screening/Early Hearing Detection and Intervention Programs, Public Health Dental Clinic, H.O.M.E. Visiting, and State System Development Initiative. The Administrator of the MCH Bureau also serves as the MCH Program Coordinator.

All MCH services are provided at the Tinian and Rota Health Centers either directly or through Resident Directors or rotating physicians. As a result of the 2015 MCH Needs Assessment, the MCH program and CHCC leadership had developed plans to open a health clinic in one of the southern villages on the island of Saipan. However, due to MCH program staff turnover and a delay in locating a suitable clinic facility space, the opening of the southern health clinic has

been delayed. The MCH program continues to work with the CHCC management towards identifying a suitable location to eventually implement a health clinic on the southern part of Saipan.

ii. Agency Capacity

The MCH Program through its partnership with the CHCC Women and Children's Clinic and the Community Guidance Center provide primary and preventive health services to the community. Services include medical, dental, mental health, substance abuse counseling, women's health, nutrition counseling, and family planning. Collaboration with other Public Health programs and community partners make it possible to bring health services out into the community. This work is supplemented by enabling services including outreach, case management, educational materials, and transportation for MCH target populations. The MCH Program has strong collaborative relationships with key physician providers for the MCH populations. The Chief Obstetrician/Gynecologist, Chief Pediatrician, Head Emergency Room Physician, and Public Health Medical Director, all guide and support the program.

iii. MCH Workforce Development and Capacity

OB/GYN Physician/MCHB Epidemiologist: Jeanolivia Grant, MD, graduated from Thomas Jefferson University Medical School and completed her residency at Temple University in Philadelphia. She completed her master's degree in Public Health from the University of North Texas in Epidemiology. She is the Department Chair for the CHCC OB/GYN unit and provides clinical services as well as input and assistance to the preventive programs at the Division of Public Health Services. She maintained a .3 FTE as the MCHB Title V Epidemiologist. Dr. Grant is no longer with CHCC as of November 2016.

Medical Director of Public Health/ Epidemiologist: Ngoc- Phuong Luu, MD, joined the Division of Public Health in 2016. She graduated from the University Of Washington School Of Medicine in 2010 and completed a Master's in Health Sciences with a focus on Clinical Epidemiology from the John Hopkins University Bloomberg School of Public Health in 2015. Her position is supported by CNMI state funding. Dr. Luu provides assistance to the CNMI Title V MCH program by assisting with reviewing data collection processes and data analysis.

MCH Program Coordinator/MCH Bureau Administrator: Heather Santos Pangelinan, assumed the role as MCH Program Coordinator and MCH Bureau Administrator in August of 2016. Mrs. Pangelinan graduated in 2006 with a BA in Social Sciences from Boise State University and started in MCHB as the Data Specialist for the MIECHV Home Visiting program. She later served as the CNMI Early Childhood Comprehensive Systems program coordinator. Mrs. Pangelinan has been with the Division of Public Health Services since 2014.

SSDI Project Coordinator/MCHB Data Analyst: Shawnalei Ogumoro graduated from Eastern Oregon University with a BS in Anthropology/Sociology, with emphasis in Anthropology in 2008. Ms. Ogumoro left the SSDI program in February of 2017. Mrs. Heather Pangelinan, MCHB Administrator, is serving as SSDI Project Coordinator until a replacement is hired.

MCH Services Coordinator: Tony Yarobwemal holds a BS in Education. Prior to his role as MCH Services Coordinator, Mr. Yarobwemal was the Health, Nutrition and Mental Health Manager for the CNMI PSS Head Start Program.

Children with Special Health Care Needs Coordinator: Ann Marie Satur administers all activities for CSHCN. She attended Old Dominion University in Norfolk, VA from 2007-2009. Ms. Satur has been working with CHCC since 2011 as an Early Intervention Services Coordinator.

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

The CNMI Public School System continues to be a major partner for strategies and activities targeting children ages zero through 17 years. The PSS Early Intervention Services Program and the Early Head Start program serve children from birth through 3 years. PSS serves children ages 3 through 5 years in Head Start programs and children ages 6 through 17 years are enrolled in PSS K through 12th grade programs. The CNMI Division of Public Health Services has formal MOUs with the PSS to collaborate on programs serving children enrolled throughout the system. MCHB collaborates with PSS to offer school based oral health services for children enrolled in Early Head Start, Head Start, and elementary school. Other initiatives that MCHB has partnered with PSS are: Developmental Screenings, Bullying Prevention, Teen

Pregnancy Reduction, Improving Immunization rates, Nutrition, and Physical Activity.

The Child Care Development Fund (CCDF), a program serving low income families through child care subsidies, is an additional key partner in the MCH program's work for serving children and families. MCH continues to partner with CCDF in the CNMI wide implementation of standardized developmental screening. As of 2016, 80% of CCDF approved child care sites have received training on conducting developmental screening at their sites.

The MCH Program works with the Kagman Community Health Center FQHC to improve accessibility and expand primary care services for low-income and vulnerable populations.

The MCH and WIC Programs have worked collaboratively for many years to improve breastfeeding rates, lower childhood obesity rates, and more recently in the implementation of the Centering Pregnancy prenatal care model.

Partnership with programs under the umbrella of the Division of Public Health also help to strengthen efforts of the MCH program. MCH works closely with the CNMI Immunization Program in increasing community awareness on the importance of vaccines and in increasing access to immunizations through collaborations on community outreach events. MCH works with the NCD Bureau on Let's Move Marianas Initiatives for increasing physical activity and improving nutrition among the CNMI's Youth. Collaboration with the NCD Bureau Breast and Cervical Cancer Screening Program positively contributes in the MCH program's efforts for increasing preventive screening rates among women in the CNMI. Other collaborative efforts includes Diabetes, Cancer, Tobacco Control and other chronic disease prevention and health promotion.

The program coordinates with the Health & Vital Statistics Office, CHCC IT Department, CHCC Medical Records Department, and Medicaid Office on initiatives involving access and improving quality of population based data.

FY 2017 Application/FY 2015 Annual Report Update

Needs Assessment Update

II.B.1 Process

MCH continues to collect and analyze data through the various programs under the CNMI MCHB, CHCC hospital, CNMI Health and Vital Statistics Office, as well as the CNMI Public School System and WIC. Together with the MCH Epidemiologist, MCH continues to work with members of the MCH Needs Assessment Steering Committee to assess the impact of strategies implemented towards addressing the priority needs that were selected.

II.B.2 Findings

II.B.2.a: MCH Population Needs

In 2015, the CNMI experienced what was categorized by the CNMI Joint Typhoon Center as Category 5-equivalent super typhoon. Immediately after the typhoon, the CNMI MCH Bureau, with the guidance from the Chief OB/GYN and management, reached out to families enrolled in the H.O.M.E Visiting Program, families with children with special healthcare needs, and those living in temporary shelters. In addition to providing family planning services and basic health screenings, staff offered assistance and resources (telephones, computers, etc.) for families to contact Red Cross, FEMA, and other emergency support programs and services.

The Commonwealth Healthcare Corporation (CHCC) conducted a rapid needs assessment to address immediate health needs resulting from the typhoon. The Division of Public Health Services prioritized the following based on CHCC recommendations:

- Reaching out and meeting community mental and emotional health needs
- Re-establishing existing chronic health care management practices
- Encouraging community clean-up to remove flying debris, injury hazards
- Strengthening core public health infectious disease early warning surveillance
- Promoting food and water safety and personal hygiene good practices
- Building disease response and outbreak investigation capacity
- Updating arboviral disease management standard operating procedures
- Establishing sustainable workforce capacity and capability in core public health disease surveillance and response activities to meet ongoing and future disaster pre-preparedness contingencies.

In 2015, the Program initiated steps in collaboration with the CHCC management towards establishing a Health Clinic in the southern side of the island of Saipan, an area that is underserved by both public and private health clinics. MCH has been working with the CHCC Hospital Division to coordinate clinic services at the proposed site that is scheduled for opening by the end of 2016.

Women's/Maternal Health

Preventive screening rates and prenatal care rates have always been areas of concern for the CNMI, as echoed in the 2015 Needs Assessment. In 2015, the percentage of infants born to mothers who received prenatal care beginning the first trimester of pregnancy was at 51.5 percent, this increased from the previous year and mainly due to initiatives such as the Medicaid MOU, Prenatal Care and Support Group at WIC, and frequent media advertisements being widespread throughout 2015.

Data retrieved from the CNMI HVSO indicates an increase in the percentage of women reporting cigarette smoking during the last three (3) months of pregnancy. This number has been rising steadily for the past few years; the numbers were 2.9 percent in 2014 and 3.8 percent in 2015. This increase is related to the CNMI Tobacco Cessation program losing federal funding in 2013, which resulted in decreasing community access to free cessation services such as counseling and nicotine replacement treatment.

MCHB provided outreach in 2015 that included preventive screenings for blood pressure, blood sugar, and hemoglobin levels. Data gathered indicated that 16.4% of women between the ages of 15-44 screened for iron deficiency had hemoglobin levels less than 12. In addition, analysis on data gathered from MCH outreach events indicates that there are quite a number of anemic individuals with hypertensive readings. MCH will further gather and analyze screening data to guide strategies to effectively address the health needs of the MCH population.

Perinatal/ Infant Health

The newborn bloodspot screening program was fully reinstated in 2015. While the program had remedied previous challenges that had caused program suspension, new challenges include the inability of the CHCC lab to send off blood samples to the off-island lab on a daily basis due to local Customs Division limitations.

Perinatal mortality rates in the CNMI in 2015 were 13.4 per 1,000 live births. While the 2015 rate indicates a slight

decrease from the 2014 rate of 14 per 1,000 live births, the number is still more than double the 2011 national rate of 6.26 per 1,000 live births.

The percentage of WIC mothers who reported breastfeeding their babies at six (6) months of age for 2015 was at 36.7 percent, which declined from the 2014 percentage of 47.2. MCH has prioritized strategies to increase breastfeeding rates in the CNMI.

Child Health

Immunization rates in the CNMI for 2015 were at 76.9 percent, an increase from the 2014 percentage of 73.5. MCHB will continue to work with the immunization program on increasing immunization coverage for children in the CNMI.

MCH was able to support ASQ implementation on the outlying islands of nurses at Tinian and Rota Health Centers, the only health clinics on the outlying islands of Tinian and Rota. However, the CNMI still lacks an efficient mechanism to collect and monitor screening results, rates, and referrals.

Data obtained from the Dental Clinic Sealant Program indicates that only 43 percent of third graders in the CNMI received protective sealant on at least one permanent tooth. Although this was a significant increase compared to 2014, which was reported at 15.2 percent, there is still a large percentage of the child population that are not accessing preventive dental care.

Adolescent Health

The CNMI Public School System (PSS) released its 2015 Youth Risk Behavior Survey report that indicated almost 40 percent of middle school students and 22 percent of high school students seriously considered committing suicide. In addition, almost 59 percent of middle school students and 22 percent of high school students report being bullied at school during 2015. The CNMI MCH Program will work closely with PSS to develop and implement a school-based program to address these alarming rates.

Teen pregnancy rates for 2015 were at 21.5 births out of a 1,000 for teenagers aged 15-17 years. Teen pregnancy rates have been decreasing within the past couple of years, however the numbers are still significantly higher than the national average.

Children with Special Healthcare Needs

The CNMI continues to lack a tracking system to report, track, or register a child as one with special healthcare needs. This continues to be a high priority area for MCH and discussions have been initiated with an MCH database consultant to be able to develop and implement a system.

Cross-cutting/Life Course

The number of uninsured children in the CNMI increased to 59.6 percent in 2015. MCH will collaborate with the CHCC Chair of Pediatrics, Children's Clinic, and the Labor and Delivery suite, and postpartum ward nurses to identify and refer babies and children to MCH for assistance with Medicaid application processing.

II.B.2.b: Title V Program Capacity

i. Organizational Structure

The MCH Program is administered within the Division of Public Health of the Commonwealth Healthcare Corporation (CHCC). The CHCC has a Governor-appointed Board of Directors and in that way is part of the central government of the CNMI.

The CHCC is the operator of the Commonwealth's healthcare system and the primary provider of healthcare and related public health services in the CNMI, including management of federal health related grants. The Chief Executive Officer of CHCC is the authorized representative for the MCH Program. The Medical Director also provides oversight to the program. There are three divisions under the corporation: 1) Public Health -- provides preventive and community health programs of which many are federally funded; 2) Community Guidance Center; and 3) Hospital. The following are senior leadership positions: Ms. Esther Muna, Chief Executive Officer; Ms. Margarita Torres-Aldan, Director of Public Health Services; and Dr. Phuong Luu, Medical Director for Public Health.

The Division of Public Health is responsible for administering the Title V MCH Program. The MCH Program falls under the recently formed Maternal Child Health Bureau. The MCH Program is one of the six programs under the Maternal Child Health Bureau along with Family Planning, HRSA and CDC funded Universal Newborn Hearing Screening/Early Hearing Detection and Intervention Programs, Early Childhood Comprehensive Systems, Public Health Dental Clinic, H.O.M.E. Visiting, and State System Development Initiative. The Administrator of the MCH Bureau also acts as the MCH Program Coordinator.

All MCH services are also provided at the Tinian and Rota Health Centers either directly or through Resident Directors or rotating physicians.

ii. Agency Capacity

The MCH Program through its partnership with the Hospital's Women and Children's Clinic and the Community Guidance Center provide primary and preventive health services to the community. Services include medical, dental, mental health, substance abuse counseling, women's health, nutrition counseling, and family planning. Collaboration with other Public Health programs and community partners make it possible to bring health services out into the community. This work is supplemented by enabling services including outreach, case management, educational materials, and transportation to MCH target populations. The MCH Program has strong collaborative relationships with key physician providers for the MCH populations. The Chief Obstetrician/Gynecologist, Chair Pediatrician, Head Emergency Room Physician, and Public Health Medical Director, all guide and support the program and serve on the MCH Advisory Council or CNMI Collaborative Improvement and Innovation Network (CollIN) Team.

iii. MCH Workforce Development and Capacity

OB/GYN Physician/MCHB Epidemiologist: Jeanolivia Grant, MD, graduated from Thomas Jefferson University Medical School and completed her residency at Temple University in Philadelphia. She completed her master's degree in Public Health from the University of North Texas in Epidemiology. She is the Department Chair for the CHCC OB/GYN unit and provides clinical services as well as input and assistance to the preventive programs at the Division of Public Health Services. She maintains a .3 FTE as the MCHB Title V Epidemiologist.

MCH Program Coordinator/MCH Bureau Administrator: TaAnn Temeing Kabua resigned from position as of June 10, 2016. Heather S. Pangelinan, ECCS Project Coordinator, has assumed the role of Acting MCH Program Coordinator and Acting MCH Bureau Administrator until a permanent replacement has been identified. Mrs. Pangelinan graduated in 2006 with a BA in Social Sciences from Boise State University and has been with MCHB since 2014.

SSDI Project Coordinator/MCHB Data Analyst: Shawnalei Ogomoro graduated from Eastern Oregon University with a BS in Anthropology/Sociology, with emphasis in Anthropology in 2008. Ms. Ogomoro was the former data manager for the MCH H.O.M.E Visiting Project.

MCH Services Coordinator: Tony Yarobwemal holds a BS in Education. Prior to his role as MCH Services Coordinator, Mr. Yarobwemal was the Health, Nutrition and Mental Health Manager for the CNMI PSS Head Start Program.

Children with Special Health Care Needs Coordinator: Ann Marie Satur administers all activities for CSHCN. She attended Old Dominion University in Norfolk, VA from 2007-2009. Ms. Satur has been working with CHCC since 2011 as an Early Intervention Services Coordinator.

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

Strategies to strengthen the MCH Program's capacity to promote and protect the health of the target population are: 1) work with schools to ensure children enrolled are up to date with their immunization and on nutrition and physical fitness activities; 2) work with partners during island-wide community events which will strongly emphasize lifestyle behavioral changes especially with health care practices, diet, and physical fitness; 3) establish a network linkage with other providers to inform them of health news, health alerts, awareness events, training, etc.; and 4) develop partnership with other agencies to ensure continuity of care.

PSS is an essential partner in activities relevant to early childhood state systems, services for children with special healthcare needs, and adolescent health building efforts; the coordinated school health model; work with school counselors; and school-based activities.

The MCH Program works with the HRSA 330e-funded Kagman Community Health Center to improve accessibility and expand primary care services for low-income and vulnerable populations.

The MCH and WIC Programs have worked collaboratively for many years and recent efforts include the implementation of the first Prenatal Care and Support Group which offers educational sessions and prenatal checkups to WIC participants.

Efforts to address unintended pregnancy, preconception health and preventing risky teen sexual behavior are targeted to both Family Planning and MCH activities. Currently, MCH funds support population-based activities around unintended pregnancy prevention. This unit has strong ties to the programs that work on STD/HIV.

The MCH Program also works with the Immunization Program via interdepartmental activities, such as with outreach and community wide events.

Relationships with the Non-Communicable Disease Bureau support work between MCH projects and programs such as Diabetes, Cancer, Tobacco Control and other chronic disease prevention and health promotion. The NCD Bureau has long worked with MCH to promote healthy weight among children.

The Health Vital Records Office is an established partner of the MCH Program. This long-term relationship has led to the continued assistance with MCH-specific data and resources.

The MCH Program has an established working partnership with Northern Marianas College (NMC) for training needs of both clinical and programmatic staff, conducting awareness activities in nutrition and physical activity and preventing and controlling non-communicable disease. The NMC School of Nursing and CNMI Nursing Association provide volunteers during outreach events.

Each unit manages on-going advisory groups and specific task forces that are made up of public and private partners that share concern and responsibility for addressing the needs of women, children and families. Additionally, staff participates in partnerships led by colleagues within other state, federal and community organizations.

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

II.B.1. Process

Goals and Vision:

The CNMI Maternal and Child Health (MCH) Program adopted the following Vision and Mission statements in 2013. CNMI's Vision focuses on healthy mothers, children, and families for a healthier CNMI. The Mission is to promote and improve the health and wellness of women, infants, children, including children with special health care needs, adolescents and their families through the delivery of quality prevention programs and effective partnerships.

CNMI chose a conceptual framework for the needs assessment process that uses a primary prevention and early intervention –based approach with the goal of optimizing health and well-being among the MCH population across the life course, taking into account the many factors that contribute to health outcomes. The CNMI developed this view collaboratively by discussing the overall framework with the MCH Needs Assessment Steering Committee and by subsequently building consensus for this approach with the MCH Advisory Board.

For purposes of assessment and strategic planning, the MCH population was defined as per the domains of women/maternal, perinatal/infant, children, adolescents, children with special health care needs, and cross-cutting. The overall goal of the process focused on identifying a set of definite priorities that could be acted upon at some depth so that results, even preliminary ones, would be achievable and evident in five years. Strategies employed to achieve results were to be evidence-based interventions grounded in sound public health theory or research and consistent with the mission and scope of CNMI's MCH program. A clear MCH public health role needed to exist for an issue to be considered as a potential priority. The process focused on meaningfully involving multiple state and community stakeholders/partners to enhance collaboration, while looking for opportunities to coordinate and integrate MCH efforts externally and internally across the MCH continuum.

The needs assessment served as a vital planning process for determining where best to focus CNMI's MCH efforts to implement programs, policies and systems building efforts that will measurably demonstrate impact within five years. CNMI also employed a strategic planning process to examine how these new priority areas can be incorporated into the existing MCH scope of work.

Leadership and Stakeholders:

CNMI's needs assessment process was guided by the MCH Needs Assessment Steering Committee which included the following staff members:

- TaAnn Kabua, Administrator of Maternal Child Health Bureau;
 - Shawnalei Ogomoro, SSDI Project Coordinator;
 - Allan Dela Cruz, MCH Data Analyst;
 - Jose Santos, Systems Administrator;
 - Maxine Pangelinian, Fiscal Specialist;
 - Ann Marie Satur, Early Intervention Program Service Coordinator, Children with Special Healthcare Needs Coordinator;
 - Tony Yarobwemal, MCH Services Coordinator;
 - Heather Santos, HOME Visiting Data Specialist;
 - Shiella Perez, Newborn Screener and Family Support Coordinator;
 - Agnes Ripple, Oral Health Project Coordinator and Dental Hygienist; and
 - Yuline Fitial, HOME Visiting Coordinator.
- The group was assisted by Arielle Buyum, who served as facilitator and process consultant.

With leadership from the Maternal Child Health Bureau Administrator, who is also MCH Program Coordinator, this group established the overall strategic direction and methodology for the needs assessment while providing the ongoing project management and oversight for the process.

The Steering Committee received support and counsel from the MCH Advisory Board, a group of external and internal stakeholders who serve as advisors to the Bureau. The MCH Advisory Board initially provided critical feedback regarding the overall process methodology and later participated in focus groups and/or completed the priority health issues survey. The Advisory Board reviewed CNMI's new MCH priorities prior to submission and will be reconvened after grant funding in order to identify future collaborative opportunities.

Stakeholders included representation from state MCH programs (including MCH Needs Assessment Steering Committee members), family/youth serving agencies, faith-based agencies, and other key MCH community partners such as health care providers and community-based agency staff, along with representatives from other state agencies and academic institutions. Stakeholders included representatives from public health and other governmental agencies (e.g., the CNMI Public School System and Medicaid Program), staff from community-based organizations and advocacy/interest groups (e.g., The Ayuda Network, Karidat, etc.) along with health care providers/organizations (e.g., The Kagman Community Health Center and FHP Clinic, etc.) and academic partners (Northern Marianas College).

Criteria used for selecting stakeholders included their area of expertise and workplace setting, training and experience, knowledge of public health, and their ability to conceptualize at the strategic level, while not solely advocating for a single issue. Members solicited feedback from their own constituencies/ stakeholders in between meetings which greatly expanded the reach of this effort.

Methodology:

CNMI assessed the needs of the MCH population using Title V indicators, performance measures and other quantitative and qualitative data. The Steering Committee reviewed major morbidity, mortality, health problems, gaps and disparities for the MCH population in order to identify specific needs by MCH population domain based on analysis of data trends. The cross-cutting needs were also examined. The Steering Committee spent several sessions determining data needs and gaps, and reviewing data findings.

Specifically, the Steering Committee:

- Reviewed the 2010 Needs Assessment and interim needs assessment findings and noted trends since the last assessment;
- Reviewed recent state, regional and national reports to determine possible issues/problems to be explored in the CNMI;
- Reviewed recommendations made by various task forces;
- Identified major data/indicators including trends of health status, access, health needs and health disparities to be included in the assessment for each domain; and
- Determined stakeholder and public input processes.

Quantitative methods used for assessing needs for each of the population domains included a review of various the data sources including Vital Statistics Data, US Census Data for the CNMI, Surveillance Systems and Registries, Mortality Reviews, Commonwealth Healthcare Corporation and other CNMI Agency Data and Reports, and Youth Behavior Risk Surveys. The Steering Committee developed a set of MCH indicators to guide this phase of the work. Findings were also used to populate the MCH Priority Health Issues Survey.

Qualitative methods included the use of the aforementioned survey to MCH clients, stakeholders, parents and community members. MCH received 179 completed surveys covering the six domains. Survey participants chose their top ten issues for each domain, while also identifying any important issues not reflected in the original list. Of the new issues identified, most had been considered by the Steering Committee in earlier phases of the needs assessment process. In addition, qualitative data was received from special population focus groups, such as Department of Corrections inmates, HOME Visiting families, and High School students, and a review of state plans and reports

prepared since the last needs assessment. Two special briefing reports were utilized- one the 2014 Kagman Community Health Center Needs Assessment Survey and the other on prenatal care in CNMI.

At the end of the above process, results were summarized from all activities and presented to the Steering Committee. As expected, the focus areas identified across approaches overlapped due to the impact that many of the issues exert throughout the life course. This phase concluded with the identification of 26 potential MCH priorities spanning the six domains. The Steering Committee met concerning the potential priorities identified with the goal of further refining and prioritizing the issues.

Prioritization criteria included considering potential issues in terms of the MCH role, the existence of strategies for intervention, and the ability to demonstrate outcomes/results within five years using specific indicators to measure progress. A Strengths, Weaknesses, Opportunities and Threats analysis was conducted on each identified priority. To gauge capacity, public health management and staff were asked to assess their organizational capacity to address the potential MCH priority areas. The following four components were utilized to assess capacity for each of the proposed MCH priorities.

- Structural Resources: Financial, human, and material resources; policies and protocols; and other resources needed for the performance of core functions.
- Data/Information Systems: Access to timely program and population data; supportive environment for data sharing; adequate technological resources to support the use of data in decision-making.
- Competencies/Skills: Knowledge, skills, and abilities of MCH staff.
- Organizational Relationships: Partnerships, communication channels, and other types of interactions and collaborations with public and private entities.

This phase concluded with the reduction to 13 potential MCH priorities spanning the six domains.

Next was the final prioritization process and state capacity assessment to determine the MCH priorities for FY2016-2020 and in keeping with the guiding principles of the process, the Steering Committee focused on the goal of identifying select areas for MCH investment, so that a comprehensive set of interventions could be employed at more depth to affect five-year outcomes. In addition, the chosen priorities needed to be tied to the MCH scope of influence in order to assure ultimate impact. In order to do so, the Steering Committee was charged with connecting each potential priority to a national or population-based outcome measure. To this end, the Steering Committee prepared a justification for each priority highlighting the following: MCH role; data to support the need (severity or numbers affected); effective interventions/strategies that exist to address the issue; local capacity score for the issue and specific indicators that could be used to measure success within the five-year period. Following these discussions, each issue was ranked, using a grid specifying impact and feasibility along an x and y axis. This, along with the assessment of state capacity, served as key resources for discussion in determining the final set of eight priorities.

Realizing the dynamic nature of MCH as well as the depth and breadth of issues specific to these populations, CNMI will continue to systematically assess needs during the upcoming five-year time frame. Specific work plans will be developed for each priority with goals, objectives, activities and evaluation measures that will drive state MCH activities from FY 2016-2020. As noted above, MCH resources will be allocated and/or shifted to implement the new priorities which will include ongoing evaluation.

II.B.2. Findings

II.B.2.a. MCH Population Needs

The MCH population has oscillated dramatically in the past 20 years, see Table 1 below. What looked like a sharp rise in population in 2000, especially amongst the adult women population, was a reflection of the influx of Chinese female factory workers, represented in Table 2 below, in the once booming garment industry in the CNMI. The recent 2010 Census numbers are a more accurate depiction of the current population, reflecting the close of the garment industry as well as federalization of immigration thus limiting in-migration. Table 2 also shows the reduction of the indigenous population, Chamorro and Carolinian, as a result of the recent out-migration of workers due to a worsening economy.

Table 1 MCH Population

Population	1990	2000	2010
Infants (less than 1)	824	1,297	1,138
Children (1-12)	8,372	12,701	11,124
Adolescents (13-17)	2,709	3,735	4,372
Women (15-44)	13,669	25,836	12,522

Source: U.S. Census Bureau

Table 2 CNMI Population by Ethnicity

Ethnicity	1990	2000	2010
Chamorro	12,555	14,749	12,902
Carolinian	2,348	2,652	2,461
Filipino	14,160	18,141	19,017
Chinese	2,881	15,311	3,659
Caucasian	875	1,240	1,343
Other Pacific Islanders	3,663	4,600	3,437
Other Asians	4,291	5,158	4,232
Others	2,572	7,370	6,832

Source: U.S. Census Bureau

Women/Maternal Health:

All public health clinical sites within the CNMI perform women's preventive health exams. However, the most recent CDC Behavioral Risk Factor Surveillance System (BRFSS) Survey conducting in 2009 found that the community's women were not accessing preventive care. According to the BRFSS Survey, 26.6% of adult females never had a pap test and of the 73.4% that did, 17.4% haven't had a pap test in three or more years which is greater than the US recommended standard. That trend of not accessing preventive care continues today. Last year in 2014 only 1,534 women had non-prenatal outpatient visits at the hospital.

The CNMI has a very large underserved population who are not receiving recommended annual preventive health services within the community. As in many underserved communities with a high percentage of families living below the federal poverty level, these women face many barriers to care, including:

- Unaware of health needs
- Shame or fear in seeking reproductive health services
- Access to care issues
- Uninsured status
- Transportation issues
- Childcare issues

The CNMI maternal health clinics serve as many women's first entry into medical care or their medical home. As such, the clinics recommend and provide preventive health services in accordance with nationally recognized standards of care. The MCH Program aims to improve the number of clients that follow the recommended standard of care in preventive health services through increased education and outreach efforts and collaboration with community-based

programs.

Because the preventive health clinics of the CNMI all exist within the CHCC facilities, clients can avail themselves of multiple public health screening and preventive services in one visit. In this way, the program serve as the gateway to care through partnerships with other public health programs. The MCH Program works closely with the Breast and Cervical Screening Program, Family Planning Program, Smoking Cessation Program, STD/HIV Prevention Program, and other health and social programs. Once again, clients need not make multiple appointments or visit multiple clinics to participate in these program services, thereby allowing for comprehensive and cohesive preventive health care.

An assessment of prenatal care conducted at the only hospital in the CNMI showed that almost 70% of deliveries receive inadequate prenatal care, see Table 3 below. Use of the Kotelchuck data results in a large percentage of prenatal care being labeled inadequate, solely because it starts after the fourth month. However, analysis of data using trimester prenatal care began or using percentage of expected visits attended, confirms the Kotelchuck findings. In addition, 6% of deliveries received no prenatal care at all.

Table 3 Percent of women (15- 44) with a live birth whose observed to expected prenatal visits are at least 80% on the Kotelchuck Index

	2010	2011	2012	2013
Percent:	22.5	21.1	18.3	33.0
Numerator:	241	218	207	348
Denominator:	1,072	1,033	1,129	1,055

Source: Health and Vital Records Office

MCH Program continues to strive to improve prenatal care adequacy. As part of 2015 Women's Health Month, a new initiative was started in partnership with the Women, Infant and Children (WIC) Program. The first ever Group Prenatal Care class in the CNMI was launched to allow pregnant mothers to receive their basic prenatal assessments, share informally with other women, and discuss together pregnancy and parenting. This initiative will be continued and evaluated for effectiveness in increasing prenatal care adequacy. In addition, the obstetrician member of the MCH Advisory Board has reported increased anemia among the pregnant population. As such, MCH Program plans to institute mandatory anemia screening of pregnant women.

Perinatal/Infant Health:

The perinatal mortality rate in the CNMI in 2014 was 14 per 1,000 live births, see Table 4 below. According to the National Vital Statistics Reports, the most recent national perinatal mortality rate available was 6.26 per 1,000 live births in 2011.

When this data is coupled with the 2013 low birth weight percentage of 7% of live births a scenario begins to form in which unplanned pregnancy, late access and inadequate prenatal care, and poverty play a significant role in poor birth outcomes, causing additional stressors on the family, community, the health care system and the government. The MCH Program is committed to improving prenatal care access and adequacy as stated above. Besides the Group Prenatal Care class, MCH has begun the process to open a women and children's health care center on the southern end of the island of Saipan, an area which is currently underserved by both public and private clinics. In addition, there are plans to provide services to remote villages via the mobile health van.

Table 4 Perinatal mortality rate per 1,000 live births plus fetal deaths

	2010	2011	2012	2013	2014
Rate:	9.3	8.6	10.7	12.1	14.0
Numerator:	10	9	12	13	15
Denominator:	1,080	1,043	1,122	1,074	1,075

Source: Health and Vital Records Office

The MCH Program has partnered with WIC to improve breastfeeding rates in the CNMI. Unfortunately WIC's involvement is a double edged sword; although breastfeeding support services are available through WIC so is free formula. MCH intends to initiate stronger breastfeeding support to improve the fluctuating breastfeeding utilization, see Table 5 below.

Table 5 Percent of mothers who breastfeed their infants at 6 months of age

	2010	2011	2012	2013	2014
Percent:	25.1	51.6	26.0	30.1	47.2
Numerator:	252	464	169	155	377
Denominator:	1,003	899	649	515	798

Source: WIC Program

The pediatrician member of the MCH Advisory Board has reported safe infant sleep issues in that not only are infants not placed on their back to sleep, but do not have a designated solo sleeping area. Co-sleeping is very common among the population. In assessment of the 59 HOME Visiting families, only 23.4% report that they have a designated safe sleeping area for their infant. The MCH Program intends to promote safe sleep over the next project period.

Child Health:

Immunizations are a pillar of child health care. However, the overall coverage rates of immunization in CNMI is low at 73.5% in 2014, see Table 6 below. The Immunization Program provides good coverage on vaccinations during vaccine campaigns such as the yearly flu vaccine or the HPV vaccine, but is not adequately covering the child population. CNMI MCH Program plans to improve immunizations through education and outreach and promotion of vaccinations during well baby clinic visits. Immunizations are currently available at all private clinics on island as well as at the CHCC Children's Clinic and the Immunization Program Public Health Clinic. The Public Health Clinic is open for walk-ins, thereby increasing accessibility. The recent implementation and strengthening of the Web IZ immunization surveillance system, will help improve tracking and case management of children in need of immunizations.

Table 6 Percent of children age 19 to 35 months who have received the recommended vaccinations

	2010	2011	2012	2013	2014
Percent	77.0	87.2	49.6	55.3	73.5

Source: CNMI Immunization Program

Until recently, developmental screenings had been provider dependent and no standardized tool was utilized. However, the MCH Program, through the Early Childhood Comprehensive Systems Project, has made great strides in improving developmental screening and referrals as needed. In the past two years, the percent of children screened for school readiness and achievement has increase 23%. This increase is directly related to the implementation of the Ages and Stages Questionnaire 3 (ASQ-3) developmental screening tools at Child Care and Development Fund approved daycare centers. Currently 81% of these daycare centers use the tools. In addition, this year the ASQ-3 Developmental Screening Operating Policy formalizing standardized developmental screening tool at the CHCC's Children's Clinic was signed and adopted. Children are screened during the 12-, 18-, 24-, and 36-month well-child visits and can also be administered at the parent's or provider's discretion outside of the scheduled screening times.

Adolescent Health:

The CNMI teen birth rate for 2014 was 24.1 births per 1,000 females, which is greater the national average of 14.1 in 2012^[iii], see Table 7 below.

Table 7 Rate of birth (per 1,000) for teenagers aged 15-17 years

	2010	2011	2012	2013	2014
Rate:	37.5	27.1	16.3	27.7	24.1
Numerator:	45	29	23	26	22
Denominator:	1,200	1,069	1,413	939	913

Source: Health and Vital Records Office

Teen births increase health risks to both mother and child including low birth weight, preterm birth, and death in infancy. In addition to health risks teen births set up a cycle of disadvantages. Teen mothers are less likely to finish high school and their children are more likely to have low school achievement, drop out of high school, and give birth themselves as teens. For these reason the MCH Program works closely with the CNMI Public School System (PSS) to prevent teen pregnancy. Unfortunately, in 2012 the High School-based Adolescent Clinic was closed for budget reasons as well as in 2014, the Title X Family Planning federal funding ended. MCH Bureau has continued family planning services and applied and is awaiting notification of award for funding. In addition, in 2014 discussions began with PSS to resume health services at the high schools. These discussions will continue as MCH is committed to adolescent health.

“High-risk sexual behaviors among adolescents are a significant public health concern in the United States. These behaviors account for increasing rates of premature morbidity and mortality by contributing to risk of unintended teen pregnancy, HIV/AIDS, and other sexually transmitted diseases. Complications associated with adolescents’ sexual risk behaviors may take years to manifest and may seriously compromise adolescents’ health and quality of life in adulthood. [...] Ethnically specific cultural and socioeconomic factors may influence high-risk sexual behaviors, which may, in turn, differentially increase risk for HIV/AIDS, other STDs, and unintended pregnancy among Asian and Pacific Islander adolescents.”

The rate of sexually transmitted diseases in the CNMI is soaring. Even with limited testing due to financial and laboratory constraints, the rates of Chlamydia has steadily increased over the past years with a dramatic increase in 2012 and 2013, see Table 8 below.

Table 8 Rate per 1,000 women aged 15 to 19 years with a reported case of chlamydia

	2009	2010	2011	2012	2013
Rate:	15.1	13.9	5.3	20.7	22.4
Numerator:	39	64	23	36	36
Denominator:	2,582	4,608	4,308	1,741	1,604

Source: HIV/STD Resource & Treatment Center

Reported high risk health behaviors are high among CNMI adolescents, see Table 9 below.

Table 9 Selected Results from CNMI High School Youth Risk Behavior Surveillance System

	2007	2009	2011	2013
Sexual Behavior	%	%	%	%
Ever had sexual intercourse	49.7	49.5	50.8	46.0
Had first sexual intercourse before age 13	9.8	9.5	8.6	6.9
Had four or more sexual partners in lifetime	14.7	12.1	14.5	11.9
Had sexual intercourse with one or more people during the past 3 months	34.2	33.4	34.4	29.7
Of those who have had sexual intercourse, did not use condom during last sexual intercourse	59.9	57.2	57.6	55.0
Alcohol & Other drugs				
Had at least one drink of alcohol on 1 or more of the past 30 days	41.1	38.8	41.4	33.6
Offered, sold, or given an illegal drug by someone on school property during the past 12 months	36.3	35.9	36.7	36.3

Source: Youth Behavior Risk Survey

The MCH goal is to encourage positive health behavior activity in adolescents, through comprehensive interventions at age-appropriate levels in a culturally-sensitive manner that will impact the frightening possibilities of adolescent risk behavior activity, including, but not limited to:

- unplanned pregnancy and teen birth
- sexually transmitted diseases in the adolescent and young adult population
- alcohol use, and
- drug use.

Based on the data, the need for educational and clinical services is apparent at all high schools. On-site educational and clinical services in the high school setting allow ease of access, confidentiality, and personal counseling within an environment that is neither restrictive nor intimidating. In addition, the program plans to implement a collaborative effort with PSS to introduce a health promotion into the middle schools, including sexuality and violence. Risky health behavior is occurring at a young age in the CNMI, see Table 10 below and the importance of offering education and skills prior to high school is vital to positive outcomes.

Table 10 Selected Results from CNMI Middle School Youth Risk Behavior Surveillance System

	2007	2009	2011	2013
Sexual Behaviors	%	%	%	%
Have had sexual intercourse	18.4	17.8	17.6	17.0
Have had 4 or more sexual partners	5.8	6.1	5.6	5.3
Have had sex before age 11	5.2	6.1	5.5	4.4
Of those who have had sexual intercourse, did not use a condom during the last intercourse	46.3	45.9	51.5	48.5
Alcohol & Other drugs				
Ever having a drink of alcohol	53.0	52.4	54.9	48.5
Ever having used marijuana	31.1	33.3	34.7	31.3
Violence				
Have been bullied on school property in the last year	n/a	48.8	55.5	63.7

Source: Youth Behavior Risk Survey

The selected results of the 2009 CNMI middle school YRBSS survey cited above indicate a real and immediate need to provide outreach and public health intervention services to young adolescents in the middle school setting. MCH Program energies are needed to collaborate with PSS in designing a comprehensive program to deter emotional and physical violence and bullying; abstinence and safe sexual practices promotion; addressing social pressures that influence behavior; and culturally-sensitive skills-building in communication, negotiation, and conflict-resolution techniques to the middle school student population.

Children with Special Health Care Needs:

Currently the CNMI does not have a database system to report, track or register a child as one with special health care needs. Therefore, the program does not have an accurate count to determine how many CSHCN are being seen and/or receive appropriate and timely health care case management services. As a stand in, the program tracks the percent of Supplemental Security Income beneficiaries that receive services, see Table 11 below.

Table 11 Percent of State Supplemental Security Income beneficiaries less than 16 years old receiving rehabilitative services from the CSHCN Program.

	2009	2010	2011	2012	2013
Percent:	94.9	72	50	50	70.1
Numerator:	282	203	141	141	232
Denominator:	297	282	282	282	331

Source: CSHCN Survey

The lack of a tracking system is a major shortcoming of the program. Without such a system it is difficult to measure or quantify most aspects of the reach and success of the program. Most children in the program are identified by their enrollment in PSS Early Intervention Services, when diagnosed as deaf or hard of hearing, or seen and referred by Shriners during Shriners annual visit. Currently there is no data sharing agreement with PSS Special Education, therefore the program is unaware how many children have an Individual Education Plan.

To begin tracking CSHCN, the program is creating a registration form to be filled out by the provider who recognizes a child

with a special health care need. This form will include demographics and the child's condition. Therefore besides beginning a basic count of children, this form can help the program identify where and what by type of provider CSHCN are being seen. In addition, the Program developed and implemented an Access database for CSHCN. However, there are some components that need improvement for better data collection and queries. Training on how to use the database will be needed as well.

Cross-cutting:

The Public Health Dental Clinic, under the CHCC's Division of Public Health Services, on the island of Saipan, serves the entire CNMI community of Saipan, Tinian, and Rota. It is the only public dental clinic. There are peripheral Public Health Dental Clinics on the islands of Rota and Tinian that provide limited services. Thus, the Dental Clinic on Saipan is the referral clinic for the two islands especially for the Medicaid and uninsured population. Furthermore, it is also the referral clinic for the Kagman Community Health Center which caters to vulnerable and underserved population.

The Dental Clinic, through a Memorandum of Agreement with the Head Start Program and PSS, has the only established school prevention programs in the CNMI. Although the purpose of the Fluoride Varnish and Sealant programs is to prevent dental caries among children in the CNMI, data shows that there is already a high incidence of dental caries among participating students even before entering the program, see Table 12 below. Along with the supporting data, both medical and dental care providers have noted tremendous deficiencies in the oral health status of children in the CNMI.

Table 12 Head Start Fluoride Varnish Prevention Program (1st Visit) – School Year 2014-2015

	Students Assessed	Students w/Caries	% w/Caries	Students w/ Application
Total:	377	247	66%	362

Source: Public Health Dental Clinic, Division of Public Health Services, CHCC

The prevalence of dental caries remains one of the most unmet health needs especially among young children in the CNMI. Supported by data in the Table above, 66% of students examined already have dental caries. For most of the children in Head Start, their first dental visit is through the Fluoride Varnish Program.

Impeding priorities in families' life creates challenges and barriers in seeking preventative health screenings including for oral health. Poor oral health literacy contributes to not seeking preventive oral health services as individuals may not understand the connection of good oral health in relation to their general health. The Dental Clinic has to be in the forefront of providing guidance to redefine the roles of health professionals in the delivery of oral health services.

CNMI experiences heightened oral cancer diagnoses due, in large part, to a high incidence of chewing betel nut. Data from the CNMI Cancer Registry shows that from 2007- 2014, 35 people were diagnosed with oral cancer ranging in age from 35-50 years. Betel (areca) nut chewing is often used in combination with tobacco and slaked lime (predominantly calcium hydroxide). Use of betel nut in adults is very high in the CNMI and starts at a young age. The average age for initiation of chewing betel nut is 12 years. Betel nut is sold in gas stations, grocery stores, and roadside stands and can be obtained from homegrown trees. It is easily available throughout the CNMI and there is no minimum age for purchase.[\[iv\]](#)

To better understand the unmet health needs of the target population, it is important to understand the effects of the economic downturn in the CNMI on the population as it has greatly affected the population's ability to seek health care. People are facing the very real truth of choosing to buy food for their families over seeking preventive services or paying for health insurance premiums. Therefore, the community tends to seek health care for acute situations and severe conditions only when they cannot avoid it – a process that most often leads to poor outcomes and expensive specialty care. The 2010 Census reports the CNMI uninsured at 34%; more than double the 15% of the uninsured in the US. Looking specifically at CNMI children, the numbers of insured are ever higher than the overall population of 34%, see Table 13 below.

Table 13 Insurance status of children age 1-9 years

Year	Percent without health insurance	Percent with Medicaid
2011	68.4	27.7
2012	60.6	28.5
2013	56.9	38.1
2014	50.0	49.4

Source: RPMS, CHCC

As the number of children with Medicaid has increased over the past four years, those without any health insurance coverage has decreased. However, the number uninsured still remains remarkably high at 50% of children. The same improvement in insurance status can be seen in women utilizing the CHCC for medical care, see Table 14 below. However, again the uninsured rate of 25% is well above the national average of 15%.

Table 14 Insurance status of women at CHCC

Year	Private Insurance	Medicaid	Uninsured
2008	24%	27%	49%
2013	20%	55%	25%

Source: RPMS, CHCC

Medicaid Expansion as part of the Affordable Care Act (ACA) accounts for much of the increase in coverage. However in August 2014, the Department of Health and Human Services determined that the ACA does not apply to the US territories including the CNMI. Therefore, at this time the CNMI does not know if Medicaid will be able to continue expanding services past 2019 when the first round of ACA funding will expire. This uncertainty means the program must be prepared to return to an uninsured rate of almost 70% of children as it had in 2011.

[i] CNMI Department of Commerce, Division of Central Statistics, BRFSS Report, 2009.

[ii] Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report, Vital Signs: Births to Teens Aged 15-17 Years- US, 1991-2012, Vol. 63; 14.

[iii] Sasaki and Kameoka, Ethnic Variations in Prevalence of High-Risk Sexual Behaviors Among Asian and Pacific Islander Adolescents in Hawaii, American Journal of Public Health, October 2009, Vol. 99;10.

[iv] Comprehensive Cancer Control Plan for the CNMI, 2007-2012, page 28. Saipan: 2007.

II.B.2.b Title V Program Capacity

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

The MCH Program is administered within the Division of Public Health of the Commonwealth Healthcare Corporation (CHCC). In 2012, Public Law 16-51 dissolved the Department of Public Health and created the CHCC. The CHCC is a semi-autonomous, quasi-governmental corporation. As such, it has a Governor-appointed Board of Directors and in that way is part of the central government of the CNMI. The CNMI is self-governing with locally elected Governor, Lieutenant Governor, and Legislature.

The CHCC is the operator of the Commonwealth's healthcare system and the primary provider of healthcare and related public health services in the CNMI, including management of federal health related grants. The Chief Executive Officer of CHCC is the authorized representative for the MCH Program. The Medical Director also provides oversight to the program.

There are three divisions under the corporation: 1) Public Health -- provides preventive and community health programs of which many are federally funded; 2) Community Guidance Center; and 3) Hospital. The following are senior leadership positions: Ms. Esther Muna, Chief Executive Officer; Ms. Margarita Torres-Aldan, Director of Public Health Services; and Dr. Daniel Lamar, Medical Director for Public Health.

The Division of Public Health is responsible for administering the Title V MCH Program. The MCH Program falls under the recently formed Maternal Child Health Bureau. The MCH Program is one of the six programs under the Maternal Child Health Bureau along with Family Planning, HRSA and CDC funded Universal Newborn Hearing Screening/Early Hearing Detection and Intervention Programs, Early Childhood Comprehensive Systems, Oral Workforce- Teeth for Health- Project, H.O.M.E. Visiting, and State System Development Initiative. The Administrator of the MCH Bureau also acts as the MCH Program Coordinator. The development of the MCH Bureau has been a positive asset in that it has improved coordination and collaboration among the programs.

All MCH services are also provided at the Tinian and Rota Health Centers either directly or through rotating visits. A Resident Director oversees services provided in Rota and Tinian. Two H.O.M.E. Visiting staff are placed on these islands. Please see the attached Organizational Chart for other programs within the Division of Public Health.

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

The MCH Program through its partnership with the Hospital's Women and Children's Clinic and the Community Guidance Center provide primary and preventive health services to the community. Services include medical, dental, mental health, substance abuse counseling, women's health, nutrition counseling, and family planning. Collaboration with other Public Health programs and community partners makes it possible to bring health services out into the community. This work is supplemented by enabling services including outreach, case management, educational materials, and transportation to MCH target populations. The strategy is to work with the community and empower the community with tools and information to make informed decisions to live healthier lifestyles. The MCH Program has strong collaborative relationships with key physician providers for the MCH populations. Dr. Grant, an Obstetrician/Gynecologist; Dr. Steadman, a Pediatrician; Dr. Rohringer, an Emergency Room Physician; and Dr. Lamar, the Public Health Medical Director, all guide and support the program and serve on the MCH Advisory Council or CNMI Collaborative Improvement and Innovation Network (CollIN) Team. Below is a description of capacity by domain.

Women/Maternal Health:

Prenatal care is provided at the Women's Clinic located at the CHCC, and Rota and Tinian Health Center. The first prenatal visit involves an intake/interview by a nurse, physical exam (Pap test), blood work, counseling, and HIV testing. The revisit exams include monitoring the baby's growth and development, monitoring the mother's health, nutritional counseling and education. There are four OB/GYNs at the Women's Clinic for referrals of high risk cases such as diabetes and hypertension. Increasing the percentage of women receiving adequate prenatal care visits, especially during first trimester, continues to be a focus for the Division.

Postpartum clinic provides assessment of maternal and fetal health after delivery as well as family planning counseling and contraceptives. Mothers are provided with hematocrit screening, blood pressure and weight check, and physical examination. Mothers are counseled on family planning methods and those who decide on using a family planning method are given their choice of contraceptives also at no cost. Family planning services are provided every day for scheduled appointments and walk-ins.

The HIV/STD Resource and Treatment Center provides counseling, partner identification and notification, treatment, and case management. Some goals of the program include community testing and mass media campaigns emphasizing behavioral change.

Breast cancer and cervical cancer screening exams such as pap smears, clinical breast exams, and mammograms are provided to women over 40 years of age at no cost to women that meet the Program's criteria. Eligibility assistance and transportation is provided to clients; transportation includes air fare to clients from Rota and Tinian for mammograms. In addition, the program conducts outreach presentations on early detection and prevention including risk factors. Supplemental activities include expanded outreach activities with partners such as MCH during awareness months.

Comprehensive Women's Health and Gynecological services are provided at the Women's Clinic and Rota and Tinian Health Centers. The referral clinic for complicated cases is the CHCC's Women's Clinic. Health screenings such as blood sugar, blood pressure, weight, etc. is provided daily. This is also conducted during community events.

Perinatal/Infant Health and Child Health:

Perinatal health is also described above in Women/Maternal Health prenatal care.

Newborn assessments completed include physical examinations, monitoring of weight gain, and cord care. Breastfeeding is also discussed and education for proper technique or identified issues is completed.

Well Baby/Child exams are provided at the Children's Clinic. Services provided include immunization, health education and counseling including nutrition, injury prevention, safety, assessment and monitoring for growth and development and other underlying health problems, and physical examinations. Referrals for dental care, hearing screening, early intervention services, specialty clinics, and home visits are made based on assessment findings. The promotion of breastfeeding is actively done during these visits.

The Immunization Program ensures availability and accessibility of vaccination services. Immunization is provided at the public health facilities and all five private clinics. The Public Health Clinic is open for walk-ins, improving accessibility. The recent implementation and strengthening of the Web IZ immunization surveillance system, will help improve tracking and case management of children in need of immunizations. The MCH Program works with partners, such as WIC, to provide awareness on the importance of age appropriate immunization.

Newborn Hearing Screening has successfully screened 98% of newborns before hospital discharge. Quality improvement activities are focused on reducing loss to follow-up. The Early Hearing Detection and Intervention surveillance system has improved the identification of infants not screened for hearing loss and those that have not returned for the second hearing test.

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Program serves to safeguard the health of low-income women, infants, and children up to age five who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care. MCH Program partners with WIC on many initiatives including breastfeeding support and encouraging prenatal care.

The School Health Program fulfills the local school health certificate requirement for all children entering school for the first time in the CNMI. A school health certificate is issued after a physical examination, including hearing and vision screening, is performed as well as completing the required immunization series for that age group.

The School Dental Program has proven to be one of the most successful collaborations between the Division and the school system, both public and private. A dental assistant provides a full mouth examination, fluoride varnish and sealant application, and education at each Head Start facility. In addition to the Head Start Program, every school year children in first, fifth, and sixth grades in the public and private schools, including Rota and Tinian, are bussed to the Dental Clinic to receive dental services. Services provided include a full mouth examination in which they are assessed for caries and periodontal diseases, sealant application, and education. The children are given report cards on their dental assessments so parents can make necessary appointments for further dental treatment and procedures.

Outside of the School Dental Program, the Dental Clinic provides services that include general dentistry such as sealant application, fluoride tablets, education/counseling, community outreach activities, cleaning, extraction, and fillings. Public Health, along with four private dental clinic, accepts children enrolled in the Medicaid Program for their restorative treatment needs. The Dental Clinic includes the private clinic information on all brochures to promote access to oral health.

Adolescent Health:

Preventive and primary health care services for adolescents: Services provided at Women's Clinic, Children's Clinic, and HIV/STD Resource Center as described above. In addition, much work for this population is done in collaboration with the PSS. Mental health and social services are provided through the Community Guidance Center (CGC).

The adolescent health focus is on the avoidance of risky health behaviors such as drugs, alcohol, and unsafe sex. The MCH Programs works closely with the HIV/STD Program described above. In addition they collaborate with the CGC to promote positive youth behaviors. The CGC leads underage drinking prevention efforts. It also addresses injury and

suicide, violence prevention and has strong ties to the federal, state and community agencies and programs that carry out risky behavior reduction activities.

Children with Special Health Care Needs:

Services are set up to promote an integrated service delivery system for CSHCN from birth to 21 years of age and their families. The Program works collaboratively and cooperatively with other agencies and departments to provide appropriate education and support services needed to meet their social, emotional, physical, and medical needs. The CSHCN Program has been developed as an interagency effort among the MCH Program, the Hospital, the Special Education Program, and the Early Intervention Services Program.

One priority of the program is to identify these children at the earliest age possible, preferably right after birth. The entry point into care is through referral to Child Development Assistance Center (C*DAC). C*DAC employs special education teachers, social workers, and occupational, physical, and speech therapists for 0-3 year olds. MCH Program employs care coordinators who oversee the coordination of specialty care that the children need.

The program provides transportation, eligibility assistance, and activities such as parent events, health forums, and trainings, to support CSHCN and their families. Challenges for the program include: lack of qualified professionals on-island for specialized services; clients who do not qualify for SSI, Medicaid, etc., because of citizenship status; and limited respite care facilities for families of CSHCN.

Contractual services, such as the audiologist, provide services that are not available otherwise. Specialty teams from Tripler Hospital, and Shriners Children Hospital visit CNMI. These specialized groups provide services in Cardiology, EENT, Orthopedics, and select surgeries. With limited or practically no state-of-the-art medical equipment, compounded with the lack of physicians with specialized skills, CNMI heavily relies on overseas contractors and medical referrals, both of which are very expensive. MCH collaborates with health care providers and the Medical Referral Program to ensure children needing extended care are treated off-island.

Cross-cutting:

The Dental Program described above provides services for all MCH populations. In addition MCH works closely with the Medicaid office to promote eligibility and enrollment. MCH has also devoted a staff member to assist clients with enrollment in the CHCC based income-based sliding fee program to provide discounted services to those that qualify.

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

The MCHB management and team (see MCHB Organization Chart) are committed to promote the strategic mission and values of the organization by developing a culturally competent and diverse workforce. To address the shifting demographic trends in the population served, each program within the Bureau works closely with key stakeholders and consumers to understand and manage the social and cultural differences of target groups. For example, the ECCS Coordinator, Maxine Pangelinan, serves on the Youth Advisory Council established by the CNMI Criminal Justice and Planning Agency. She also served on the advisory body responsible for the development and approval of the CNMI Early Learning Guidelines for infants and toddlers. The recruitment of a MCH Services and CSHCN Coordinator has tremendously improved the service linkages for families, including children with special health care needs, in the CNMI. Dr. Jeanolivia Grant not only provides input and guidance for the program, but recently took on the role as the CNMI Title V Epidemiologist working alongside the SSDI Project Coordinator, Shawnalei Ogumoro, to inform decision making through the use of quantitative and qualitative data and evaluation of program performance. Additionally, professional development is available and continuous to meet the evolving needs of the population. Working closely with all MCH populations and partnering agencies helps to assure that in turn, MCHB promotes and utilizes the best policy and practice appropriate to the CNMI.

MCH Program is administered under the leadership of the Chief Executive Officer, Esther L. Muna, who appoints the Directors of the three Divisions- Public Health Services, Community Guidance Center, and Hospital and Directors of the Tinian, and Rota Health Centers, see attached CHCC Organizational Chart. The Director and Medical Director of DPHS are locally supported FTEs that work directly with the MCH Bureau to provide support and guidance. See attached biographical sketches for senior management personnel. The MCH Program supports the following full/part time positions:

OB/GYN Physician/MCHB Epidemiologist: Jeanolivia Grant, MD, graduated from Thomas Jefferson University Medical

School and completed her residency at Temple University in Philadelphia. She completed her master's degree in Public Health from the University of North Texas in Epidemiology. She is the Department Chair for the CHCC OB/GYN unit and provides clinical services as well as input and assistance to the preventive programs at the Division of Public Health Services. She maintains a .3 FTE as the MCHB Title V Epidemiologist.

MCH Program Coordinator/MCH Bureau Administrator: TaAnn Temeing Kabua recently assumed duties as the MCH Program Coordinator. She holds an AA degree in Liberal Arts from the Leeward Community College in Honolulu HI. She is currently pursuing a BS in Education with a concentration in Rehabilitation and Human Services and is expected to graduate this year. Prior to becoming the MCH Program Coordinator, she managed the overall programmatic activities for the SSDI Grant for over two years. She served in the U.S. Army on active duty as an Automated Logistical Specialist. Ms. Kabua also volunteers in community organizations and serves as a founding member of one of the sports organizations, engaging adolescents in softball tournaments, in the CNMI. She is a member of Marianas Young Professionals, a non-profit organization representing a broad range of professionals across the CNMI.

SSDI Project Coordinator/MCHB Data Analyst: Shawnalei Ogumoro graduated from Eastern Oregon University with a BS in Anthropology/Sociology, with emphasis in Anthropology in 2008. Related coursework completed included: culture health and illness, information access, and statistics. Ms. Ogumoro was the former data manager for the MCH H.O.M.E Visiting Project. She currently serves as the SSDI Project Coordinator and Data Analyst.

MCH Services Coordinator: Tony Yarobwemal serves as the MCH Service Coordinator and Acting Family Planning Manager. He holds a BS in Education. Prior to his role as MCH Services Coordinator, Mr. Yarobwemal was the Health, Nutrition and Mental Health Manager for the CNMI PSS Head Start Program. He was also a nursing assistant for eight years at CHCC before moving to PSS. Mr. Yarobwemal volunteer work for faith-based and community organizations such as the teaching at the Confraternity of Christian Doctrine classes has linked many families to the MCH Program. His respectable reputation in the community as well as his knowledge of health programs have been valuable assets for the program.

Children with Special Health Care Needs Coordinator: Ann Marie Satur administers all activities for CSHCN. She was born and raised in Saipan, CNMI. She graduated from Northern Marianas College Saipan, MP in 2007 and graduated from Northern Marianas Academy Saipan, MP also in 2007. Ms. Satur attended Old Dominion University Norfolk, VA from 2007-2009. Ms. Satur has been working with CHCC since 2011 as an Early Intervention Services Coordinator. She has taken the role of CSHCN Coordinator to ensure the activities detailed in the new CNMI MCH State Action Plan and priorities for CSHCN are met.

The MCH Programs continue to provide coordination and provision of outreach clinic services, education and awareness, data collection and reporting, and other services aimed at improving the quality of live for our MCH population. The programs administered under the CNMI MCH Bureau continue to meet major milestones and objectives. For more information about key MCHB staff see Section F, 2.

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

The MCH Program has been instrumental in forging strong partnerships to enhance disease prevention and public awareness activities. Other strategies to strengthen the MCH Program's capacity to promote and protect the health of the target population are: 1) work with schools to ensure children enrolled are up to date with their immunization and on nutrition and physical fitness activities; 2) work with partners during island-wide community events which will strongly emphasize lifestyle behavioral changes especially with health care practices, diet, and physical fitness; 3) establish a network linkage with other providers to inform them of health news, health alerts, awareness events, training, etc.; and 4) develop partnership with other agencies to ensure continuity of care. The strength of MCH Program's work is through collaboration with partners.

Much of the island-wide work accomplished by MCH staff is done in collaboration with other state agency staff, particularly those who work within the Division of Public Health, and the Department of Education. MCH personnel work with other state agency staff on a nearly daily basis through coalitions, task forces, advisory groups, committees, and through cooperative agreements.

The CNMI Department of Education, in particular the Early Intervention Service, is an essential partner of the CSHCN Program. Together the agencies offer services for children served by the CSHCN Program. A staff member represents the

program and the department on the Interagency Coordinating Council.

The CNMI Department of Education is an essential partner in activities relevant to early childhood state systems building efforts; the coordinated school health model; work with school counselors; and school-based activities. They also work with the CNMI Community Guidance Center, who leads underage drinking prevention efforts. The Community Guidance Center also addresses injury and suicide, violence prevention and has strong ties to the federal, state and community agencies and programs that carry out risky behavior reduction activities.

The MCH Program works with the HRSA 330e-funded Kagman Community Health Center to improve accessibility and expand primary care services for low-income and vulnerable populations. These efforts include information and data sharing; policy development; and assisting communities with applying for health professional shortage area and medically underserved designations.

The MCH and WIC Programs have worked collaboratively for many years. Current efforts are focused on increasing breastfeeding rates and decreasing childhood overweight and obesity.

Family Planning is housed within the MCH Bureau. Efforts to address unintended pregnancy, preconception health and preventing risky teen sexual behavior are targeted to both family planning and MCH activities. Currently, MCH funds are not used for direct family planning services, but rather to support population-based activities around unintended pregnancy prevention. This unit has strong ties to the programs that work on STD/HIV.

The MCH Program also works with the Immunization Program via interdepartmental activities, such as the H1N1 and HPV School Vaccination Campaigns.

Relationships with the Non-Communicable Disease Bureau are strong and support work between MCH projects and programs such as Diabetes, Cancer, Tobacco Control and other chronic disease prevention and health promotion. For example, the NCD Bureau has long worked with MCH to promote healthy weight among children.

The Health Vital Records Office is an established partner of the MCH Program. This long-term relationship has led to the development of MCH-specific data and resources. The rehiring of a Division Epidemiologist as well as a part time MCH Epidemiologist will further strengthen the MCH Program's ability to gather, interpret and use data at the state and community level.

The MCH Program has an established working partnership with Northern Marianas College (NMC) for training needs of both clinical and programmatic staff, conducting awareness activities in nutrition and physical activity and preventing and controlling non-communicable disease. The NMC School of Nursing and Emmanuel Nursing College provide volunteers during events such as HPV School Campaign and H1N1 and health fairs. All Division programs conduct outreach activities at schools during their health fairs, science fairs, nutrition awareness event, etc.

Each unit manages on-going advisory groups and specific task forces that are made up of public and private partners that share concern and responsibility for addressing the needs of women, children and families. Additionally, staff participates in partnerships led by colleagues within other state, federal and community organizations.

The MCH Title V Program staff work closely with parent support groups, church leaders, women's groups, and community and traditional leaders. However, the current use of the parent/consumer partnership is limited in the CNMI. Outside the children with special health care needs population, the parent/consumer partnership is non-existent at this time. Within the children with special health care needs population CNMI has an Inter-Agency Coordinating Council (ICC) consisting of representative from Public Health, Special Education, community groups such as churches, NGOs and advocacy bodies, government offices as well as parents and consumers of the CSHCN services. The diversity of the population is represented appropriately. As a group focused on CSHCN, they are educated and aware of CSHCN competencies but not MCH core competencies overall. The ICC meets quarterly and has approximately twenty members, four of which are parents and consumers. This council receives no compensation or monetary incentive for participation. Parents and consumers have and equal say and equal vote to other members in the business of the council. Council business centers around program policies and guidelines, access issues, service delivery, and needs and gaps in services provided. The MCH program intends to expand its parent/consumer partnership in the coming years to improve public input into the entire program and its policies and objectives. In addition to the ICC, annual surveys are conducted to seek family and caregiver's assessment of services and how they are provided. There are three types of surveys depending how long the child has been in the

III.D. Financial Narrative

	2016		2017	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$456,074	\$507,252	\$456,074	\$444,458
State Funds	\$0	\$0	\$0	\$0
Local Funds	\$0	\$0	\$0	\$0
Other Funds	\$458,156	\$403,440	\$458,156	\$458,024
Program Funds	\$0	\$0	\$0	\$0
SubTotal	\$914,230	\$1,012,582	\$914,230	\$902,482
Other Federal Funds	\$176,255	\$1,730,144	\$147,374	\$572,709
Total	\$1,090,485	\$2,742,726	\$1,061,604	\$1,475,191
	2018		2019	
	Budgeted	Expended	Budgeted	Expended
Federal Allocation	\$458,614	\$463,450	\$457,947	
State Funds	\$0	\$170,866	\$0	
Local Funds	\$0	\$0	\$0	
Other Funds	\$443,825	\$434,011	\$469,527	
Program Funds	\$0	\$0	\$0	
SubTotal	\$902,439	\$1,068,327	\$927,474	
Other Federal Funds	\$1,703,040	\$1,574,778	\$1,657,040	
Total	\$2,605,479	\$2,643,105	\$2,584,514	

	2020	
	Budgeted	Expended
Federal Allocation	\$463,450	
State Funds	\$0	
Local Funds	\$0	
Other Funds	\$474,700	
Program Funds	\$0	
SubTotal	\$938,150	
Other Federal Funds	\$2,059,790	
Total	\$2,997,940	

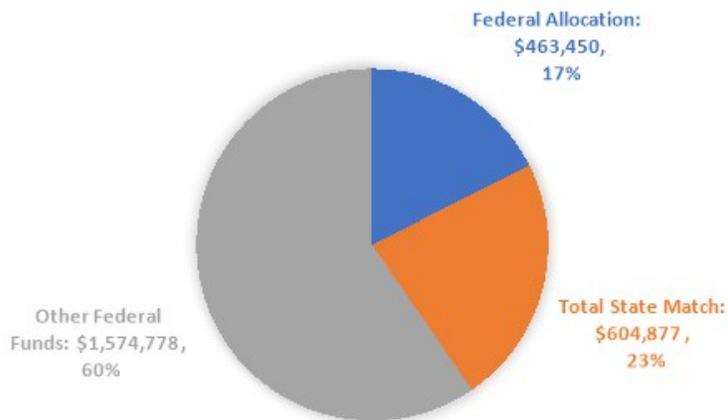
III.D.1. Expenditures

Overview of Expenditures

The mission of the CNMI Maternal and Child Health (MCH) Bureau is to promote and improve the health and wellness of women, infants, children, including children with special health care needs, adolescents, and their families through the delivery of quality prevention programs and effective partnerships. The MCH Bureau works towards achieving this overarching work through the Commonwealth Healthcare Corporation (CHCC) under the Division of Public Health Services and with its internal and external partnerships.

During the Fiscal Year 2018, from 10/01/2017 through 07/12/2019, the CNMI Maternal and Child Health Program expended total funds of \$352,974. As of July 12, 2019, the current encumbered figure is \$19,094 and the total unobligated amount is \$91,382. Of the total unobligated amount of \$91,382, \$64,878 is allocated for Wages and Salary, \$7,139 is allocated for Fringe Benefits, \$16,432 is allocated for Administrative Costs and \$2,933 is allocated for pharmaceutical supplies. Therefore, the program is projecting to expend all funds under the grant award by the end of the budget period, September 30, 2019. Note that the expenditures from July 12, 2019 through September 30, 2019 and all obligations that are currently encumbered has been has been projected in the figures reported. Therefore, with the projections made, the total projected expended funds are \$463,450.

FY 18 ANNUAL REPORT EXPENDITURES



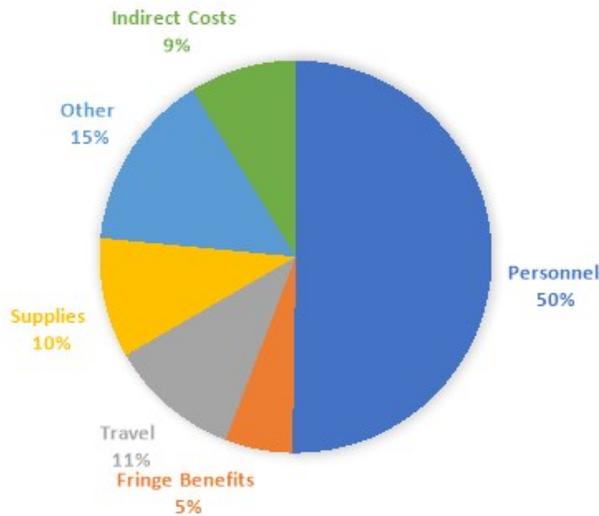
The Northern Mariana Islands Maternal Commonwealth Healthcare Corporation MCH Bureau manages the following programs:

Maternal & Child Health Bureau
MCH Title V Program
Healthy Outcomes for Maternal and Early Childhood (H.O.M.E.) Visiting Program
Title X Family Planning Program <ul style="list-style-type: none"> • Adult Medicaid Quality: Improving Maternal and Infant Health Outcomes in Medicaid and CHIP
Newborn Hearing Screening & Intervention Program <ul style="list-style-type: none"> • Early Hearing and Detection and Intervention (EHDI) State Programs
Children with Special Healthcare Needs Program <ul style="list-style-type: none"> • Family Professional Partnership/CSHCN
Oral Health Program
State Systems Development Initiative Project

Use of the Title V Funds

The chart below provides an overview of the actual Title V funds utilized towards specific categories:

USE OF FEDERAL TITLE V FUNDS

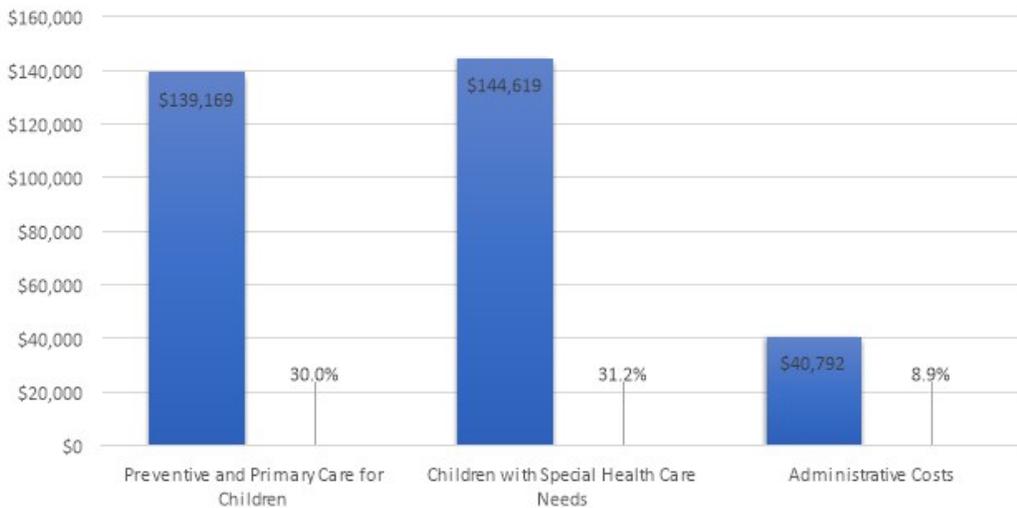


Legislative Requirements Met

The CNMI MCH Bureau is continuously striving to ensure that the program is complying with the legislative financial requirements for the Title V Block Grant. The MCHB Fiscal Specialist provides the MCHB Administrator a monthly

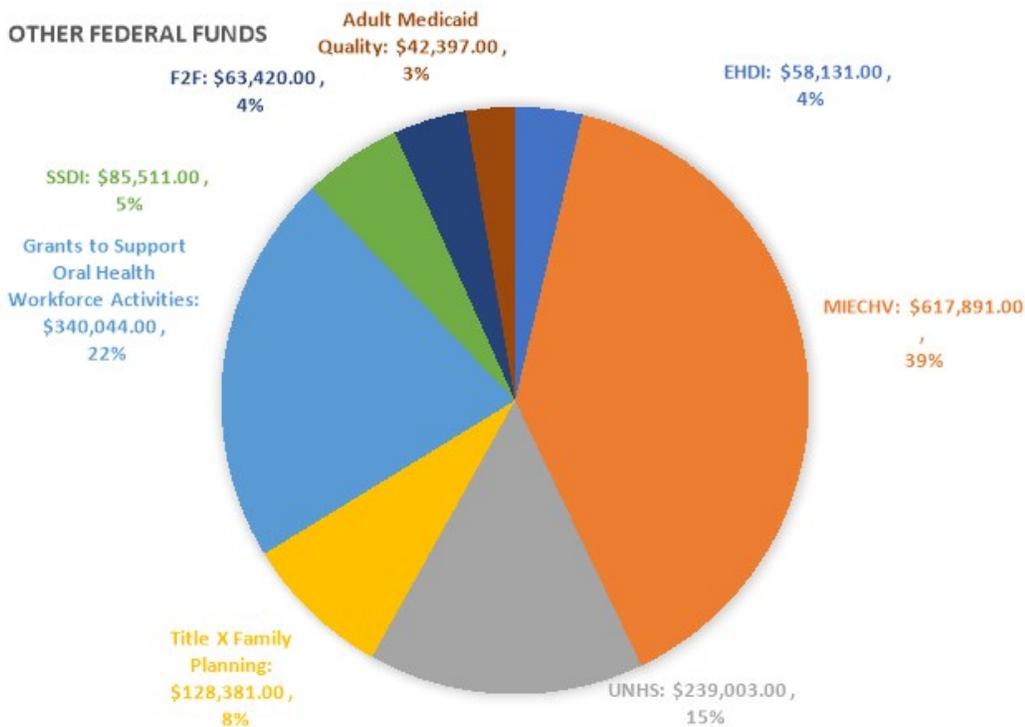
fund status report that consist of current funds available, funds encumbered, funds expended and the legislative required 30-30-10 percentage status report. In collaboration with the MCHB Administrator and programmatic staff, the MCHB Fiscal Specialist develops the Title V Block Grant Budget and continuously monitor and track expenditures to ensure compliance with the legislative financial requirements. Expenses are monitored and tracked through the state’s accounting system called the, *JD Edwards*. The Title V legislation requires a minimum of 30% of the block grant funds to be utilized for preventive and primary care for children and a minimum of 30% of the block grant funds for services for CSHCN. In addition, no more than 10% of the grant may be used for administration costs. The CNMI MCH Program has met the required legislative percentages for FY 18. The chart below provides an overview of the required federal allocation for the FY 18 expenditures.

Federal Allocation FY 18 Expenditures



Other Federal Funds

The chart below provides an overview of the Other Federal Funds expended that were also under the direction of the CHCC MCH Bureau Administrator, which are also listed in Form 2 [Early Hearing and Detection and Intervention (EHDI) State Programs, Maternal, Infant and Early Childhood Home Visiting (MIECHV) Program, State Systems Development Initiative (SSDI), Universal Newborn Hearing Screening and Intervention Program (UNHS), Title X Family Planning, Grants to States to Support Oral Health Workforce Activities, Family Professional Partnership/CSHCN (F2F), and the Adult Medicaid Quality: Improving Maternal and Infant Health Outcomes in Medicaid and CHIP]. The Other Federal Funds total expenditure is \$1,574,778.



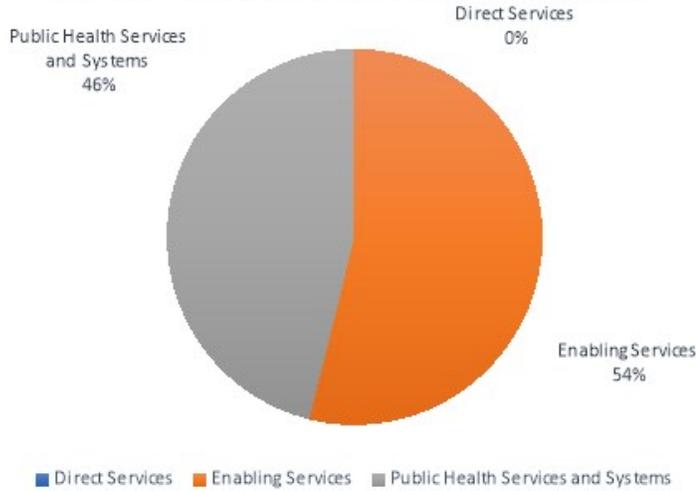
As stated, the Other Funds listed here were administered under the CHCC MCH Bureau. Therefore, the Bureau continues to align its goals and objectives that serve the MCH population to maximize and leverage resources across all programs. This strategy is in line with the CHCC MCHB's efforts for utilizing the life course framework in implementing programs and interventions to address the health and wellness needs and outcomes for the CNMI MCH populations.

Total State Match

The Total State Matching funds in the amount of \$604,877 was expended for FY 2018. Of the Total State Matching funds, the MCH Bureau expended State Match Funds in the amount of \$170,866. These expenditures are a significant variation because the Program did not identify these funds during the block grant reporting in the previous year. These funds was an appropriation from the Tobacco and Control funds through the Public Law 20-32 in which a portion of the funding, an estimated \$400,000, was made available for the MCH Services. The CHCC is unsure whether future funding under this legislation will become available once again for the MCH Services.

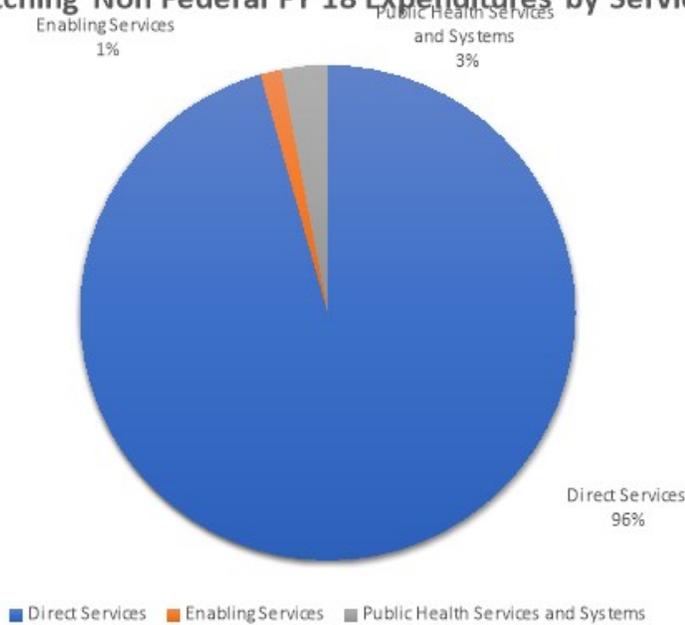
In addition, the Program expended Other Funds in the amount of \$434,011. The total Other Funds were expended towards personnel salaries for staff at the Commonwealth Healthcare Corporation that provides direct services to the MCH population. Since the Other Funds contributes to direct services, majority of the Title V funds contributes to enabling services and public health services and systems. The actual total amount of in-kind support provided by the CHCC to the maternal and child health population continue to exceed the amount reported on the Title V MCH program expenditures. However, the Title V MCH program will only report budgeted salary percentages that were stated on the proposed non-federal budget. The chart below shows how the FY 2018 \$463,450 Title V funds were expended by type of service as defined by the Title V guidance: direct, enabling and public health services and systems.

Title V FY 18 Expenditures by Service Type



The chart below shows how the FY 2018 \$434,011 state matching non-federal funds were expended by type of service as defined by the Title V guidance: direct, enabling and public health services and systems.

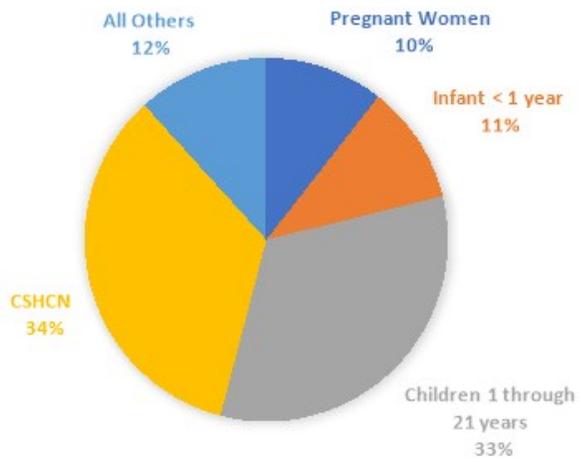
State Matching Non Federal FY 18 Expenditures by Service Type



Expenditures by Population Group

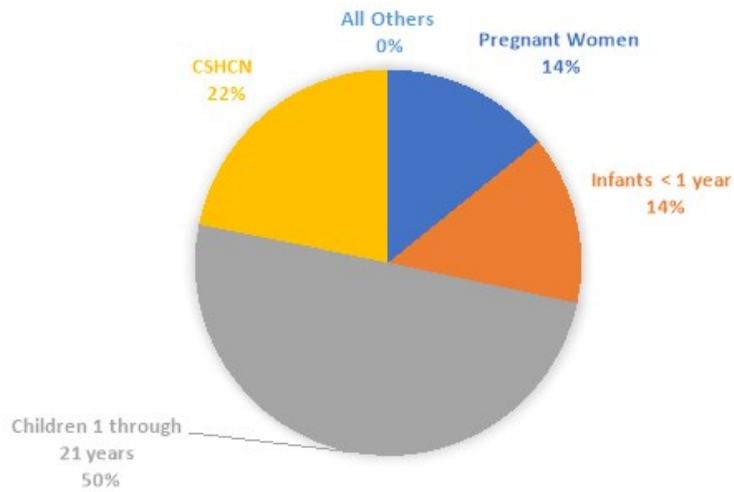
The chart below shows how the FY 2018 \$463,450 Title V funds were expended to serve the Title V population groups:

TITLE V FY 18 EXPENDITURES BY POPULATION GROUP



The chart below shows how the FY 2018 \$434,011 state matching non-federal funds expended to serve the Title V population groups:

STATE MATCHING NON FEDERAL FY 18 EXPENDITURES BY POPULATION GROUP



III.D.2. Budget

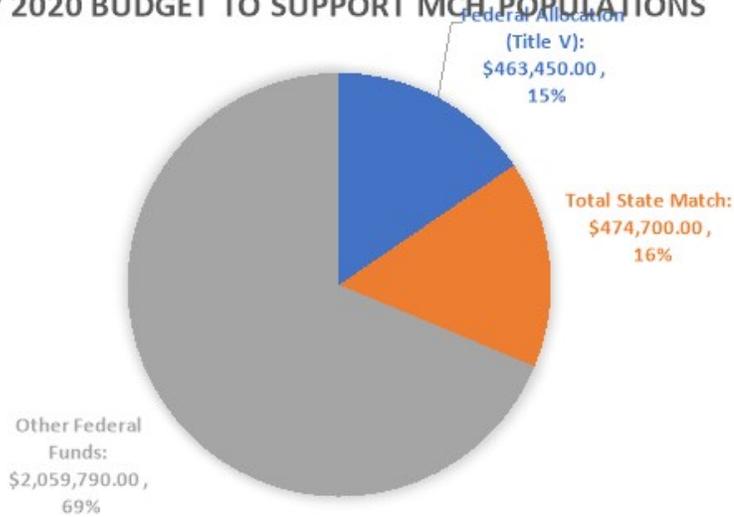
Budget Overview

The mission of the CNMI Maternal and Child Health (MCH) Bureau is to promote and improve the health and wellness of women, infants, children, including children with special health care needs, adolescents, and their families through the delivery of quality prevention programs and effective partnerships. The MCH Bureau works towards achieving this overarching work through the Commonwealth Healthcare Corporation (CHCC) under the Division of Public Health Services and with its internal and external partnerships; and in FY 2020 estimating a total state MCH budget of \$3M.

The MCH Program's State Action Work Plan has been developed based on the Needs Assessment and current emerging issues. Therefore, the MCH Program's State Action Work Plan determines where the MCH federal grant dollars are budgeted. The MCH grant, all Other Federal Funds under the MCH Bureau, and the Total State Match continues to align its overarching goals and objectives to effectively leverage resources to serve the MCH population. The Title V funds consist of personnel salaries and fringe benefits that support the following staffing: MCHB Administrator, MCHB Fiscal Specialist, Medical Director of Public Health, MCH Services Coordinator, Outreach Worker, Child and Adolescent Health Coordinator, and 2 Early Intervention Services Workers. The following staff works not only for the MCH Program but works across all programs under the MCH Bureau. The MCHB Fiscal Specialist is funded 50% under Title V funds, 45% under the ACA Maternal, Infant Early Childhood Home Visiting funds and 5% under the Family Professional Partnership/CSHCN funds. The Outreach Worker is funded 50% under Title V funds and 50% under the ACA Maternal, Infant Early Childhood Home Visiting funds. The Medical Director of Public Health's FTE is cost shared between CHCC, other federal programs and 10% under the Title V funds. In addition to personnel salaries and fringe benefits, the Title V funds are budgeted towards Professional Services, Public Education and All Other Costs to support the MCH Programs activities and initiatives stated on the State Action Work Plan. Professional services costs will include development of an MCH Bureau database system and other related trainings and technical assistance. Public education and awareness costs include print, radio, local newspapers, television and social media posts on the importance of preventive screenings, pre-conception health, prenatal care, screening and treating anemia in women. Community awareness includes publicizing available services and programs, oral health care, breast feeding and safe sleep education. The MCH Program will continue to educate the community on the importance of developmental screenings, bullying and bullying prevention. Title V funds are utilized towards family support materials for the Centering Pregnancy Program, adolescent after school initiatives, Women's Health Month, and all other community outreach events that serve the MCH population. Title V funds are utilized to support the costs of newborn bloodspots and metabolic screenings and newborn screening kits. Funds are also utilized towards other costs such as travel, fuel, license and fees, communication costs, office space rental, and et cetera.

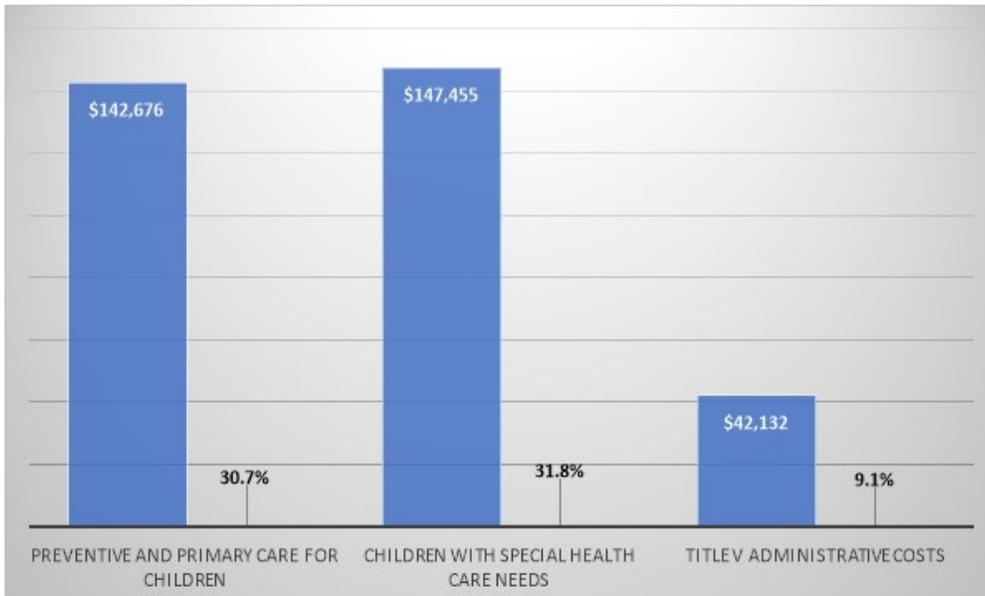
The chart below provides an overview of the CNMI MCHB's FY 2020 Budget as reported on Form 2.

FY 2020 BUDGET TO SUPPORT MCH POPULATIONS



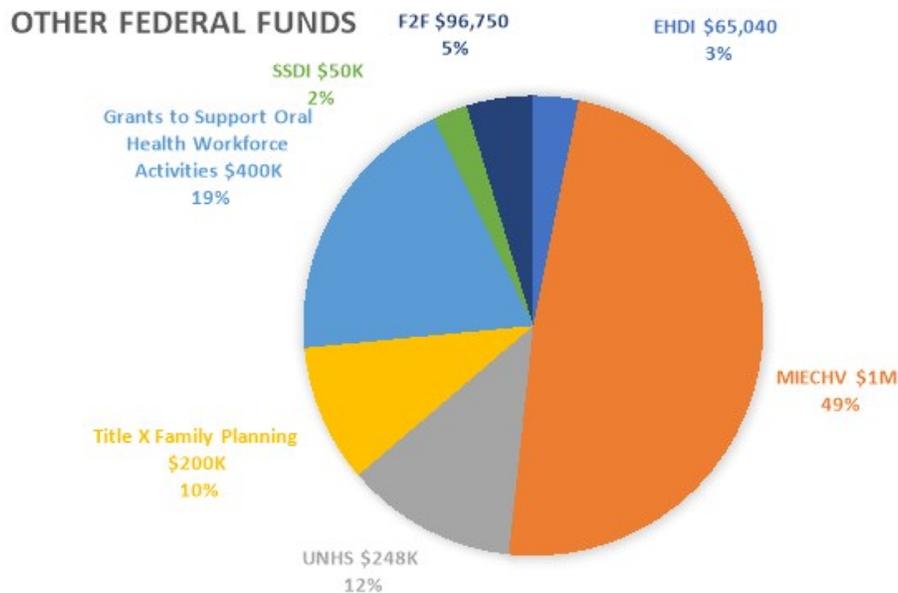
Legislative Requirements Met:

The CNMI MCH Bureau is continuously striving to ensure that the program is complying with the legislative financial requirements for the Title V Block Grant. As stated, the MCH Title V funds 50% of the MCHB Fiscal Specialist FTE. One of the major duties and responsibilities of this FTE is to continuously ensure that the funds are being budgeted and expended per the minimum required 30-30-10 percentage. The MCHB Fiscal Specialist provides the MCHB Administrator a monthly fund status report that consist of current funds available, funds encumbered, funds expended and the legislative required 30-30-10 percentage. The Fiscal Year 2020 Title V Block Grant budget proposal of \$463,450 consist of the following types of individuals served: Pregnant Women and Infants less than 1 year of age is budgeted at \$79,154 which is at 17% of the total federal award. Preventive and Primary Care for Children is budgeted at \$142,676 which is at 30.7% of the total federal award (at least 30% of the total award to be utilized in compliance with the 30%-30% requirements). Children with Special Health Care Needs is budgeted at \$147,455 which is 31.8% of the total federal award (at least 30% of the total award to be utilized in compliance with the 30%-30% requirements). Administrative costs is budgeted at \$42,132 which is 9.1% of the total direct costs of the federal grant award. A total of \$52,034 is budgeted for All Other Costs such as travel, dues and subscriptions, repairs and maintenance, communication services, meeting venue rental, and office space rental. The chart below provides a budget overview of the required federal allocation for the FY 20 Budget.



Other Federal Funds

The chart below provides an overview of the Other Federal Funds budgeted that are under the direct authority of the MCHB Administrator which are also listed in Form 2 [Early Hearing and Detection and Intervention (EHDI) State Programs, Maternal, Infant and Early Childhood Home Visiting (MIECHV) Program, State Systems Development Initiative (SSDI), Universal Newborn Hearing Screening and Intervention Program (UNHS), Title X Family Planning, Grants to States to Support Oral Health Workforce Activities and Family Professional Partnership/CSHCN (F2F)].



As indicated in Form 2 of this report, the total amount included under the "Other Federal Funds" category is \$2,059,790.

Total State Match

The MCH match is budgeted at \$474,700 which is comprised of the Commonwealth Healthcare Corporation in-kind funds which will comply with the required FY1989 Maintenance of Effort amount. Therefore, the Federal-State Title V Block Grant Partnership subtotal is \$938,150. The Total State Match funds are budgeted towards personnel salaries and fringe benefits for staff at the Commonwealth Healthcare Corporation that provides direct services to the MCH population. Since the State Match funds contribute to direct services, majority of the Title V funds contribute to enabling services and public health services and systems.

III.E. Five-Year State Action Plan

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

State: Northern Mariana Islands

Please click the links below to download a PDF of the Entry View or Legal Size Paper View of the State Action Plan Table.

[State Action Plan Table - Entry View](#)

[State Action Plan Table - Legal Size Paper View](#)

III.E.2. State Action Plan Narrative Overview

III.E.2.a. State Title V Program Purpose and Design

The mission of the CNMI MCH Title V Program is *“To promote and improve the health and wellness of women, infants, children, including children with special healthcare needs, adolescents, and their families through the delivery of quality prevention programs and effective partnerships.”* Title V funds are administered through the Division of Public Health under the Commonwealth Healthcare Corporation (CHCC).

The CNMI MCH workforce is primarily housed within the Maternal and Child Health Bureau. The Maternal and Child Health Bureau was formed in 2014 to address the needs of the CNMI MCH population, transformation of the MCH Title V Block Grant, and link all opportunities between MCH programs to work through challenges common across programs since the transition of the Corporation into a semi-autonomous agency. Strategies identified within the CNMI MCH Title V State Action Plan are designed to: 1) improve access to comprehensive primary and preventive healthcare; 2) provide health promotion to reduce the incidence of preventable diseases, morbidities, and mortalities; 3) reduce barriers and increase access to preventive, screening, and treatment services; 4) improve coordination across programs that serve MCH populations.

While most of the staff is funded by sources other than Title V, all contribute to the Title V mission and MCH priorities. The following are brief biographies of senior level management and key staff involved in the Title V needs assessment and application processes.

Director of Public Health Services: Margarita Torres-Aldan holds a Master’s Degree in Public Health (Health Service Administration) from the University of Hawaii and a Bachelor of Science Degree from the University of Colorado, Denver. Aside from her experience in the MCH Program, she has experience in social work, including interagency liaisons, adolescent health, and services for CSHCN. Director Aldan continues to provide guidance and input to all programs within the MCH Bureau.

Medical Director of Public Health/Epidemiologist: Ngoc-Phuong Luu, MD, MHS, joined the Division of Public Health in 2016. She graduated from the University of Washington School of Medicine in 2010 and completed a Master’s in Health Sciences with a focus on Clinical Epidemiology from Johns Hopkins University Bloomberg School of Public Health in 2015. She currently serves as the Medical Director of Public Health and is an internal medicine physician at the Commonwealth Healthcare Corporation. Dr. Luu provides epidemiological support to the Title V MCH Program and assists in reviewing and making recommendations for data collection, quality improvement, and data analysis. The MCH Epidemiologist is funded at 0.1 FTE through Title V Block Grant funds.

Department Chair of Pediatrics: Michael Taylor, MD, MPH, graduated from the University of Minnesota School of Medicine in 2011 and completed general pediatrics residency at the University of Minnesota in 2014. He also completed a Pediatric Global Health Fellowship and Masters in Public Health at the University of Massachusetts in 2016. Dr. Taylor oversees the CHCC Pediatrics Department including the CHCC Children’s Clinic and works closely with the MCH program in addressing activities identified in the MCH State Action Plan. The Department Chair of Pediatrics position is funded through MCH state matching funds.

CHCC Dental Clinic Dentist: Dr. Angelica C. Sabino was hired October 2016 and replaced outgoing dentist,

Dr. Adam Gentry. She holds a DDS degree from the University of Minnesota and a BA in Biology with a minor in Chemistry from the College of St. Catherine in St. Paul, Minnesota. She is a graduate of Marianas High School located on Saipan. She is a member of the Association of States and Territorial Dental Directors (ASTDD) and the Health Advisory Committee for the Head Start Program in the CNMI. Dr. Sabino participates in outreach events providing services to women, children, and families on the outlying islands of Tinian and Rota. She also provides preventive dental care to children enrolled in the CNMI Public School System, Early Head Start, and Head Start through a school based fluoride varnish and dental sealant program.

OB/GYN Physician/Family Planning Program Medical Director: Maria Hy, MD, graduated from University of Kentucky College of Medicine 2010 and completed her obstetrics and gynecology residency at Christiana Care Hospital in 2014. She also serves as medical director for the Title X Family Planning grant. Dr. Hy provides guidance and assistance in program planning for preventive services such as annual well woman exams, prenatal care, family planning, and also assists by providing medical care through mobile clinic outreach and during outreach to the outlying islands of Tinian and Rota. The OB/GYN Physician position is funded through State Match funds.

MCH Program Coordinator/MCH Bureau Administrator/ Title V Project Director: Heather Santos Pangelinan, graduated with a Bachelor's degree in Social Sciences, from Boise State University in Boise, Idaho in 2006 and also holds a Master's of Science Degree in Counseling from Grand Canyon University. As the MCHB Administrator, Mrs. Pangelinan oversees the various programs under the Bureau. She works closely with the management of the Division of Public Health and other CHCC leadership to ensure continuity and improvement of services for the MCH population in the CNMI. Additionally, Mrs. Pangelinan participates in program outreach events and other activities in which she interacts directly with clients, patients, partners, and other stakeholders served. The MCH Bureau Administrator position is funded at 1.0 FTE through Title V Block Grant funds.

Child Health Coordinator/CSHCN Project Director: Danielle Youn Jung Su holds a Master of Science in Education in Rehabilitation Counseling and a Bachelor of Art's degree in English Language Arts, both from Hunter College of City University of New York. As the Child Health Coordinator, her work focus on development, coordination, implementation and evaluation of children, including children and youth with special health care needs programs and related activities. Additionally, Ms. Su participates in community outreach activities as well as professional training opportunities to enhance awareness and knowledge provided for children, including the CYSHCN population.

SSDI Project Coordinator: Richard R. Sablan graduated from California State University San Bernardino with a BS in Health Science, with emphasis in Public Health Education. Related coursework completed included: Statistics for the Health Sciences, Research Methodology in Health Science and Health Program Planning, Implementation and Evaluation. The SSDI Project Coordinator is responsible for coordinating outreach data collection, linking data sources from various key partner programs, and developing needs assessment instrument to aid the MCH program in developing strategies to address barriers and gaps in preventive care.

MCHB Fiscal Specialist: Maxine Pangelinan, graduated from Arizona State University, in Tempe, AZ with a BS in Psychology in 2005. She obtained her MBA with a concentration in Accounting in 2014 and is currently the MCHB Fiscal Specialist. In addition to overseeing program budgeting and monitoring expenditures, Ms.

Pangelinan participates in outreach activities provided by the MCH Title V Program. She also provides assistance with community awareness and educational materials that are used to inform the community regarding important initiatives or projects. The MCHB Fiscal Specialist is supported by the MCH Title V grant at a 0.5 FTE.

MCH Services Coordinator: Mr. Yarobwemal serves as the MCH Service Coordinator. He holds a BS in Education. Prior to his role as MCH Services Coordinator, Mr. Yarobwemal was the Health, Nutrition and Mental Health Manager for the CNMI PSS Head Start Program. He was also a nursing assistant for eight years at CHCC before moving to PSS. Mr. Yarobwemal volunteers work for faith-based and community organizations such as the teaching at the Confraternity of Christian Doctrine classes has linked many families to the MCH Program. The MCH Services Coordinator is supported by the MCH Title V grant at 1.0 FTE.

While the MCH program experienced some setback due some key position vacancies in 2017, the program continues to provide coordination and provision of outreach clinic services, education and awareness, data collection and reporting, and other services aimed at improving the quality of life for our MCH population. The programs administered under the CNMI MCH Bureau continue to meet major milestones and objectives. The following are key MCHB staff:

Family Planning Program Manager: Irene M. Barrineau graduated from the University of Hawaii at Manoa with a BA in Psychology and has a Master's Degree in Education from the University of Phoenix. Ms. Barrineau has over 10 years of experience in the Human Services and Education field including case management, rehabilitation counseling and teaching experience. Ms. Barrineau has been with MCHB for about 4 years linking family planning services and comprehensive women's care with MCH priorities.

H.O.M.E. Visiting Project Coordinator: Yuline C. Fitial, Project Coordinator for the Healthy Outcomes for Maternal and Early Childhood (H.O.M.E.) Visiting Program. In 2007 she graduated with a BA in Human Development with a concentration in Adolescence from California State University, East Bay. Immediately following graduation worked as a Junior Behavioral Therapist in the homes and assisted a Speech & Language Pathologist at an intensive speech and language based program in CA. She relocated to Saipan in 2010 and has served as the H.O.M.E. Visiting Project Coordinator until present. Primary duty is to oversee the entire daily functions and operations of the H.O.M.E. Visiting Program.

Oral Health Project Coordinator: Agnes K. Ripple, received her certificate of completion from Loma Linda University in Dental Hygiene in 1981. She worked at the Adventist Dental Clinic for 12.5 years as a Dental Auxiliary/Dental Hygienist. In 2003 she graduated from Northern Marianas College with an AA in Business with emphasis in Accounting. She has been working as a hygienist for Public Health Dental Clinic since 1991 and since 2011 has taken on the additional role of Project Coordinator for the Oral Health Project. Ms. Ripple is one of two certified Chamorro Hygienists living in the CNMI.

Newborn Screener and Family Support Coordinator: Shiella Marie Perez graduated with ASN from Northern Marianas College, Saipan MP. She is in charge for providing outpatient hearing rescreening and most importantly provides educational and developmental interventions families with children who have hearing loss. Ms. Perez also continues to coordinate events in collaboration with the Shriner's Children Hospital of Honolulu for Specialty Clinics for CSHCN. She recently received a Certificate of Completion in Basic American Sign Language.

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

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

Staffing Structure

The CNMI MCH workforce is primarily housed within the Maternal and Child Health Bureau. The Maternal and Child Health Bureau was formed in 2014 to address the needs of the CNMI MCH population, transformation of the MCH Title V Block Grant, and link all opportunities between MCH programs to work through challenges common across programs since the transition of the Corporation into a semi-autonomous agency. While most of the staff is funded by sources other than Title V, all contribute to the Title V mission and MCH priorities. For example, a substantial number of MCHB staff work within the Healthy Outcomes for Maternal and Early Childhood Visiting Program, carrying out the implementation of the CNMI HOME visiting work plan.

While the MCH Program is working closely with the CHCC administration to improve current workforce capacity, the capacity to effectively meet the varying needs of the maternal and child population in the CNMI might be challenged by the limited amount of professionals working directly for the MCH program. The Division of Public Health had strategically established the Maternal and Child Health Bureau to align priorities for all programs that serve the maternal and child populations in the CNMI. However, there still remains the fact that each program under the Bureau is responsible for administering a separate federal grant that includes individual program reporting requirements and project objectives.

Recruitment & Retention

Recruitment of all staff under the MCH Bureau is handled through the CHCC Human Resource office and coordinated in accordance with CHCC Human Resource policies and procedures. The CNMI as a whole experiences difficulty in workforce recruitment as the shortage in local skilled workforce has forced organizations, both public and private, to recruit from other countries through a CNMI only workforce permit that is scheduled to phase out after 2019 but was subsequently granted and extension by US legislation through 2029. Nursing positions are the most difficult to fill due to a national workforce shortage in this specific field. The CNMI, like many US states and other jurisdictions and territories, recruits a large majority of its nursing workforce from the Philippines. However, due to annual reduction in available CNMI conditional worker permits until the program eventually phases out in 2029, the CNMI faces increasing challenges in recruiting and retaining nurses. Various industries compete for these limited number of permits and as such the healthcare field, and CHCC in particular, competes with both public and private agencies across the CNMI. The CNMI also faces challenges in recruiting medical providers. Due to CMS Conditions for Participation, CNMI regulations require that medical providers be US trained or US board certified in order to be licensed providers in the CNMI and this has limited recruitment to the US mainland. The CNMI's geographic location and distance from the US mainland poses as a challenge for recruiting medical providers and turnover is high.

Staffing for the Public Health programs, including the Title V MCH Program, is largely made up of a local workforce. The Public Health Director, MCH Bureau Administrator, Fiscal Specialist, Services Coordinator, and SSDI Project Coordinator, for example, are local to the CNMI. Because of limited opportunity for post-secondary education locally, many community members move off-island to attend colleges and universities in the US mainland. While some eventually return to the CNMI, many do not return for various reasons.

The CHCC has been working diligently in implementing strategies to support workforce retention. One key

development that occurred in 2017 was the revision of the CHCC employee classification and pay scale. This resulted in salary increases for many critical positions across the healthcare system and thus improving the CHCC's ability to compete with other organizations on recruiting and retaining staff. Other employee engagement activities implemented within the CHCC include quarterly family fun days and under the MCH Bureau, quarterly meetings that integrate team building activities to build and maintain staff engagement and positive morale.

Training

The MCH Bureau is under the CHCC Division of Public Health Services. The Division's strategy is to provide comprehensive and holistic community health services, including medical, dental, mental health and substance abuse screening perinatal, nutrition, and family planning, all supplemented by enabling services including outreach, case management, and transportation. Other strategies are: 1) work with schools to ensure that all children enrolled are up to date with their immunization; 2) collaborate and partner with other agencies, both private and governmental, during island-wide community events which will strongly emphasize lifestyle behavioral changes especially with health care practices, diet, and physical fitness; 3) establish a network linkage with other providers to inform them of health news, health alerts, awareness events, training, etc.; 4) develop partnership with other agencies to ensure continuity of care. Staff are given the opportunity to attend trainings provided by internal partners, such as the Non Communicable Disease Bureau's Diabetes' Management training. The established partnership with other agencies has also provided numerous training opportunities for the staff.

Furthermore, during orientation all MCHB staff are advised to complete the MCH 101 training module in the MCH Navigator. Other training modules through the MCH Navigator, such as those identified through the "5- minute MCH" segment is being incorporated as part of new hire training requirements within the Bureau. Web based training opportunities provide an ideal training format for MCH staff in the CNMI, especially since many of our technical assistance and training needs are not easily met by local capacity. The MCH Bureau Administrator is working closely with the Director of the Division of Public Health and Corporate Quality Office to develop training policies, to include performance improvement plans, as part of a division wide effort for building professional capacity and as part of efforts for obtaining public health accreditation. Throughout employment, cross cutting measures such as presentations by other programs and partners about ongoing goals and objectives (i.e. Newborn screening, breastfeeding, etc.) and involvement of staff from other programs in community events take place in order to build MCHB's capacity.

In 2018, MCH staff members took part in the following training and professional development opportunities:

- State System Improvement Plan (SSIP) Development for early intervention services
- Ages & Stages Questionnaire: 3rd Edition Developmental Screening Training of Trainers
- CNMI Garrett Lee Smith Youth Suicide Prevention In-Service training
- Various virtual learning sessions and online training available through the Children's Safety CollIN, IM CollIN, and Centers for Diseases Control and Prevention.
- Annual Association for Maternal and Child Health Programs Conference (AMCHP)
- United States Affiliated Pacific Islands Grants Management Technical Assistance Calls

- MCH Federal/State Partnership Technical Assistance Meeting
- MCH Federal/State Partnership Technical Assistance Meeting: Pacific Basin
- Centering Healthcare Institute- Centering Pregnancy Training
- Institute for Healthcare Improvement (IHI) Quality Improvement related training
- Certificate of Professional Practice in the Epidemiology and Control of Non-communicable Diseases web based program, through the Western Regional Public Health Program
- Question, Persuade, Refer (QPR), Suicide Prevention Training
- National Cytomegalovirus (CMV) Training in Vermont.
- Early Hearing Detection and Intervention (EHDI) National Conference
- Hands & Voices Leadership Conference
- Parent Café Facilitation Training, Project I Bisita, Guam
- Breastfeeding and Lactation Support training conducted by WIC Consultant
- IBCLC Christa Bridges-Jones
- Motivational Interviewing training conducted by Dr. Tom Freese of the Pacific Southwest Addiction Technology Transfer Center.

While virtual learning sessions provide the MCH workforce in the CNMI the opportunity to interact with experts and other technical assistance that are not readily available on island, the time difference between the CNMI and the US mainland makes it challenging for staff to participate as often times sessions are held early mornings, in some cases 3 am CNMI time.

The need to build and improve the workforce for sustainability of the public health programs is imperative to improving delivery of services to the community. The shortage of local manpower impacts health service delivery in that there is a need to recruit manpower from the U.S. mainland. This recruitment process is lengthy and at a high cost for CHCC plus the turnover rate is high. One of the goals of CHCC is to establish a sustainable healthcare manpower program. The program will work closely with CHCC leadership to develop competent, committed and compassionate MCH professionals.

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

The CNMI MCHB has focused efforts to meet the demands of the transition of our governing entity into a semi-autonomous government agency, setting the structure to merge all programs and services for the MCH population into one Bureau, meeting grant requirements, and maintaining services to our target groups. The MCH Program not only partners with internal programs such as the HOME Visiting and Newborn Hearing Screening Programs, but strives to involve families at all levels, individually, and at the decision-making level. Family/consumer engagement has taken place through advisory committees, strategic and program planning, quality improvement, workforce development, block grant development and review, materials development, and advocacy.

In order to ensure that services are effectively meeting the needs of the local population, programs under the MCH Bureau have taken a collective approach towards involving families in programmatic decision making. The MCH Bureau has initiated a learning collaborative involving Parent Advisory Panel members to focus on training and capacity building among families as a means for strengthening meaningful family engagement. Parent Advisory Panels (PAPs) have been established on the islands of Saipan, Tinian, and Rota in 2018.

Strategic and program planning, congruent with the integration of programs and services for the Bureau, continues to involve small-group discussions, individual surveys, partnership meetings, and social media. Focus groups with various target groups continue to be conducted. In 2017, the MCH program partnered with the Family Planning program to facilitate focus groups with adolescents from high schools throughout the CNMI. The focus groups were conducted with the intent to ensure that strategic and program planning are guided by family/consumer input. Surveys were also conducted throughout the communities. Surveys include Kagman Community Health Center telephone surveys, H.O.M.E. Visiting Program Family Satisfaction Surveys, CSHCN Needs Assessment Survey. Input and guidance was also sought through the use of social media such as with the MCHB Facebook account which allows families to send inquiries by posting directly on timeline and using the private messaging feature. Along with other members of the CNMI MCH Advisory Committee, families are also invited to participate in the development and review of the State Action Plan and the Executive Summary, as part of the Block Grant Development and Review.

Moreover, for materials development, programs seek input from families who actively participate in MCH programs on items such as program brochures. Program informational materials, including those specific for the adolescent population, are reviewed by the Information and Education (I & E) committee and approved by them prior to printing and distribution to the community as a mechanism for ensuring that print materials are culturally and linguistically appropriate. The I & E committee is made up of community members of varying ethnic backgrounds, age groups, and segments of the community representative of the CNMI population.

MCHB related advisory committees with family partners as members include the: Interagency Coordinating Council (ICC), Newborn Hearing Screening Advisory group, CSHCN stakeholder group, HOME Visiting Community Advisory Board, Governor's Council on Developmental Disabilities, and the Head Start Advisory Council. Families and community members also take active roles in the planning and coordinating of annual CNMI wide events, such as with CNMI Women's Health Month.

In addition to these efforts, the MCH Bureau has been consulting with the national Family Voices organization on strategizing on ways to build self-advocacy and leadership capacity among parents and families who have children with disabilities. The MCH Bureau was awarded federal grant funding to establish a Family to Family Health

Information Center in the CNMI allowing the MCH Bureau to take an active role and prioritize the work needed to develop parent leaders within the CNMI community. This newly established project is aims to provide training to families and providers who work with CYSCHN, develop and disseminate culturally and linguistically appropriate information/educational materials, provide one-on-one family consultation, and utilize a community awareness campaign.

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

The Commonwealth of the Northern Mariana Islands (CNMI) Maternal and Child Health (MCH) Systems Development and Improvement Project continues to focus grant resources to improve data capacity for the CNMI Title V MCH Block Grant program. The SSDI Project continues to be greatly involved with the CNMI Title V MCH program by working towards modifications and updates to existing CNMI Title V MCH data repository system to include all National Outcomes Measures (NOMs), National Performance Measures (NPMs), and State Performance Measures (SPMs). The SSDI project worked closely with the MCH program during the 5 year needs assessment process for developing and completing the CNMI's 2015 MCH Needs Assessment. The 2015 Needs Assessment resulted in the selection of priorities and related NPMs that the CNMI Title V MCH program has focused its efforts on during the 2016 – 2020 period. The SSDI assisted with the development of Evidence-based or informed Strategy Measures (ESMs) to better enable the MCH program's efforts in tracking and monitoring progress towards meeting objectives for the CNMI selected priorities. Initially, 12 ESMs were developed, however, after meetings with partners and assessing agency capacity, the number of ESMs were reduced to eight by the subsequent reporting year.

The SSDI Project Coordinator works to compile Title V MCH data annually and works closely with the MCH epidemiologist and the MCH Program Coordinator in completing data analysis to inform the annual Title V Block Grant report and application. Additionally, the SSDI Project Coordinator works closely with partners such as the WIC program, Public School System, HVSO, CHCC Medical Records department for collecting information vital to needs assessment updates and for informing the annual block grant.

The SSDI works closely with the HVSO and CHCC Medical Records department for accuracy and validity, including clarification surrounding fetal, child, adolescent and maternal deaths. Additionally, the SSDI project works closely with the CHCC IT department, billing department, and Medical Records on extracting and compiling Title V measures through ICD-10 and billing codes.

The SSDI project coordinated a Life Course training for staff of the Division of Public Health Services and CHCC nurses and providers. Other training coordinated by the SSDI project towards efforts for expanding data capacity for MCH reporting includes training on the RPMS QMAN and VGEN data management and extraction system to extract data from the CHCC electronic health records system.

The SSDI project led the CNMI's efforts in carrying out the Infant Mortality CollN framework and activities for reducing infant mortality in the CNMI. Staff from the MCH program along with the SSDI Project Coordinator took part in Pacific CollN Data Capacity Learning Network calls and in the Pacific Basin Fetal and Infant Mortality Review (FIMR) coaching calls and activities. The CNMI infant mortality rate for the years 2011-2013 was 4.65 and for the years 2014-2016 2.95, a rate decrease of 1.7 per 1,000. Data gathered through the SSDI project assisted the MCH program in identifying and developing educational campaign information used to increase awareness on initiatives such as breastfeeding and safe sleep practices. The SSDI project continued its collaboration with the CNMI Health and Vital Statistics for working on improving quality and timeliness of birth and death information. The SSDI Project Coordinator was granted access to the CNMI's only hospital data system, called the RPMS, as well the CNMI Birth Records data system managed by the CNMI Health and Vital Statistics Office (HVSO). Access to the CNMI's only birthing hospital's data system meant that the SSDI and MCH program had access to data on almost all births that occurred in the CNMI.

As part of efforts towards increasing newborn bloodspot screening rates, the MCHB is working with the CHCC IT department for improving access to newborn bloodspot data available through the Oregon Department of Public Health Laboratory. Current process requires that MCH Bureau staff conduct a manual, per patient search via the Oregon Public Health Laboratory data system, which is time consuming and can take anywhere upwards of 5-10 minutes to access an individual patient's bloodspot screening result. With an average of 5 babies per day, it takes the program anywhere from 25 to 50 minutes to complete daily data gathering on newborn bloodspot screens which comes out to about 4 hours per week. Improvements are currently being negotiated with Oregon Public Health Laboratory to allow for weekly data downloads via a secure file transfer protocol (SFTP). This set up will reduce the amount of time dedicated towards gathering bloodspot data and allow the program to devote more time on actually analyzing screening rates, presumptive positive rates, and work on improvements on referral and coordination of care for children needing follow-up diagnostic and early intervention or specialty care, if needed.

The following is a list of programs and corresponding data that the SSDI Program focuses on collecting and analyzing as part of annual Title V Block Grant reporting:

Table 3: CNMI MCH Data Sources

Data Source/Program Report	Information Gathered
Healthy Outcomes for Maternal and Early Childhood (HOME) Visiting Program	Breastfeeding Rates Safe Sleep Practices/data Early Childhood Developmental Screening
Family Planning Program	Preventive Visits for Women ages 18-44 Adolescent Visit Rates
Breast & Cervical Cancer Screening Program	Breast and Cervical Cancer Screening Rates
CNMI Cancer Registry	Cancer Diagnosis Rates
Immunization Program	Childhood Immunization Rates
Early Hearing Detection & Intervention (EHDI) Program	Newborn Hearing Screening Rates Diagnosis and Referral Rates
Public Health Dental Clinic/Oral Health Program (School Based Programs)	Dental Caries Rates Preventive Dental Visit Rates for Children Prenatal Preventive Visit Rates Oral Cancer Screening Rates
CNMI Health & Vital Statistics Office	Birth Rates Teen Birth Rates Preterm Births Prenatal Care rates Fetal & Infant Death Maternal Morbidity & Mortality Data Birth weight data Congenital Anomalies Birth Outcome Data
CNMI Medicaid Office	Number of children enrolled Number of pregnant women enrolled
CHCC Hospital Electronic Health Record Data System	Anemia Diagnosis Rates Well-Child Visit Rates Preventive Visit Rates
Women, Infant, Children (WIC)	Breastfeeding Rates Early Childhood BMI data Anemia screening data
Early Intervention Program	Number of CSHCN 0-3 years
Public School System	Youth Risk Behavior Survey (YRBS) SPED enrollment rates School Enrollment Rates

Additionally, the SSDI Project has been actively involved in leading efforts around the CNMI's comprehensive 5-year MCH Needs Assessment. As part of the Needs Assessment Steering Committee, which is composed of the MCH Bureau Administrator and the Director of the Division of Public Health Services, the SSDI Project Coordinator takes part in identifying goals, framework, and methodology that will be used to complete the 2020 Needs Assessment. The Project is working closely with a consultant to have the entire needs assessment completed by the July 2020 deadline.

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

Over the past several years, shifts in CNMI policies and the health care environment have impacted the health system services and sustainability. The CHCC, which provides both clinical and public health services, was formed in 2012. This reorganization provided a unique opportunity for integrated services between clinical and public health services. However, in such a financially constrained environment - systematic, evidence based, and outcome driven change is challenging.

The MCH Title V Program is administered by the CHCC Division of Public Health Services (DPHS), within the Maternal and Child Health Bureau. Preventive and primary care services for women and children are provided at the CHCC Women's Clinic, Children's Clinic – both are located at the hospital; and Rota and Tinian Health Centers- located on the outer islands. MCH services include prenatal care, postpartum care, women's health, education and counseling, case management of high risk pregnancies, family planning, HIV/STI Prevention, and preventive screenings such as mammogram, Pap smear, blood pressure screening, diabetes screening with blood sugar testing, well-child visits, developmental screenings for infants and children, newborn screening, and oral health services. Since its inception, the MCHB, and primarily the MCH Program, has worked diligently with the CHCC outpatient clinics and its medical providers on applying evidence-based approaches towards improving healthcare and health outcomes within the population.

In addition to working closely with CHCC clinic providers, the MCH program works closely with community based partners on a variety of projects. A significant role that MCH plays towards ensuring access to healthcare is by working towards reducing barriers to access. The inability to pay or lack of insurance is often cited as a major obstacle in seeking preventive healthcare. The MCH Program provides expedited Medicaid application assistance to women and children in the CNMI and receives referrals from partner agencies and medical providers.

The partnership between the MCH program and the CNMI Medicaid program, as indicated in an interagency agreement, includes referrals, Medicaid reimbursement for services eligible under the Medicaid State Plan, data sharing, and training. The Medicaid program provides eligibility and enrollment information to the MCH program on an annual basis. Additionally, the Medicaid program allows for the processing and expediting of MCH client applications and provides training to MCH program staff on Medicaid eligibility and application processing. The CNMI Medicaid program is operated under a 100% fee for service model. When needed health services are not available within the CNMI, the Medicaid program, through a medical referral review board, provides coverage for off-island medical care to those enrolled.

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

Women/Maternal Health

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations	SID	Data Not Available or Not Reportable	NPM 1
NOM 3 - Maternal mortality rate per 100,000 live births	NVSS	Data Not Available or Not Reportable	NPM 1
NOM 4 - Percent of low birth weight deliveries (<2,500 grams)	NVSS-2017	7.6 %	NPM 1
NOM 5 - Percent of preterm births (<37 weeks)	NVSS-2017	7.8 %	NPM 1
NOM 6 - Percent of early term births (37, 38 weeks)	NVSS-2017	33.4 %	NPM 1
NOM 8 - Perinatal mortality rate per 1,000 live births plus fetal deaths	NVSS	Data Not Available or Not Reportable	NPM 1
NOM 9.1 - Infant mortality rate per 1,000 live births	NVSS-2017	Data Not Available or Not Reportable	NPM 1
NOM 9.2 - Neonatal mortality rate per 1,000 live births	NVSS-2017	Data Not Available or Not Reportable	NPM 1
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2017	Data Not Available or Not Reportable	NPM 1
NOM 9.4 - Preterm-related mortality rate per 100,000 live births	NVSS	Data Not Available or Not Reportable	NPM 1
NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy	PRAMS	Data Not Available or Not Reportable	NPM 1
NOM 11 - The rate of infants born with neonatal abstinence syndrome per 1,000 hospital births	SID	Data Not Available or Not Reportable	NPM 1
NOM 23 - Teen birth rate, ages 15 through 19, per 1,000 females	NVSS-2017	16.1	NPM 1
NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth	PRAMS	Data Not Available or Not Reportable	NPM 1

National Performance Measures

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

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

State Provided Data			
	2016	2017	2018
Annual Objective	19	12	19
Annual Indicator	12.1	18.1	18.7
Numerator	1,464	1,425	1,437
Denominator	12,096	7,863	7,690
Data Source	CNMI Pap Exam Data, US Census Population Estimate	CNMI Pap Exam Data, US Census Population Estimate	CNMI Pap Exam Data, US Census Population Estimate
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	20.0	21.0	22.0	23.0	24.0	25.0

Evidence-Based or –Informed Strategy Measures

ESM 1.1 - Percent of women ages 18 thru 44 seen at mobile clinic outreach events.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		5	5	
Annual Indicator	2.9	1.6	3.3	
Numerator	351	124	251	
Denominator	12,096	7,863	7,690	
Data Source	MCH Program Records	MCH Program Records	MCH Program	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	7.0	8.0	10.0	11.0	11.0	12.0

ESM 1.2 - Percent of women ages 18 thru 44 seen at the Family Planning Program.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective			9	11
Annual Indicator	7.8	10.4	14.1	
Numerator	948	818	1,085	
Denominator	12,096	7,863	7,690	
Data Source	CNMI Family Planning Program Records	CNMI Family Planning Program Records	CNMI Family Planning Program	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	14.0	14.0	15.0	15.0	16.0	16.0

State Performance Measures

SPM 1 - Percent of women of childbearing age with anemia.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		15	10	
Annual Indicator	16.4	10.2	14.8	
Numerator	42	52	16	
Denominator	256	510	108	
Data Source	MCH Program Records	CNMI WIC Program	MCH Program Records	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	13.0	12.0	12.0	11.0	11.0	10.0

State Action Plan Table

State Action Plan Table (Northern Mariana Islands) - Women/Maternal Health - Entry 1

Priority Need

Improve Women's Health Through Cervical and Breast Cancer and Anemia Screening.

NPM

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

Objectives

By 2020, increase the number of women of reproductive age who complete a preventive health visit by 10% from baseline.

Strategies

Utilize the mobile clinic to bring preventive screenings and other health services into non-traditional sites and into underserved communities.

Promote reproductive life planning and preconception care.

ESMs

Status

ESM 1.1 - Percent of women ages 18 thru 44 seen at mobile clinic outreach events.

Active

ESM 1.2 - Percent of women ages 18 thru 44 seen at the Family Planning Program.

Active

NOMs

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

NOM 3 - Maternal mortality rate per 100,000 live births

NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

NOM 5 - Percent of preterm births (<37 weeks)

NOM 6 - Percent of early term births (37, 38 weeks)

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

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

NOM 9.2 - Neonatal mortality rate per 1,000 live births

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

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

NOM 10 - The percent of infants born with fetal alcohol exposure in the last 3 months of pregnancy

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

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

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

State Action Plan Table (Northern Mariana Islands) - Women/Maternal Health - Entry 2

Priority Need

Improve Women's Health Through Cervical and Breast Cancer and Anemia Screening.

SPM

SPM 1 - Percent of women of childbearing age with anemia.

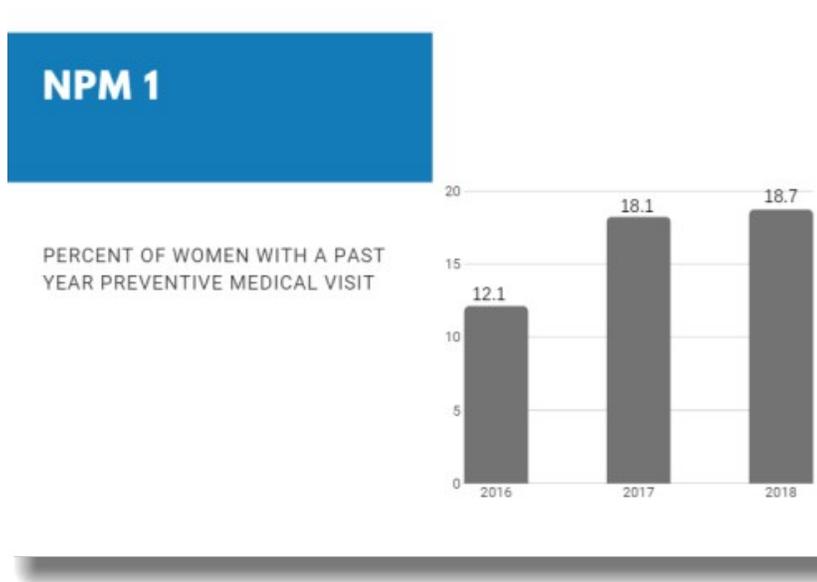
Objectives

By 2020, decrease the number of women of childbearing age with anemia by 10%.

Strategies

Increase access to anemia screening.

WOMEN/MATERNAL HEALTH



A total of 18.7 percent of women ages 18 thru 44 years in the CNMI accessed preventive medical services in 2018. This was a slight increase from the previous year which was at 18.2 percent. The denominator value for this measure is based on the US Census population for the CNMI in 2018, which was 7,690 women ages 18 thru 44 years. Numerator information is based on the total number of women of reproductive age who completed a pap exam on the islands of Saipan, Tinian, and Rota in 2018. Numerator is gathered through laboratory data on pap specimens. The CNMI currently does not have a national data set to gather preventive medical visit rates among the women of childbearing age demographic, therefore the number of pap exams completed is used as a proxy measure.

Strategy: Utilize the mobile clinic to bring preventive screenings and other health services into non-traditional sites and into under-served communities.

CNMI Annual Women's Health Month

Each year during the month of the May the CNMI celebrates Women's Health Month. Women's Health Month planning and event coordination is directed by a committee formed of partnerships of a variety of Public Health programs and includes members from external agency partners such as the CNMI Office of Youth Affairs, Lady Diane Torres Foundation, and others. In 2018, the MCH Program spearheaded a four (4) day Mobile Clinic Outreach at the Nutrition Assistance Program (NAP) Office, the CNMI's local food stamp program, which is located at a southern village on the island of Saipan. The outreach was held during food stamp voucher issuance days in the month of May 2018. Food stamp issuance days is held during the first week of each month and provides assistance to a total of 2,709 households on the island of Saipan. The Mobile Clinic outreach was held in partnership with other programs



such as the Title X Family Planning, Breast and Cervical Cancer Screening Program, and the Maternal, Infant, Early Childhood Home Visiting (MIECHV) Program.



The MCH Program provided free blood pressure and blood glucose screenings to a total of **206** individuals during the Food Stamp office outreach event. Services provided included diabetes, hypertension, and anemia screening. Family Planning services along with breast and cervical cancer screenings were also available and accessible on site through the use of the Public Health Mobile Clinic. Individuals were also screened for insurance coverage and offered assistance on applying to the Medicaid program or the CHCC Sliding Fee program. Individuals identified at risk for diabetes, hypertension, or anemia were counseled on risk factors that contribute to the health conditions and provided a referral to either the CHCC Family Care Clinic or the Kagman

Community Health Center (KCHC), which is the only Federally Qualified Health Center (FQHC) in the Northern Mariana Islands. Additionally, health education materials, such as brochures and flyers, were available on site and shared with food stamp program recipients. Informational materials provided included topics such as prenatal care, breastfeeding, early childhood developmental screening, newborn screening, and preventive screenings for women, etc.

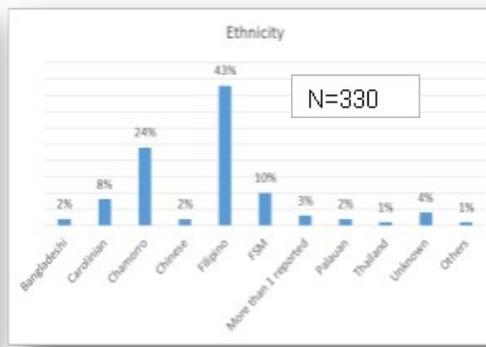
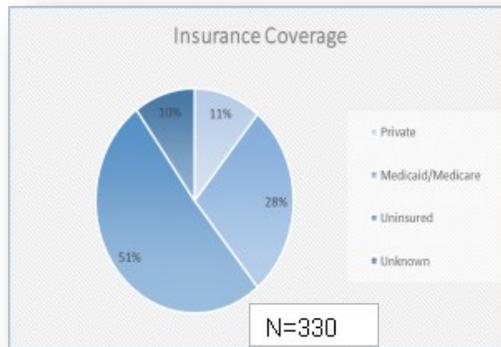
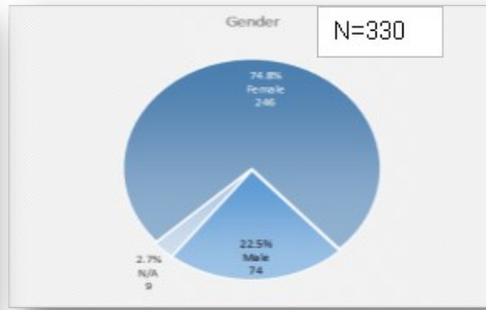
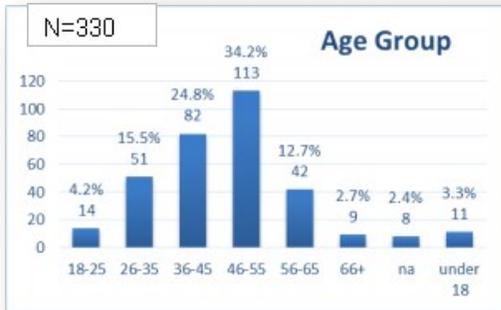


In addition to the NAP office Mobile Clinic Outreach event, the MCH Program also provided basic health screenings on the island of Rota, at the 2nd Annual CNMI Run 4 Mom Event on Saipan and provided Family Planning and BCSP services through the use of the mobile clinic in the villages of Tanapag, Garapan, and Koblerville. The MCH Program saw an additional **124** community members at these outreach events providing free basic screenings and health education regarding risk factors of non-communicable diseases and the importance of completing annual well-

visits.

The MCH Program was able to provide preventive screenings to **330** individuals through outreach clinic events mentioned above. Seventy-five (75) percent of the event participants were women and 79 percent of participants being between the ages of 18 and 45 years. More than half (51%) reported to be uninsured and 28 percent reported Medicaid/Medicare coverage as a source of health insurance. Only 11% of those screened reported to have private insurance coverage.

Figures 4-7: Age distribution, gender, insurance, and ethnic breakdown of Women's Health Month outreach events



Mobile Clinic Outreach SAN ROQUE CHURCH OUTREACH



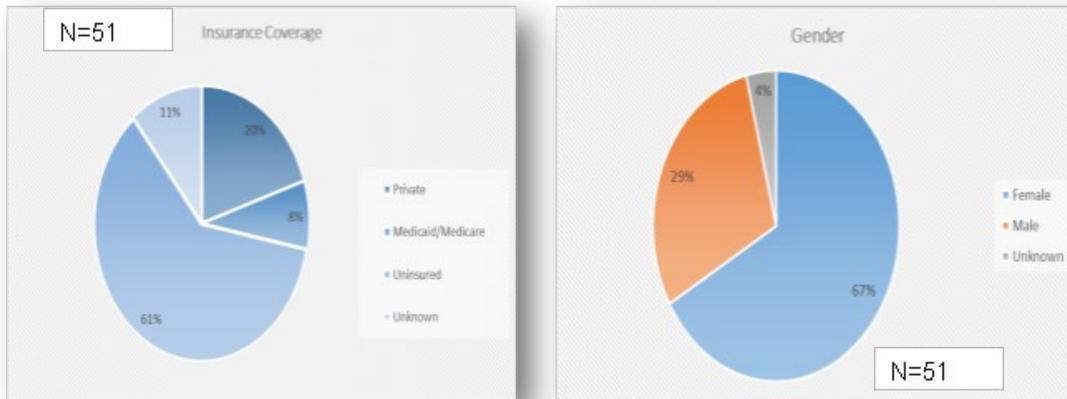
The CNMI MCH Program and Breast and Cervical Cancer Screening Program partnered with the San Roque Catholic Church to provide women's preventive health services through the use of the Public Health mobile clinic. Mobile clinic services were made available on the church grounds and included breast and cervical cancer screening. Women were also informed of services available through the CNMI Family Planning Program and referrals to Family Planning service sites made to those who expressed interest. Basic health screenings, such as screening for diabetes, hypertension and anemia risk, were provided to all members of the community that visited the outreach event.

The CNMI population is predominantly Catholic, therefore the partnership with the Catholic Diocese and the Churches in the CNMI supports the MCH Program's efforts for increasing the numbers of community members, most especially women, that are served through preventive health programs and services. The San Roque church is a Catholic parish that is located on the northern most part of the island of Saipan. There are no health clinics located in the village of San Roque.

The MCH Program saw a total of 51 individuals during the mobile clinic outreach with a majority of them (67%) women. A majority of the individuals seen (61%) were uninsured, 20 percent had reported private insurance coverage, and just eight percent had Medicaid/Medicare coverage. A large proportion of the individuals seen during

the San Roque outreach clinic were Filipinos (72%), followed by 20 percent Chamorro, 2 percent African American and 2 percent Carolinian.

Figures 8-9: Insurance and Gender for San Roque Clinic Outreach



NUTRITION ASSISTANCE PROGRAM (NAP) OUTREACH

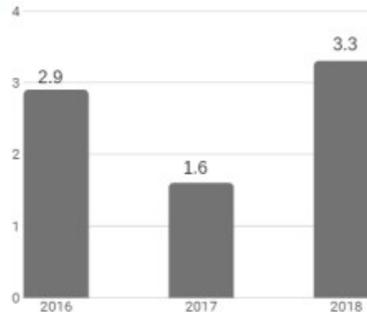
The MCH Program partnered with the Family Planning program and CHCC Women’s Clinic to provide basic preventive health screenings, such as blood glucose and blood pressure screening, and Family Planning Services to food stamp recipients during benefit distribution days. MCH was able to provide services to 227 individuals. Of the 227 individuals seen, 167 were women and 75 were women ages 18 thru 45 years. In addition to offering basic screenings, such as blood glucose and blood sugar, the MCH program screens for insurance status and provides information and/or assistance on applying for the CNMI Medicaid program or the CHCC Sliding Fee Program to those who report to be uninsured.

TINIAN & ROTA

The MCH Program partnered with the Family Planning Program and the Breast and Cervical Cancer Screening program to conduct Women’s Clinic Outreach to the outlying islands of Tinian and Rota. The MCH Program funds travel for an OB/GYN to travel from Saipan to Tinian and Rota on a quarterly basis to provide prenatal care and women’s preventive healthcare services including breast and cervical cancer screening and family planning services. Through the partnership, total of 7 outreach clinics, 4 on the island of Rota and 3 on Tinian, were conducted. In Rota, there were a total of 32 patients seen for pap and breast exams with 24 of them being women between the ages of 18 and 45 years. In Tinian, a total of 45 women were provided pap smears and breast exams and 26 of the 45 (57.8 percent) being between the ages of 18 and 45 years.

ESM 1.1

Percent of women ages 18 thru 44 years seen at mobile clinic outreach events.



Transportation and financial barriers are often cited by community members as challenges to receiving preventive healthcare. Additionally, many primary and preventive care clinics only operate during usual business hours, Monday thru Friday between the hours of 8 a.m.-4:30 p.m. Healthcare limited to the usual business hours is a challenge for many who work or attend school during those hours. To address these challenges, the MCH Program has partnered with other Public Health programs to bring women's preventive healthcare into village and community settings.

The MCH Program conducted 3 Outreach Clinics on the island of Saipan, 4 on the island of Rota, and 3 on the island of Tinian. A total of 251 women between the ages of 18 to 45 years accessed services through the Outreach Clinics. The US Census estimates that the population of women ages 18 thru 45 years in the CNMI in 2018 is 7,690, which means that 3.3 of the total population of women of reproductive age in the CNMI accessed services through Clinic Outreach in 2018. This percentage has increased from last year's rate of 1.6 percent.

Strategy: Utilize Print, Radio, and Social Media to promote the importance of Preventive Screenings.

Live Radio Shows

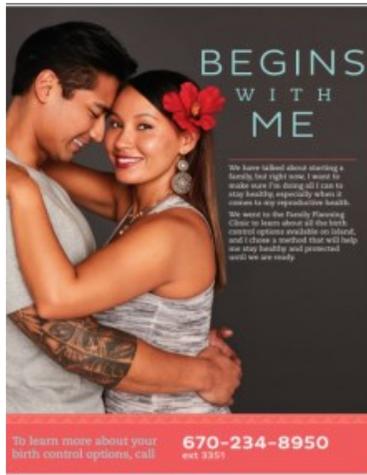


The MCH Program utilized print, social media, and radio advertisements as a means for increasing community awareness regarding the importance of preventive medical visits, preventive screenings, and availability of services and assistance in the community. In 2018, the program conducted **4 live radio shows** on a variety of women's preventive health services. MCH partnered with providers from the CHCC Women's Clinic and

program managers from programs such as Family Planning and MCH were on live radio providing information

regarding the importance of preventive healthcare, i.e. annual check-ups, preventive health screenings, prenatal care, etc., and informing listeners about available programs and services to address healthcare needs, i.e. Family Planning Program, Women's Clinic, Tobacco Cessation Program, Dental Clinic, Medicaid assistance, etc. Live radio provided an opportunity for community members to call in to the station to ask questions or gather additional information about services. Additionally, the information was translated by the radio hosts into the indigenous languages spoken by the Chamorro and Carolinian groups.

Print and Online Advertisements



The MCH Program also utilized online newspaper advertisements, Facebook and Instagram social media platforms to advertise information on available program services, outreach events, and preventive health education information. In 2018, the MCH program published 248 Facebook Posts, almost doubling Facebook posts conducted in 2017 (125 posts in 2017).

Additionally, the Program partnered with the Family Planning Program and the CDC's Division of Reproductive Health to develop print materials utilizing models who more closely resembled the local demographics. While the program has utilized health education materials by organizations such as CDC, WHO, and HRSA, community members have shared through informal interviews that adapted print materials are more appealing and relatable, therefore more likely to be viewed and read by the CNMI community. Title V funds were used to support the

development and printing of brochures and posters that provide information on services for preventive women's health. Posters have been distributed to various partnering agencies, such as the WIC, Division of Youth Services, etc., and are included in Newborn Packets provided to women prior to discharge from the CHCC Obstetrics unit.

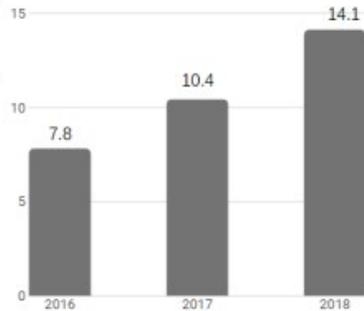
Strategy: Increase the number of women seen through the Family Planning Program.

For many women in the CNMI, the Family Planning Program is their first entry into the healthcare system and their only source of primary care services. MCH has worked closely with Family Planning to improve breast and cervical cancer screening rates, increase access to contraception and pregnancy testing, and enhance case management. The MCH Program works diligently to ensure that Family Planning services be made available whenever possible during Clinic outreach events.

In 2018, MCH published advertisements through the online newspaper outlets to increase community awareness regarding services available through Family Planning. Staff and management of the CNMI Maternal and Child Health Bureau were also provided training on program services, service sites, and eligibility criteria to increase referrals from program such as Home Visiting, Newborn Screening, Oral Health, etc. Additionally, the Title V funds were utilized to provide pap smears for women seen through the program.

ESM 1.2

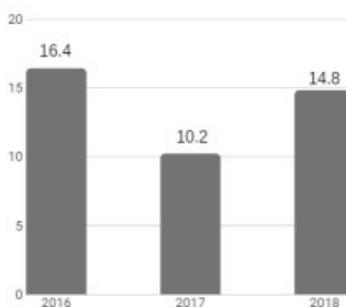
Percent of women ages 18 thru 44 years seen at the Family Planning Program.



Numerator data for this measure is obtained through the CNMI Family Planning program and is based on the unduplicated total number of women ages 18 thru 44 years that received family planning services. In 2018, there were a total of 1,085 women ages 18 thru 44 years that accessed the Family Planning program. The US Census estimates that the population of women ages 18 thru 45 years in the CNMI in 2018 is 7,690, which means that 14.1 percent of the total estimated population of women of reproductive age in the CNMI accessed services through Family Planning. This percentage has increased from last year's rate of 10.4 percent.

SPM 1

PERCENT OF WOMEN OF
CHILDBEARING AGE WITH ANEMIA



A total of 108 women between the ages of 18 thru 44 years were screened for anemia during Clinic outreach in 2018. Of the 108, 16 women (14.8 percent), were identified with hemoglobin levels below 12 grams per deciliter. These women were referred to primary care for further testing and diagnostic services.

The MCH Program and Needs Assessment Steering committee performed an assessment of State Performance

Measure 1, Percent of Women of Childbearing Age with Anemia, to identify the impact and determine whether the measure reflected the intent of addressing the issue of anemia among the maternal population in the CNMI. During the 2015 MCH Needs Assessment, qualitative information gathered through the CHCC Ob/Gyn department identified an increase in the number of prenatal patients being diagnosed with anemia and that there was a need to increase anemia screening among the women/maternal population. As such, anemia was determined to be a priority area for addressing the health of women in the CNMI. The program and Needs Assessment Steering Committee, through guidance received from reviewers during the 2019 block grant review, have determined that instead of focusing on the rate of women diagnosed with anemia, the program will focus on increasing anemia screening rates. Therefore, SPM 1 will be inactivated and an ESM developed for reporting year 2019 to reflect efforts/strategy for anemia screening among the women/maternal population in the CNMI.

Strategy: Integrate Anemia Screenings and Education into Family Planning visits and preconception evaluations.

Through Title V funds, the MCH Program secured non-invasive hemoglobin screening machines. The equipment allows for non-invasive and quick estimation of hemoglobin levels through a finger sensor. The equipment was provided to the Family Planning Program for anemia screening to be conducted among patients during initial yearly visits. In 2018, the Family Planning medical assistant was able to screen 27 patients before experiencing an issue with the anemia screening equipment. It was determined that replacement equipment was needed and therefore screening at Family Planning visits were placed on hold until a replacement unit was obtained. Screening resumed after replacement machine was received in FY 2019.

Strategy: Integrate anemia screening during clinic outreach events.

In 2018 the MCH Program was able to provide anemia screenings to 272 community members during Clinic outreach. Of the 272 screened for anemia risk, 108 were women ages 18 thru 44 years. A total of 16 of the 108 women screened, or 14.8 percent, were identified with hemoglobin levels below the average level of 12 grams per deciliter. Normal hemoglobin range for women is between 12 and 15.5 grams per deciliter. Women who are identified during Clinic outreach with hemoglobin levels of less than 12 grams per deciliter were referred to a primary care provider for further evaluation and treatment, if needed. Women were provided educational material regarding potential causes of anemia and importance of prevention and treatment.

Challenges

The Public Health mobile clinic is critical to the provision of services to those who are underserved in the community. During the latter part of 2018, the CNMI's only mobile clinic vehicle was shipped from the islands of Saipan to the island of Rota after Rota was badly impacted by Typhoon Mangkut. The CHCC Leadership is currently working on procuring a replacement mobile clinic vehicle for the island of Saipan. The MCH Program will work with partnering agencies and organizations to be able to utilize office space to provide preventive women's health care during clinic outreach events.

Another challenge is around collecting data on annual preventive visits for the maternal population. The MCH program relies mainly on data collected through the CHCC clinics. And although the CHCC provides 100 percent of inpatient care and a majority of ambulatory care, the program at this time does not have access to information on preventive visits conducted at private clinics. Additionally, since the CHCC had implemented the EHR, programs under Public Health



are continuously working with the CHCC IT Director and providers at the Women's Clinic on assessing current data collection made through EHR and developing plans for improving them.

Women/Maternal Health - Application Year

Women/Maternal Health

Activities to address priority areas identified for the Women/Maternal Health domain will continue to be guided by the life course framework. MCH will continue efforts in bringing preventive screenings into village settings and outlying island communities through clinic outreach events. A focus on integrating pre-conception health and healthcare within primary care settings and during clinic outreach will be a priority for FY 2020. Preconception care is individualized care focused on reducing maternal morbidity and mortality, increasing the chances of conception if and when pregnancy is desired, and providing contraceptive counseling to help prevent unplanned pregnancies^[1]. Management of overall health and other conditions are important factors in preconception care, this includes important health screenings such as breast and cervical cancer screening, STD screening, diabetes and hypertension screening, and weight management which are in line with the CNMI MCH program's priority for improving women's health.

Priority Need: Improve women's health through breast, cervical, and anemia screening.

National Performance Measure 1: Percent of women, ages 18 through 44, with a preventive medial visit in the past year.

Objective: By 2020, increase the number of women who receive a preventive visit by 10%.

Strategy: Utilize the clinic outreach events to bring preventive screenings and other health services into non-traditional sites and into under-served communities.

Transportation continues to be a top cited barrier for accessing healthcare in the CNMI. While there has been recent developments towards implementation of a public transit system, access to transit services through the Commonwealth Office of Transit Authority (COTA) is minimal at this time. Bringing health services into community village settings through outreach provides access to many who lack transportation. Collaboration between the MCH Program, Family Planning, and Breast and Cervical Cancer Screening program will continue to play a critical role towards clinic outreach and in reaching underserved pockets of the population.

Strategy: Promote Reproductive Life Planning and Preconception Care.

Preconception health refers to the health of a woman of childbearing age prior to or between pregnancies. Key components of preconception care includes the identification and modification of biomedical, behavioral, and social risks and addresses lifestyle risk factors, screenings and vaccinations, chronic disease management, and access to contraception. The CNMI MCH Program will utilize the following activities to promote reproductive life planning and preconception health:

- Provide training to clinic staff on reproductive life planning and preconception care.
- Develop protocols, workflow diagram, and patient handouts to assist with integration of reproductive life planning into primary settings.
- Utilize media campaigns (television and radio advertisements) to promote community awareness of the importance of preconception health and how to access preconception healthcare and Family Planning services.
- Collaborate with partner agencies to conduct a CNMI Women's Health Symposium, highlighting preconception health.

State Performance Measure 1: Percent of women of childbearing age with anemia.

Objective: By 2020, reduce the rate of anemia in reproductive age women by 10%.

Strategy: Increase access to anemia screening.

The MCH Program will continue to partner with the Family Planning program in conducting anemia screenings during Family Planning visits, during pre-conception and inter-conception visits. The program will also work to include anemia screening as part of school based programs, such as the Dental Sealant program and the teen outreach clinic.

^[1] American Academy of Family Physicians. (2016). Preconception Care. Retrieved on June 23, 2019 from <https://www.aafp.org/about/policies/all/preconception-care.html>

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-2017	Data Not Available or Not Reportable	NPM 4
NOM 9.3 - Post neonatal mortality rate per 1,000 live births	NVSS-2017	Data Not Available or Not Reportable	NPM 4
NOM 9.5 - Sleep-related Sudden Unexpected Infant Death (SUID) rate per 100,000 live births	NVSS-2017	Data Not Available or Not Reportable	NPM 4

National Performance Measures

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

NPM 4A - Percent of infants who are ever breastfed

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

State Provided Data			
	2016	2017	2018
Annual Objective	45	94	96
Annual Indicator	95.5	94.7	95.8
Numerator	1,162	1,145	1,209
Denominator	1,217	1,209	1,262
Data Source	CNMI Health and Vital Statistics Office	CNMI Health and Vital Statistics Office	CNMI Health and Vital Statistics Office
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	96.0	97.0	97.0	98.0	98.0	98.0

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

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

State Provided Data			
	2016	2017	2018
Annual Objective	40	3	4
Annual Indicator	1.7	2.5	2.5
Numerator	9	13	12
Denominator	535	518	486
Data Source	CNMI WIC Program	CNMI WIC Program	CNMI WIC Program
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	4.0	5.0	5.0	6.0	6.0	7.0

Evidence-Based or –Informed Strategy Measures

ESM 4.2 - Percent of infants enrolled in Home Visiting breastfed through 6 months.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		53	55	
Annual Indicator	51.6	56.5	45.1	
Numerator	33	13	23	
Denominator	64	23	51	
Data Source	MIECHV Home Visiting Program	MIECHV Home Visiting	MIECHV Home Visiting	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	50.0	52.0	54.0	56.0	58.0	60.0

State Performance Measures

SPM 2 - Percent of deliveries to resident women receiving prenatal care beginning in the first trimester of pregnancy.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective			45	47
Annual Indicator	43.4	45.8	47.5	
Numerator	319	297	323	
Denominator	735	648	680	
Data Source	CNMI HVSO	CNMI HVSO	CNMI HVSO	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	49.0	51.0	53.0	55.0	55.0	60.0

State Action Plan Table

State Action Plan Table (Northern Mariana Islands) - Perinatal/Infant Health - Entry 1

Priority Need

Improve Perinatal/Infant Outcomes Through Early and Adequate Prenatal Care Services and Promoting Breastfeeding and Safe Sleep.

NPM

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

Objectives

By 2020, increase the percent of mothers reporting exclusively breastfeeding by 10%.

Strategies

Increase access to breastfeeding support and education.
 Increase partnerships and collaboration in support of breastfeeding.

ESMs

Status

ESM 4.1 - Percent of infants enrolled in WIC who are breastfed exclusively through 6 months	Inactive
ESM 4.2 - Percent of infants enrolled in Home Visiting breastfed through 6 months.	Active

NOMs

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

State Action Plan Table (Northern Mariana Islands) - Perinatal/Infant Health - Entry 2

Priority Need

Improve Perinatal/Infant Outcomes Through Early and Adequate Prenatal Care Services and Promoting Breastfeeding and Safe Sleep.

SPM

SPM 2 - Percent of deliveries to resident women receiving prenatal care beginning in the first trimester of pregnancy.

Objectives

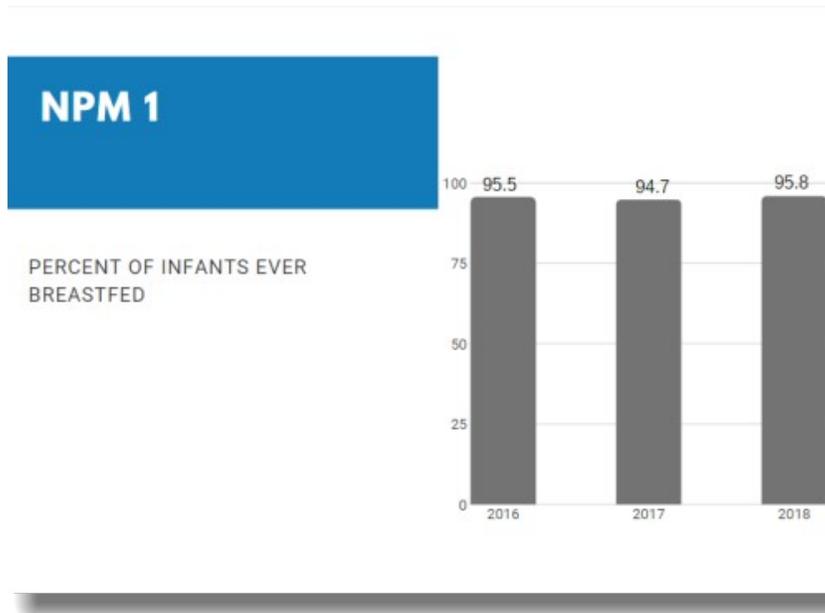
By 2020, increase the number of resident women receiving prenatal care beginning in the first trimester by 5%.

Strategies

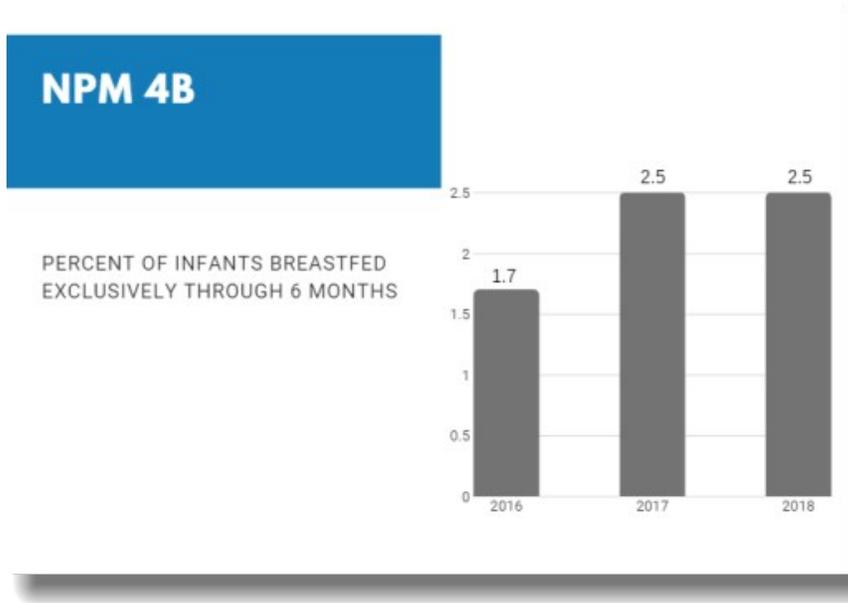
Increase community awareness regarding the importance of early and adequate prenatal care.

Increase access to prenatal care.

PERINATAL/INFANT HEALTH

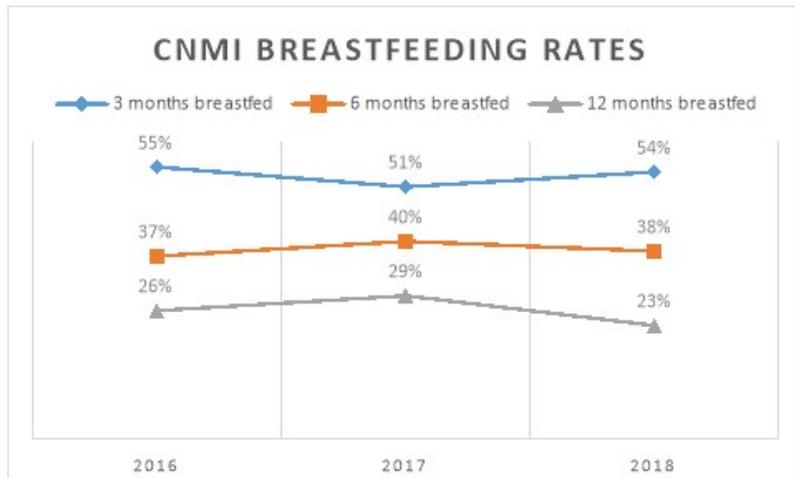


Based on data gathered from birth records available at the CNMI Health & Vital Statistics Office, 95.8 percent of infants in the CNMI were ever breastfed. This was a 1 percent increase from the previous year. The CNMI does not have federally available data and therefore utilizes the data gathered from the CNMI HVSO as a proxy measure. Of the 1,162 live births during the reporting period, 1,209 were reporting to have been breastfed. A collaboration between the CNMI MCH Program, WIC, and the CHCC Hospital, which is the only birthing facility in the CNMI, has been a critical component for ensuring breastfeeding initiation.



The percent of infants breastfed exclusively through 6 months in the CNMI of age is 2.5 percent. This data is based on data gathered from the CNMI WIC program. Of the 486 infants who were 6 months of age in 2018, 12 were reported to have been breastfed exclusively through 6 months. There was no change in this performance measure from the previous reporting period.

Figure 9: CNMI WIC Data on Breastfeeding Rates



Source: CNMI WIC Program

While breastfeeding initiation rates in the CNMI of 95.8 percent is higher than US national rate of 83.2 percent^[1], its 6 months breastfeeding rate (38 percent) trails behind the US average of 57.6 percent. A review of data on CNMI infants breastfed indicates that 54 percent of infants are breastfed at 3 months, 38 percent at 6 months of age, and 23 percent at 12 months. And while there was a 3 percent increase in the number of infants who are reported to be breastfed at 3 months, there were decreases in percentages of infants breastfed at 6 and 12 months of age. High breastfeeding initiation rates indicates that a vast majority of moms in the CNMI want to breastfeed and start out doing so. However, despite the recommendations for exclusive breastfeeding through 6 months, only a little over 50 percent are being breastfed by 3 months of age and by 6 months, less than 40 percent are breastfed.

Many factors contribute to success in continued breastfeeding and support to breastfeeding moms is critical. Having to return to work is one factor and women typically return to work before a baby is 3 months of age. In the CNMI, the average maternity leave time is 15 business days for a government employee. Additionally, little is known about the types and level of breastfeeding support provided by local employers, both in the government and private sectors. Lactation support outside of the typical work week is also lacking in the CNMI. The WIC program is the only program in the CNMI that provides peer counseling services dedicated to supporting moms in breastfeeding. Unfortunately, peer breastfeeding counseling services are not available before 7:30am, after 4:30 pm, and on weekends.



Strategy: Increase referrals to the WIC Breastfeeding Peer Counselor Program.

In 2018, the MCH Program focused on increasing prenatal referrals to the WIC program and its Breastfeeding Peer Counselor Program. Through a partnership with the CHCC Women's Clinic, a protocol was set in place in which patients who test positive for pregnancy are provided a referral to the WIC program which provides Breastfeeding Peer Counselor services. Additionally, pregnancy testing is made free to the community through the Women's Clinic as a strategy for increasing early prenatal care initiation and

referrals of prenatal patients to programs and services such as the WIC.

Strategy: Provide training on breastfeeding and lactation for hospital staff that work with pregnant women and /or infants.

The MCH Program partnered with the CNMI WIC program to provide training to hospital staff and community health workers who provide direct services to pregnant or parents of infants on breastfeeding and lactation. The training was provided with the aim of improving capacity among hospital staff and community health workers, most especially those at the Labor and Delivery and Obstetrics unit who are the first line of support for women who deliver babies. Hospital and public health staff were trained on strategies for effectively supporting women in successfully breastfeeding. Additionally, staff from the Family Planning program also participated in the training which will further expand access to breastfeeding support. Postpartum women who access services through the local Family Planning Program will be able to receive breastfeeding support and information.

The training was a weeklong "Breastfeeding Bootcamp" that was facilitated by an International Board Certified Lactation Consultant (IBCLC) who also is an OB clinical instructor at the Arizona State University College of Nursing and Health Innovation.

Through Title V funds, the MCH Program purchased three (3) hospital grade breast pumps with trolley to further support mothers and families with babies in the NICU or in the inpatient pediatrics unit. These new units replaced an older breast pump model in which replacement kits were no longer being manufactured. The MCH Program continues to supply breastfeeding kits for the hospital breast pump units.

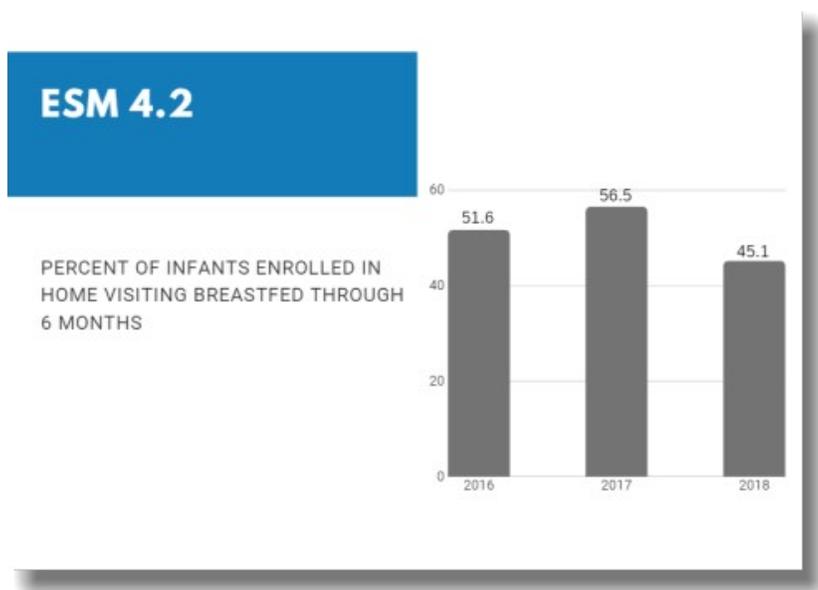
Strategy: Increase breastfeeding support and education provided to families enrolled in Home Visiting.

As mentioned in the description of activities for the strategy above, the MCH Program partnered with the local WIC program to provide a weeklong "Breastfeeding Bootcamp" to build capacity among healthcare and community health

workers to effectively support women in breastfeeding. Family Partner Advocates and the Family Assessment Worker from the CNMI Home Visiting Program completed the training. The Home Visitors, or Family Partner Advocates, provide weekly home visits to families enrolled in the program which is a source of continuous breastfeeding support for women with infants.

In addition, staff members from the CNMI Division of Youth Services (DYS) also completed the Breastfeeding Bootcamp. The Division of Youth Services is the CNMI agency responsible for child protective services and also provides parenting support programs to families at risk for child abuse or neglect. The Division of Youth Services is a close partner of the CNMI Home Visiting and a resource for families in Home Visiting.

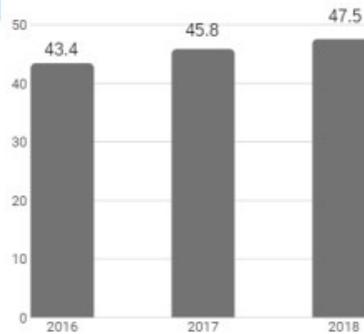
Information on breastfeeding is also included in Newborn Baby Welcome Folders distributed to all women with live births prior to discharge. In a survey conducted in 2018 of parents/caregivers who received Newborn Baby Welcome Folders, information on breastfeeding ranked as the number 2 top choice for most useful information provided.



In 2018, 23 (45.1%) of the 51 enrolled 6 month old infants from the CNMI Home Visiting Program reported to have been breastfed at 6 months of age. This was an 11 percent decrease from the previous reporting period. Further analysis of the Home Visiting Breastfeeding data illustrated that 57 percent of infants whose mothers were enrolled into Home Visiting prenatally reported to be breastfed at 6 months compared to just 29 percent of infants enrolled after birth being breastfed at 6 months. The data demonstrates the importance of initiating conversation and education around breastfeeding prior to birth.

SPM 2

PERCENT OF DELIVERIES TO RESIDENT WOMEN RECEIVING PRENATAL CARE BEGINNING IN THE FIRST TRIMESTER OF PREGNANCY



Forty-eight percent of resident births in the CNMI in 2018 were to mothers who received prenatal care beginning in the first trimester of pregnancy. Data for this measure is gathered from birth records through the CNMI Health and Vital Statistics Office (HVSO).

Strategy: Utilize the mobile clinic and outreach activities to offer prenatal care.

In 2018, the MCH Program utilized Clinic outreach as a strategy for bringing preventive healthcare for women into village and community settings to reach underserved populations. A total of 10 outreach clinics were conducted in 2018 which included preventive screenings, family planning services, and basic prenatal care. The MCH program partnered with medical providers from the CHCC Women's Clinic for these services to be provided during clinic outreach.

Strategy: Increase community awareness and education on prenatal care, preconception health, and family planning services by utilizing print and social media advertisements and disseminating information during outreach events.

Radio, online newspaper, and social media advertisements were utilized to promote the importance of early and adequate care as well as to provide information on ways to access prenatal clinics. The MCH Program conducted a total of 4 live radio shows in partnership with medical providers from the CHCC Women's Clinic to provide information to the community regarding a variety of preventive health topics, including prenatal care, preconception health, and family planning. Radio listeners were able to call into the show and ask questions. Listeners were provided with information on ways to access Medicaid and health clinics and also urged to contact the MCH Program for assistance.

The MCH Program also partnered with the CNMI HIV/STD Prevention program to publish online newspaper ads to encourage women to complete their prenatal screenings, such as testing for HIV and STIs. Free pregnancy testing was also promoted through online newspaper advertisements to encourage early initiation of prenatal care; those unsure of pregnancy were encouraged to contact the MCH program for assistance with free pregnancy testing.

Additionally, through Title V funds, preconception health checklists were made available for patients at the Women's Clinic and Family Planning programs and distributed by the MCHB Community Outreach Worker during community

events.

Outreach at various community events, such as the annual American Red Cross Walk-a- Thon and Healthy Mothers Healthy Babies Fair. In 2018, the MCHB Outreach Worker interacted with 619 community members through participation and exhibiting information and educational materials at various community events.

In addition to efforts on advertisements and awareness activities regarding the importance of prenatal care, the MCH Program also continued to work with the CNMI WIC Program to make the Centering Prenatal Care program available to the community. Title V funds are used to support training for group facilitators and mid-level providers to conduct centering group prenatal care session/visits. Training was completed by MCH program staff and 2 mid-level Women's Clinic Providers at the Centering Healthcare Institute in Boston, Massachusetts. Staff time, through Title V funds, are used to contact and enroll prenatal women referred and to facilitate group prenatal sessions. Title V funds are also used to support advertisements and brochures to promote community awareness regarding group prenatal care. The CNMI WIC program provides the facility in which the group session are held. WIC staff members also inform prenatal WIC clients regarding centering and provide referrals to the MCH. Each session lasts between an hour and a half and two hours.

The centering prenatal care model is a care provided in a group of 8 to 12 pregnant women enrolled based on estimated dates of delivery who meet for an average of 90 minutes in regular intervals. The visits include the components of prenatal care: risk assessments, education, and support into every visit. During centering prenatal group visits, standard prenatal risk assessment is completed, an educational format is followed that uses a didactic discussion format, and time is provided for women to talk and share with one another. Incorporating these three components within each visit places emphasis on their collective importance. Women are encouraged to take responsibility for themselves, which leads to a shift away from the traditional client-provider relationship.

In 2018, the program was able send an additional 2 staff members for training through the Centering Healthcare Institute, doubling the number of providers utilizing the group model for providing prenatal care. The increase in staffing also increased the programs capacity for serving pregnant women through the group model. In 2018, the MCH program received a total of 79 referrals with 35 (44%) enrolling into group prenatal care. Group prenatal care is provided at the CNMI WIC Clinic, allowing for patients to schedule both prenatal care and WIC visits consecutively. This helps patients who have issues with accessing transportation as it eliminates a potential extra trip to another clinic site. Referrals to group prenatal care are provided by the CHCC Women's Clinic, Family Planning Program, WIC, and self- referrals of women who hear about the program through advertisements.

Currently the program is working to increase the number of referrals to the program of women who are in their 1st trimester of pregnancy. Review of 2018 referral data indicates that the majority of the referrals made to MCH were of women who were already past 13 weeks or greater in estimated gestational age.

Strategy: Partner with the Family Planning program to implement a prenatal care referral protocol to MCH Services.



MCHWIC Group Prenatal Care

All pregnancy testing done at the CHCC Women's Clinic, the only public women's clinic on the island of Saipan, is done through the Family Planning program. In 2018, the MCH Program was able to work with the CHCC Women's Clinic staff and the Family Planning program manager to develop a referral protocol to MCH services for all women who have a positive pregnancy test at the Women's Clinic. The referral protocol involves referral of prenatal patients with risk factors (i.e. uninsured, low income, history of fetal demise or infant death, tobacco use, diabetes, hypertension, etc.) to the MCH Services Coordinator for further screening and assistance with accessing services. Assistance with expedited Medicaid application processing, free preventive dental care, referral to Tobacco Cessation services and the Centering Prenatal Care program are made. The referral protocol was scheduled for implementation in October 2018.

Strategy: Develop and implement a PRAMS-like survey in the CNMI.

The CNMI MCH Program worked with the Health Resources Services Administration to develop and implement a territorial MCH survey that will address the data needs of the CNMI MCH Program. Together with the SSDI Project Coordinator, the MCH Bureau Administrator and Child Health Coordinator worked collaboratively with HRSA DSCH staff and survey consultants to develop a draft survey that includes sections that addresses health information around maternal and child health indicators for the CNMI population. Conference calls were held along with meetings during MCH Technical Assistance Meetings held in Washington D.C. and during the annual AMCHP conference. The survey is scheduled to be administered in the CNMI in the year 2020.

Changes in National Performance Measures: National Performance Measure 5 (Safe Sleep)

The CNMI had identified infant safe sleep as a priority and one of eight required national performance measures when the 2015 comprehensive MCH needs assessment was completed. In 2017, the HRSA MCHB released updated guidance to the national Title V Annual Report/Application which reduced the number of required national performance measures from a minimum of eight to five; requiring one in each population health domain. This revision allowed the CNMI Title V program the chance to re-assess its capacity, available funding, and other factors associated for effectively impacting health outcomes for infants in our islands. The program made the decision to focus Title V resources around infant health on improving breastfeeding and prenatal care rates. Therefore, NPM 5: Safe Sleep was removed as a selected NPM for reporting as part of the CNMI's Title V Block Grant program on the 2019 Application submitted in July of 2018.

^[1] Centers for Disease Control and Prevention. (2018). Breastfeeding Report Card.

Perinatal/Infant Health

MCH will continue to work towards improving early and adequate prenatal care and breastfeeding in the Northern Mariana Islands. The implementation of the Fetal and Infant Mortality Review (FIMR) committee has played a critical role in identifying priorities and addressing gaps in the CNMI healthcare system to improve the health of women and infants. MCH will partner with FIMR committee members to assess and improve upon current efforts for improving perinatal and infant health outcomes.

Priority Need: Improve perinatal/infant outcomes through early and adequate prenatal care and promoting breastfeeding and safe sleep.

National Performance Measure 4: A) Percent of infants who are ever breastfed. B) Percent of infants breastfed exclusively through 6 months.

Objective: By 2020, increase the percent of mothers reporting exclusive breastfeeding by 10%.

Strategy: Increase access to breastfeeding support and education.

Increasing access to breastfeeding supports and education for pregnant women and parents/caregivers with infants is critical towards increasing the number of babies who are exclusively breastfed through six (6) months. To increase supports and education the MCH program will:

- Partner with women's and children's clinic nurses to enhance breastfeeding education and support during the prenatal, postpartum, and 5 day well-baby visit.
- Provide training and support for home visitors
- Develop and provide patient education materials on breastfeeding to be utilized during women's and children's clinic visits and during home visits.

Strategy: Increase partnerships and collaboration in support of breastfeeding.

Partnerships are critical for ensuring that the program is able to reach a large proportion of the community. To increase the number of partners collaborating on breastfeeding initiatives for improving breastfeeding rates in the CNMI, the MCH program will prioritize the following activities:

- Partner with the CNMI WIC Program to develop a brief training curriculum/presentation regarding the importance and strategies for improving breastfeeding rates.
- Conduct breastfeeding training/ presentations for partner agencies that serve pregnant women and families with infants. Programs such as the Health & Vital Statistics Office, Vaccines for Children, Child Care Development Block Grant Fund, Early Head Start will be invited.
- Develop community awareness materials to promote available breastfeeding supports and breastfeeding peer counselor program.
- Collaborate with partner agencies for materials on breastfeeding and breastfeeding supports to be disseminated in partner agency programs.

A new Evidence- Based or Informed Strategy Measure (ESM) was developed to monitor progress towards the activities indicated herein. ESM 4.3, the number of community program staff that receive training on breastfeeding and information on breastfeeding education and supports was added to track the number of community agency partner staff that complete the training to support efforts for increasing referrals and enrollment to programs such as Home Visiting, WIC, WIC Peer Counselor program as a method for connecting women to breastfeeding supports. The training events will be focused on engaging partners in support of breastfeeding.

State Performance Measure 2: Percent of deliveries to resident women receiving prenatal care beginning in the first trimester of pregnancy.

Objective: By 2020, increase the number of women receiving prenatal care beginning in the first trimester by 5%.

Strategy: Increase community awareness regarding the importance of early and adequate prenatal care.

Prenatal care has been known as a strategy for improving pregnancy and birth outcomes for over a century. Both the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) recommend prenatal care with early and ongoing risk assessment for all women, with content and timing linked to the needs and associated risk factors of the woman and her fetus^[1]. Through prenatal care, access to medical, nutritional, and educational interventions is available to reduce the risk of low birth weight, preterm birth, and other adverse outcomes.

The MCH program will work to promote early and adequate prenatal care as a means for increasing community awareness on its importance. The following activities will be completed to promote awareness:

- Conduct presentations at village settings throughout the island of Saipan and on the islands of Rota and Tinian.
- Conduct presentations for partner agencies to promote awareness of prenatal care, clinic that provide care, information on MCH “hotline” and how to access available public health services that work to address barriers to prenatal care.
- Develop commercials to be shared through social media pages, at the local movie theater, and radio segments.

Strategy: Increase access to prenatal care

Increasing access and reducing barriers is critical for improving the rates of women who initiate early entry and obtain adequate prenatal care. Barriers to preventive healthcare often cited by members of the community includes: financial challenges, being uninsured, and lack of transportation. To increase access to prenatal care, the MCH program will conduct the following activities:

- Provide basic prenatal care during outreach clinic events.
- Support Free Pregnancy testing to enable early pregnancy identification and thus early initiation into care.
- Increase awareness of the CHCC Group Prenatal Care program to improve referrals, enrollment and retention.
- Provide Medicaid application assistance to uninsured pregnant women.

Women who access the CHCC Women’s Clinic and Family Planning program who are identified as uninsured are referred to the MCH program for prenatal screening and referrals to programs such as the dental clinic and tobacco cessation. Uninsured women are provided assistance with applying with the Medicaid program or the CHCC Sliding Fee program.

^[1] National Vital Statistics Report. (2018). Timing and Adequacy of Prenatal Care in the United States, 2016. Retrieved on June 25, 2019 from https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_03.pdf

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 or Not Reportable	NPM 6
NOM 14 - Percent of children, ages 1 through 17, who have decayed teeth or cavities in the past year	NSCH	Data Not Available or Not Reportable	NPM 13.2
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH	Data Not Available or Not Reportable	NPM 6 NPM 13.2

National Performance Measures

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

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

State Provided Data			
	2016	2017	2018
Annual Objective			11
Annual Indicator	1.8	10.2	12.1
Numerator	103	215	321
Denominator	5,602	2,112	2,656
Data Source	Childrens Clinic Log	CHCC Childrens Clinic and Home Visiting Program	CHCC Childrens Clinic
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	13.0	15.0	17.0	19.0	21.0	22.0

Evidence-Based or –Informed Strategy Measures

ESM 6.1 - Percent of children who complete an ASQ screening at the CHCC Children's Clinic during a well-child visit.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		40	55	
Annual Indicator	38.4	53.6	61.2	
Numerator	103	112	170	
Denominator	268	209	278	
Data Source	CHCC RPMS and Childrens Clinic ASQ screening log	CHCC RPMS and Childrens Clinic Log	CHCC RPMS and Childrens Clinic Log	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	63.0	65.0	67.0	69.0	70.0	72.0

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

NPM 13.2 - Child Health

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

State Provided Data			
	2016	2017	2018
Annual Objective			13
Annual Indicator	13.6	11.9	12.3
Numerator	2,025	1,900	1,934
Denominator	14,847	16,010	15,719
Data Source	CHCC Public Health Dental Clinic	CHCC Public Health Dental Clinic	CHCC Public Health Dental Clinic
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	14.0	15.0	16.0	17.0	18.0	19.0

Evidence-Based or –Informed Strategy Measures

ESM 13.2.1 - Percent of children from public elementary schools who receive dental sealants through the Public Health School Sealant Program.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		15	16	
Annual Indicator	56.3	55.6	61.8	
Numerator	814	813	910	
Denominator	1,446	1,463	1,472	
Data Source	Public Health Dental Clinic/Oral Health Prg	Public Health Dental Clinic/Oral Health Prg	Public Health Dental Clinic/Oral Health Prg	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	65.0	70.0	75.0	80.0	85.0	90.0

State Performance Measures

SPM 3 - Percent of children receiving routine vaccines.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		68	50	
Annual Indicator	42.9	48.9	51.5	
Numerator	949	1,092	1,157	
Denominator	2,214	2,232	2,247	
Data Source	CNMI Immunization Program WEBiz	CNMI Immunization Program Weblz	CNMI Immunization Program Weblz	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	52.0	54.0	56.0	58.0	60.0	62.0

SPM 6 - Percent of resident children, ages 0 thru 17 years, seen at any CHCC site with continuous health insurance coverage.

Measure Status:		Active				
Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	59.0	61.0	63.0	65.0	67.0	67.0

State Action Plan Table

State Action Plan Table (Northern Mariana Islands) - Child Health - Entry 1

Priority Need

Improve Child Health Through Providing Vaccinations and Screening for Developmental Delays.

NPM

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

Objectives

By 2020, increase the percentage of children who are screened for a developmental delay by 11%.

Strategies

Implement a data system to be able to capture developmental screening results, monitor screening rates, and manage referrals to needed services.

Promote community awareness regarding the importance of screening for developmental delays.

Increase the number of clinics and early care and education settings that utilize the ASQs.

ESMs

Status

ESM 6.1 - Percent of children who complete an ASQ screening at the CHCC Children's Clinic during a well-child visit. Active

NOMs

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

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

State Action Plan Table (Northern Mariana Islands) - Child Health - Entry 2

Priority Need

Improve Oral Health of Children & Pregnant Mothers

NPM

NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

Objectives

By 2020, increase the percentage of children ages 1 through 17 years who had a preventive dental visit by 10%.

Strategies

Increase access to preventive oral healthcare.

ESMs

Status

ESM 13.2.1 - Percent of children from public elementary schools who receive dental sealants through the Public Health School Sealant Program. Active

NOMs

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

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

State Action Plan Table (Northern Mariana Islands) - Child Health - Entry 3

Priority Need

Improve Child Health Through Providing Vaccinations and Screening for Developmental Delays.

SPM

SPM 3 - Percent of children receiving routine vaccines.

Objectives

By 2020, increase the number of children ages 9 through 35 months who receive recommended vaccines by 9%.

Strategies

Promote community awareness regarding vaccines.

State Action Plan Table (Northern Mariana Islands) - Child Health - Entry 4

Priority Need

Improve Insurance Status of Children and Pregnant Mothers.

SPM

SPM 6 - Percent of resident children, ages 0 thru 17 years, seen at any CHCC site with continuous health insurance coverage.

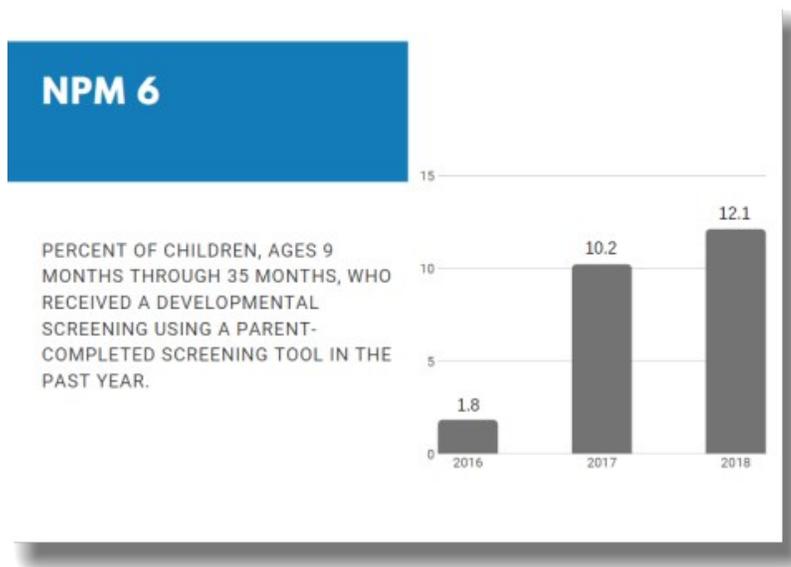
Objectives

By 2020, decrease the number of infants born to mothers who are uninsured by 5 percent.

Strategies

Provide expedited Medicaid or CHCC Sliding Fee program application processing assistance.

CHILD HEALTH



The percentage of children, ages 9 through 35 months, who received a developmental screening using a parent-completed screening tool in 2018 was 12.1. Out of 2,656 children ages 9 thru 36 months, 321 were reported to have been screened through the Ages and Stages Questionnaire: 3rd edition. The denominator value of 2,656 is based on population estimates in the CNMI provided by the US Census Bureau. The number of children screened is based on the unduplicated number of children screened through the CHCC Children’s Clinic and the HOME Visiting program. There are other programs in the CNMI that utilize the ASQ screening tool, such as the Early Head Start and Head Start programs and daycare centers that receive Child Care Development Fund (CCDF) subsidies in which obtaining developmental screening data is a challenge due to a lack of a central data collection mechanism. Therefore, there is a great probability that the number of children being screened is underreported in this measure as children screened outside of the CHCC Children’s Clinic and HOME visiting program are not represented in this figure.

***Strategy:** Implement quality improvement projects to increase developmental screenings completed at all CHCC clinics, including clinics on the outlying islands of Tinian and Rota and the FQHC Kagman Community Health Center.*

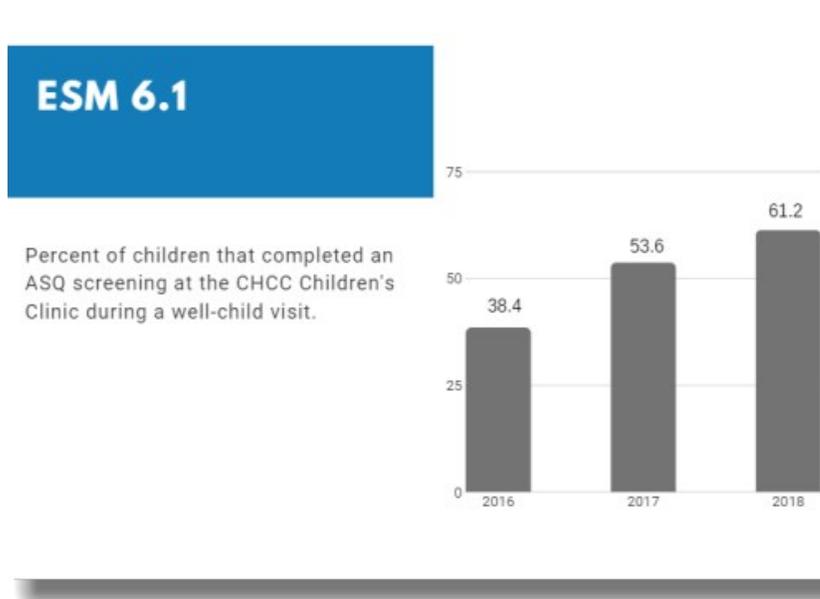
Through the assistance of interns from the Northern Marianas College, the MCH Program was able to conduct phone surveys of parents who accessed developmental screened through the CHCC Children’s Clinic. The information gathered through the survey helped the MCH Program determine areas of technical assistance to be focused on to increase completion rates as well as the quality of the information being gathered on the screening tools. The top three areas of focus for quality improvement, based on the results of the surveys, are: 1. Providing Parents with Information on Resources for Additional Support on Child Development; 2. Improving the rate of screening results being reported back to parents; and 3. Addressing challenges to difficulty responding to specific questions on the ASQ screening tool.

***Strategy:** Implement a data system to able to capture developmental screening results, monitor screening rates, and manage referrals to needed services.*

The MCH Program had experienced delays in the implementation of a data system to capture all developmental screening results for the CNMI. The original plan was for the program to utilize the CHCC Electronic Health Record (EHR) system as the main database to capture all screening records through a system application called the “Well Child Module”. Just as the initial steps of the project were being initiated, the CHCC leadership had determined a need to transition into a new electronic health record system. An assessment of the new system that will be implemented revealed that a component similar to the “Well Child Module” is not available. As a result, the MCH Program, in partnership with the CHCC IT Director, determined that a new data system will need to be developed and therefore will work to request proposals from database developers. The MCH Bureau Administrator is working closely with the IT Director to finalize a scope of work and project details to outline the work and specifications of the project in order to make a public notice available to potential bidders.

Strategy: Utilize the CDCs Learn the Signs. Act Early Campaign to promote awareness of developmental screening.

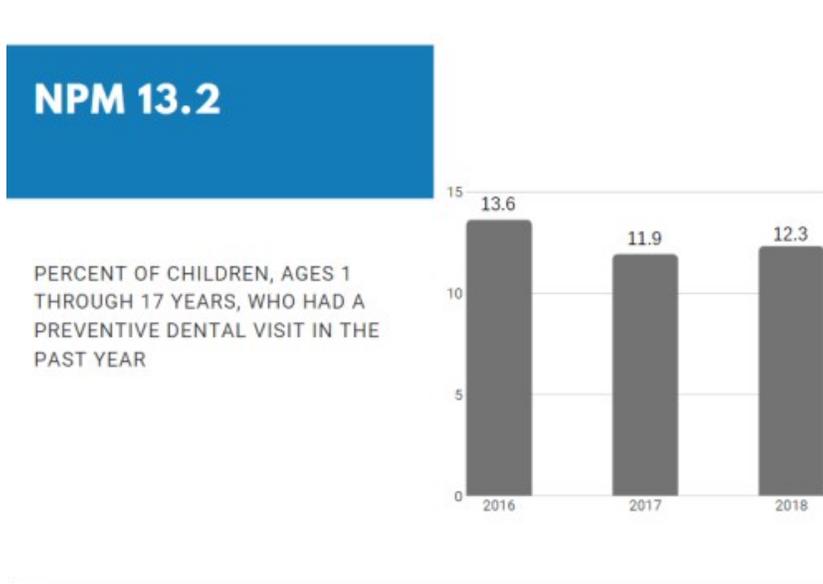
MCH Program staff have been able to access free resources available through the CDC’s website to promote awareness around developmental milestones and screening. The Milestone Moments Booklets obtained through the CDCs website were made available in Newborn Packets that are distributed to all women prior to discharge from delivery. Information from materials through the Learn the Signs. Act Early website have also been adapted for online newspaper publication and sharing through the MCH social media pages. Additionally, milestone brochures are made available during community outreach events.



There was an unduplicated number of 278 children between the ages of 6 months thru 36 months that completed a well-child visit at the CHCC Children’s Clinic. Out of the 278 children identified, 170 had had an ASQ screening completed for a rate of 61.2 percent. In 2018, the MCH Program hired a Child Health Coordinator who assisted with program improvements around developmental screening efforts implemented at the CHCC Children’s Clinic. The Child Health Coordinator completed a training of trainers through Brooke’s Publishing, publisher of the Ages and Stages Questionnaire tool. After completion of the training, the Child Health Coordinator has been able to serve as a resource and provides technical assistance to nurses and providers of the CHCC Children’s Clinic regarding the

ASQ's.

Title V funds were used to support the purchase of ASQ screening and materials toolkits. The materials toolkits include a variety of developmental items that parents can use during the well-child visit as aids in determining whether their child is meeting certain milestones. The materials toolkits help parents or caregivers answer a screening question regarding their child's development that they are not sure about by allowing them to test out the skill with their child during the visit. In addition, the MCH program supports age appropriate books for children that have an ASQ completed during a well child visit. These books are provided by the CHCC Children's Clinic nursing staff upon completion of the developmental screening.



The CNMI Title V Program currently utilizes a proxy measure to report on the total number of children ages 1 through 17 years who had a preventive dental visit in the past year as there is no federally available data source for this measure. The data represented in the graph above illustrates children seen through the CHCC Public Health Dental Clinic. Out of the 15,719 children ages 1 through 17 years in the CNMI, which is a population estimate provided by the US Census Bureau, 1,934 were seen for a preventive dental visit in the past year through the Public Health Dental Clinic. This data does not account for the children that access services through private dental providers. What is important to note is that the total number of children seen through the CHCC Public Health Dental Clinic are either uninsured or on Medicaid.

Strategy: Develop referral protocols for referrals of children enrolled in WIC and the Home Visiting Program to the CHCC Dental Clinic.

The CNMI HOME Visiting Program curriculum, Growing Great Kids, covers preventive oral healthcare topics beginning when enrolled children are 4 months of age and information regarding the benefits of completing a preventive dental visit is provided beginning at 10 months of age. Home visitors provide referrals to the CHCC Dental clinic for families enrolled in Home Visiting and also provide assistance in scheduling appointments for families that encounter challenges in scheduling a dental appointment.

A formal protocol has not been finalized for referrals of HOME Visiting and WIC enrolled children at this time, however, the MCH Program is working with the Oral Health Program/ Public Health Dental clinic to complete the protocol for implementation. Delays were a result in part due the limited number of staffing available at the Public Health Dental clinic. Dental Clinic/Oral Health program staff had also prioritized much of the year in establishing outreach dental clinics to the outlying islands of Tinian and Rota as there were no dental services or providers that existed on those islands. Residents of Tinian and Rota had to travel by air to the island of Saipan to access oral health care. In 2018, the CHCC DPHS MCHB submitted a grant proposal to HRSA, which was subsequently awarded, for supporting oral health workforce activities in the CNMI. As a result, the Oral Health Program/ Public Health Dental Clinic has doubled in staffing, the outlying islands of Tinian and Rota have full time dental assistants to support monthly outreach clinics, and the public health dental clinic was able to hire an additional dentist. The additional funding and staffing availability has increased the Oral Health program's capacity for reaching children enrolled in the HOME Visiting and WIC programs in support of the implementation of the protocol.

The MCH Program was able to develop a referral protocol with the CHCC Women's Clinic. Pregnant women are offered a referral to the MCH Services Coordinator for follow-up screening and assistance with services such as Medicaid application processing, tobacco use screening and referral to cessation services, and screening for oral health and assistance in connecting with a dental home. A vast majority of the prenatal women referred to the MCH program are either uninsured or on Medicaid. The MCH Services Coordinator helps to connect prenatal patients with a dental home, if they do not have one, and services for those who do not have coverage for preventive dental care are provided a free visit at the CHCC dental clinic. The MCH Program has worked with the CHCC Dental Clinic to amend current sliding fee program policy to include sliding fee options for oral health; both preventive and curative services, for project sustainability purposes. This policy change supports the CHCC Dental Clinic's ability for providing preventive oral health care to the low- income prenatal population in the CNMI. Offering a sliding fee option, where patients can pay as low as \$10 for a visit, including an exam, cleaning, and x-ray, will further support the CNMI's efforts for improving the oral health status of pregnant women, infants, and young children.

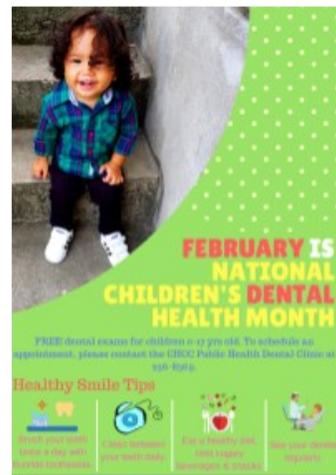
The oral health visit during pregnancy allows the dental providers the opportunity to educate pregnant women of not only the importance of proper oral health and changes during pregnancy, but provides an opportunity for the dentist to offer guidance and instruction on how to care for their infant's teeth and increase awareness on the importance of an infant completing a dental visit by 12 months of age.

Strategy: Integrate components of oral health care into the standard of care for children seen at the CHCC clinics including on the outlying islands of Tinian and Rota.

The MCH Program worked with the CHCC Dentists and Oral Health Program staff to develop patient handouts to be utilized during well child visits. Additionally, a handout for prenatal patients was also developed to be utilized during prenatal visits. Guidance included on the prenatal handout provides instruction on how to care for infant teeth and recommendations for a first dental visit before one year of age. Training will be provided to the clinical workers of the CHCC Women's and Children's Clinic as well as the Tinian and Rota Health Centers on the use of the Oral Health patient handouts developed.

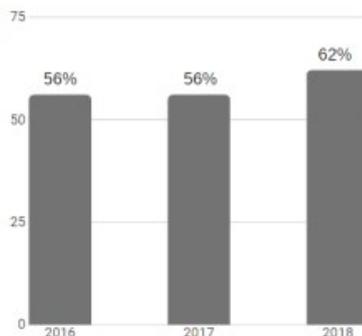
Strategy: Utilize print, radio, and social media advertisements to promote the importance of oral health care for children.

The MCH Program partners with the Public Health Dental Clinic/Oral Health Program in promoting oral health care for children through print, radio, and social media advertisements. The program works with local families in utilizing images of children from around the CNMI to promote oral health. Additionally, during the month of February, as part of the National Children's Dental Health Month, the MCH Program partners with the Oral Health program to provide free oral exams to children as well as publish online newspaper advertisements to promote preventive oral health care for children.



ESM 13.2.1

Percent of 2nd and 6th grade students from public elementary schools who receive dental sealants through the Public Health School Sealant Program.



In 2018, there was a total of 1,472 2nd and 6th grade students enrolled in the public school system. Of that number, 1,053 (72%) received an oral health assessment and 910 (62%) received dental sealants through the Public Health Dental Clinic School Sealant Program. There was a six (6) percent increase in the number of 2nd and 6th students enrolled in public school that received dental sealants through the program.



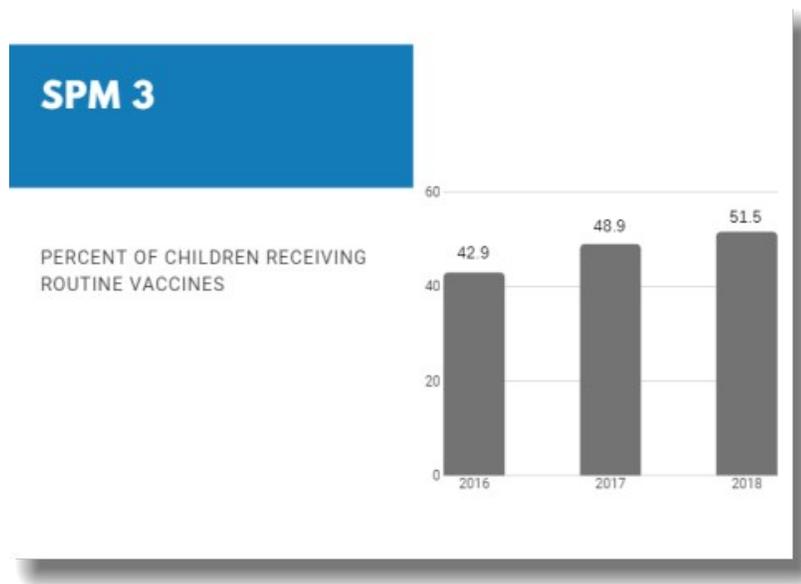
The Public Health Dental Clinic/ MCH Bureau Oral Health Program continues to partner with the Public School System to provide oral health exams and dental sealants to all 2nd and 6th grade students enrolled in public schools on the island of Saipan. Through additional funding from a HRSA Bureau of Oral Health Workforce Grant, the Oral Health Program will be expanding the School Sealant Program to the outlying islands of Tinian and Rota.

Further analysis on data collected from the School Sealant Program indicates that approximately 58 percent of the children seen through the program were identified to have dental caries. This number has been steady for the past couple of years, with the rate in 2016 being 59 percent and then in 2017 at 56 percent. The MCH Bureau is working diligently to address the high rate of children with dental caries through plans for the upcoming year to expand the School Sealant Program to the islands of

Tinian and Rota, adding 1st and 6th classes, strengthening our partnership with the CHCC Children's and Women's Clinics to increase referrals of young children and pregnant women the clinic for preventive oral health care.

Additionally, through local appropriations from the CNMI Legislature, the Oral Health Program received some funding that is currently being utilized to provide preventive dental care to pregnant women who are either uninsured or on Medicaid. The CNMI Medicaid Program does not cover preventive oral health care for anyone over the age of 19, regardless of pregnancy status. And because our Public Health Dental Clinic only accepted Medicaid or self-pay patients, the clinic saw no pregnant women in 2016 or 2017 for any preventive oral healthcare. This is significant due to the fact that over 70 percent of the CNMI resident births are to women who are on Medicaid.

In 2018, the clinic encountered 4 prenatal patients during the month of December alone, immediately after referral protocols were implemented between the MCH Program and the Oral Health Program. With the anticipated increase in the number of prenatal patients accessing preventing oral health care, the MCH Program anticipates increases in the number of children coming in to be seen by their 1st birthday, an increase in the number of young children accessing fluoride varnish and other preventive dental care, and ultimately a decrease in the number of children in the CNMI with tooth decay or dental caries. This is in part due to the education and instruction on infant and early childhood oral health care that is provided during a preventive dental visit for pregnant patients.



There were a total of 1,157 (51.5 percent) children ages 19 through 35 months who have completed the combined 7 vaccine services out of a total population of 2,247 children. The percent of children receiving routine vaccines has steadily increased since 2016.

Strategy: Utilize print, radio, and social media ads to increase awareness of the importance of childhood vaccinations.

The MCH Program utilized social media and print advertisements on local magazines to promote awareness of the importance of vaccines for children and teens. In addition, print information regarding the recommended vaccines schedule and importance of vaccines are provided to all women prior to discharge after a live birth. The MCH

Bureau Community Outreach Worker also provides print information regarding vaccines during community outreach events to community members who drop by and visit with the MCH Bureau exhibit table. In 2018, there was a total of 387 individuals who visited with the MCH Bureau exhibit table during community events.

Strategy: Utilize the mobile clinic and other outreach activities to bring immunizations into the community.

The MCH Program partnered with the CNMI Immunization Program during clinic outreach that was held that the CNMI Nutrition Assistance Program (NAP) for food stamp recipients. The clinic outreach event was held over four (4) days during food stamp issuance days during the month of May. Immunization program staff were on site to provide free early childhood vaccines as well as flu shots for anyone interested. The NAP serves 2,709 households throughout the CNMI.

The CNMI Immunization program conducts program outreach periodically throughout the year bringing vaccines to community outreach events attended by many community members. Additionally, the Immunization program maintains partnership with the Public School System conducting school campus outreach for children who need updated vaccinations in order to comply with school health clearance requirements. Flu vaccines were also provided via school campus outreach in 2018.

Child Health

The CNMI continues to focus on developmental screening as a strategy for improving child health. Parent administered screening instruments not only help healthcare workers identify potential developmental delays, but engages parents and caregivers in actively assessing developmental milestones their child may or may not be reaching. Families are increasingly engaged in conversations regarding the development of their children and becoming more aware of available community supports and specialized services available to them.

Another priority under the child health domain for the CNMI is Oral Health. A healthy mouth and teeth are an important part of child wellness and according to the American Academy of Pediatrics, tooth decay is the most common chronic children's disease in the US. In the CNMI, 58 percent of 2nd and 6th grade public school students seen during the 2018 school year under the dental sealant program had untreated dental caries.

Priority Need: Improve child health through providing vaccinations and screening for developmental delays.

National Performance Measure 6: Percent of children, ages 9 through 35 months, who received a developmental screening using a parent completed screening tool.

Objective: By 2020, increase the percentage of children who are screened for a developmental delay by 11%.

Strategy: Implement a data system to able to capture developmental screening results, monitor screening rates, and manage referrals to needed services.

The MCH program was working in partnership with the CHCC IT Director towards implementing the Well Child Module of the CHCC Electronic Health Record as the central data system for capturing developmental screening information for children in the CNMI. However, recent developments towards a transition into a new electronic health record system has resulted in the MCH and IT department's decision to develop a standalone system to serve as the centralized developmental screening database. Activities to support the implementation of a data system to capture developmental screening results, monitor screening rates, and manage referrals will include:

- Finalizing the scope of work and securing a contract with a vendor to develop the system
- Developing standard operating procedures and training MCH staff and partners on the use of the system

Strategy: Increase the number of clinics and early care and education settings that utilize the ASQs.

Increasing the number of sites that utilize the Ages and Stages Questionnaire developmental screening tool will improve the number of infants and young children who complete a developmental screening. The MCH program will conduct the following:

- Provide training to clinic and early care and education personnel
- Assist clinics and early care and education settings identify developmental screening workflow and standard operating procedures to support implementation
- Promote awareness of developmental screening among families and the CNMI community

Strategy: Promote awareness of the importance of developmental screening and monitoring.

The program will utilize the Centers for Disease Control and Prevention's (CDC) Learn the Signs. Act Early. Campaign to bring awareness to community members regarding the importance of developmental monitoring and screening. Additionally, activities for reaching developmental milestones and steps to take when there are concerns regarding development will be shared via social media, television commercials, and radio ads.

State Performance Measure 3: Percent of Children receiving routine vaccines.

Objective: By 2020, increase the percent of children ages 9 months through 35 months who received recommended vaccines by 9%.

Strategy: Increase community awareness regarding vaccines.

The MCH program will focus on promoting childhood immunizations and recommended vaccines by conducting the following awareness activities:

- Developing a commercial to be utilized on television, at the local movie theater, and on radio.
- Integrating reminders regarding vaccine schedules during the post-partum visit and WIC appointments

Priority Need: Improve Oral Health of Children and Pregnant Mothers.

National Performance Measure 13.2: Percent of children, ages 1 through 17, who had a preventive dental visit in the past year.

Objective: By 2020, increase the percentage of children ages 1 through 17 years who had a preventive dental visit by 10%.

Strategy: Increase access to preventive oral healthcare.

The MCH program will continue to work collaboratively with the CHCC Dental Clinic for improving the rates of individuals who access preventive oral healthcare. The child population ages 1 through 17 years and prenatal populations are groups of particular priority. To increase the access to preventive oral healthcare, the following activities will be conducted:

- Expand the School Dental Sealant Program to include 1st grade public school classes
- Provide oral health program outreach events on middle school and high school campuses
- Assist uninsured families with accessing Medicaid or CHCC Sliding Fee for dental care
- Partner with the Public School System to increase awareness regarding the importance and how to access preventive oral healthcare
- Educate prenatal and post-partum patients regarding the importance of preventive oral healthcare for their babies

Priority Need: Improve Insurance Status of Children and Pregnant Mothers

State Performance Measure 6: Percent of resident children, ages 0 thru 17 years, seen at any CHCC site with continuous health insurance.

Objective: By 2020, decrease the number of uninsured children by 8%.

Strategy: Increase access to Medicaid and CHCC Sliding Fee Program application assistance.

The MCH Program will continue to work with community agency partners, such as the Public School System, child care centers, and other partners to provide assistance with Medicaid or CHCC Sliding Fee Program application assistance. The CHCC Sliding Fee Program was recently revised to expand coverage to undocumented residents in the CNMI. We anticipate this recent policy change will result in positive health outcomes and support increased access to preventive healthcare. Activities related to this strategy will include:

- Provide brochures and applications for the CHCC Sliding Fee Program to Public School System and other

partner agencies who serve children.

- Provide application assistance to uninsured families to the Medicaid Program or the CHCC Sliding Fee Program.

Emerging Need: Childhood Obesity

As mentioned in the Annual Needs Assessment Update section of this report, review of available data on overweight and obesity rates in the CNMI illustrates a steady increase in the number of young children and teens who are reported to be overweight or obese.

In 2018, 395 (22.89 percent) of young children ages 2 to 5 years old enrolled in the CNMI WIC program out of a total of 1,726 were reported to have Body Mass Index (BMI) levels between the 84.9 and 94.9 percentiles. This number of children enrolled in WIC identified as overweight has gradually increased since 2016, where a little over 18 percent (329 out of 1,764 children) were reported to be overweight.

In 2018, 10.25 percent (122) of a total of 1,726 children ages 2 to 5 years enrolled in WIC were reported to be obese with BMI levels at the 95th percentile or higher. The number of children enrolled in WIC identified as obese has also gradually increased since 2016 (8.45 percent).

The CNMI has also seen a steady increase in the number of teens reporting to be overweight or obese on the Youth Risk Behavior Survey (YRBS). A review of the 10-year trends on data available through the CNMI YRBS, both the number of middle school and high school students who reported to be overweight or obese had increased by almost 10 percent since 2007.

The burden of non-communicable diseases in the Northern Mariana Islands and its impact on the overall quality of life of many families in our communities in the addition to the continued rise in overweight and obesity among children demonstrates the significance for interventions and programs to address this need/issue.

To address this, programs within the Division of Public Health Services, led by the Medical Director of Public Health/MCH Epidemiologist, has initiated a partnership with the CNMI Public School System and the CNMI State Medicaid office to conduct data collection on the BMI status of elementary aged children and work on policy changes within our local food stamp program (Nutrition Assistance Program) to restrict the purchase of sugar sweetened beverages from being allowed to be purchased under food stamp benefits.

Additionally, the Title V MCH Program will work towards engaging families and parents in trainings and workshops to increase their knowledge and build capacity among families to make healthy choices around nutrition and physical activity as a strategy towards preventing and addressing obesity among children in the CNMI.

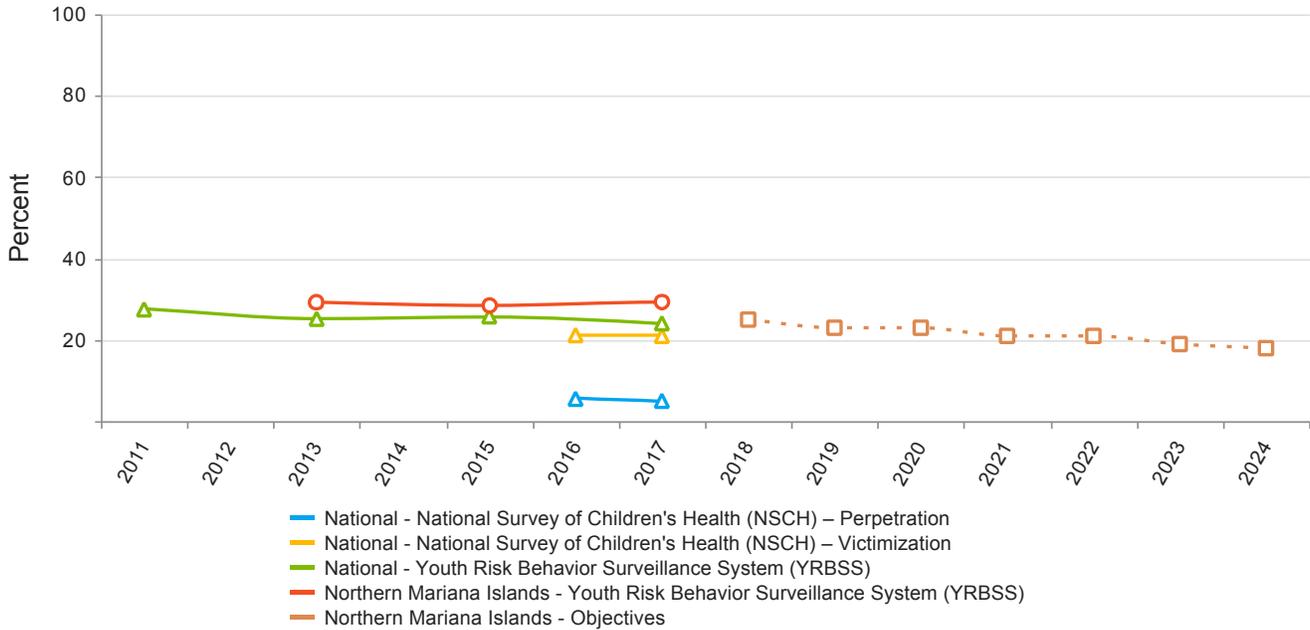
Adolescent Health

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-2017	Data Not Available or Not Reportable	NPM 9
NOM 16.3 - Adolescent suicide rate, ages 15 through 19, per 100,000	NVSS-2015_2017	Data Not Available or Not Reportable	NPM 9

National Performance Measures

**NPM 9 - Percent of adolescents, ages 12 through 17, who are bullied or who bully others
Indicators and Annual Objectives**



Federally Available Data

Data Source: Youth Risk Behavior Surveillance System (YRBSS)

	2016	2017	2018
Annual Objective	75	25	25
Annual Indicator	28.5	28.5	29.4
Numerator	934	934	953
Denominator	3,277	3,277	3,240
Data Source	YRBSS	YRBSS	YRBSS
Data Source Year	2015	2015	2017

Annual Objectives

	2019	2020	2021	2022	2023	2024
Annual Objective	23.0	23.0	21.0	21.0	19.0	18.0

Evidence-Based or –Informed Strategy Measures

ESM 9.1 - Percent of schools that have implemented evidence based programs to address bullying.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		15	45	
Annual Indicator	0	45	40	
Numerator	0	9	8	
Denominator	20	20	20	
Data Source	CNMI Public School System	CNMI Public School System	CNMI Public School System	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	50.0	55.0	60.0	65.0	70.0	75.0

State Performance Measures

SPM 4 - Percent of high school students that report thoughts of suicide.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		20	22	
Annual Indicator	22.8	22.8	25	
Numerator	543	543	481	
Denominator	2,385	2,385	1,922	
Data Source	Youth Risk Behavior Survey	Youth Risk Behavior Survey	Youth Risk Behavior Survey	
Data Source Year	2015	2015	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	21.0	21.0	19.0	19.0	18.0	18.0

SPM 5 - Birth rate among 15-17 year olds

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective			13	7
Annual Indicator	15	8.5	11.6	
Numerator	14	11	15	
Denominator	931	1,296	1,295	
Data Source	CNMI HVSO	CNMI HVSO	CNMI HVSO	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	7.0	6.0	6.0	5.0	5.0	5.0

State Action Plan Table

State Action Plan Table (Northern Mariana Islands) - Adolescent Health - Entry 1

Priority Need

Improve Adolescent Health by Promoting Healthy Adolescent Behaviors & Reducing Risk Behavior (i.e. drug & alcohol use, bullying) & poor outcomes (i.e. teen pregnancy, injury, suicide)

NPM

NPM 9 - Percent of adolescents, ages 12 through 17, who are bullied or who bully others

Objectives

By 2020, reduce the percentage of students who report being bullied at school by 12%.

Strategies

Expand the use of bullying prevention programs in public schools.

Increase parent engagement in bullying prevention.

ESMs

Status

ESM 9.1 - Percent of schools that have implemented evidence based programs to address bullying. Active

NOMs

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

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

State Action Plan Table (Northern Mariana Islands) - Adolescent Health - Entry 2

Priority Need

Improve Adolescent Health by Promoting Healthy Adolescent Behaviors & Reducing Risk Behavior (i.e. drug & alcohol use, bullying) & poor outcomes (i.e. teen pregnancy, injury, suicide)

SPM

SPM 4 - Percent of high school students that report thoughts of suicide.

Objectives

By 2020, reduce the percentage of student who report thoughts of suicide by 8%.

Strategies

Increase teen access to mental/behavioral health supports and education.

State Action Plan Table (Northern Mariana Islands) - Adolescent Health - Entry 3

Priority Need

Improve Adolescent Health by Promoting Healthy Adolescent Behaviors & Reducing Risk Behavior (i.e. drug & alcohol use, bullying) & poor outcomes (i.e. teen pregnancy, injury, suicide)

SPM

SPM 5 - Birth rate among 15-17 year olds

Objectives

By 2020, decrease teen pregnancy rate by 5%.

Strategies

Increase access to confidential adolescent health services.

ADOLESCENT HEALTH



The CNMI utilizes the bi-annual Youth Risk Behavior Survey (YRBS) to report on this measure. The most recent YRBS completed was in 2017. Therefore, the CNMI is reporting on this measure utilizing the 2017 YRBS results, which is the most recent available YRBS survey data on bullying. Of the 3,240 children ages 12 through 17 years in the CNMI enrolled in public schools 29.4 percent (953) reported to have been bullied.

Strategy: Partner with schools to implement health advisory councils.

The MCH Program continues to maintain partnership with the CNMI Public School System on priorities related to adolescent health. After working together to assess needs and come up with strategies that would most effectively address priorities, a decision was made that instead of working on developing and implementing an entirely separate body to serve as the health advisory council for schools throughout the CNMI, efforts will be made to work within existing school councils to integrate health priorities. Each school within the CNMI currently has a Youth Advisory Panel (YAP) and a Parent Teach Organization (PTO), in which the MCH Program will be working to address bullying prevention initiatives. Initial meetings have been held with representatives from the Public School System to strategize on activities for integrating a focus on health within the PTO and YAP groups.

In addition to working with the Public School System, the MCH Program engaged the CNMI Division of Youth Services and the Governor's Office on Youth Affairs in bullying prevention efforts. Staff and program management of the Division of Youth Services and CNMI Governor's Office on Youth Affairs completed a 2.5 hour training course conducted by the MCH program, utilizing training curriculum materials available through the HRSA Stopbullying.gov website. The training was intended to increase awareness and build capacity among these programs to be able to address and prevent bullying situations among the youth that they serve.

The MCH Program also participated as a panelist during the Youth Empowerment Awareness Month Summit that

was hosted by the Governor's Office on Youth Affairs with students from high schools throughout the CNMI attending. As part of a panel, the MCH Bureau Administrator was able to speak about strategies for addressing bullying situations and answer questions that teens and other attendees had regarding how to address bullying, discuss evidence based strategies for bullying prevention, and share resources available for teens, parents, and the community.

Additionally, the MCH Program completed a Memorandum of Understanding with the CNMI Youth Empowerment Alliance for Health (YEAH) as part of efforts for engaging youth groups around MCH adolescent health priorities. The YEAH group originally formed as part of efforts of the Public Health Non-Communicable Disease Bureau for engaging youth in activities to combat non-communicable diseases in the CNMI. Through the MOU, the MCH Program will be working with the YEAH group on activities to promote health and wellness across the adolescent population in the CNMI.

Strategy: Partner with schools on implementing evidence based curriculum that address bullying.

The MCH program conducted an assessment to determine the types of evidence based curriculums being utilized by public schools to address bullying. There were a total of 40 percent (8) of 20 schools surveyed that reported evidence based curriculum use. Five (25%) of the 20 schools surveyed reported to utilize a curriculum called Second Step. One school (5%) reported to utilize the Peace Builders curriculum and one (5%) utilize a combination of the Second Step and Peace Builders curriculums. Three schools did not respond to the survey and nine schools reported no curriculum use. Action planning was initiated with assistance from a middle school on the island of Saipan to determine strategies for most effectively impacting bullying rates through the use of the evidence based curriculums. Next steps will include working with an identified middle school and the elementary level schools that feed into it to ensure continuity and consistency of evidence based practices and curriculum being utilized.

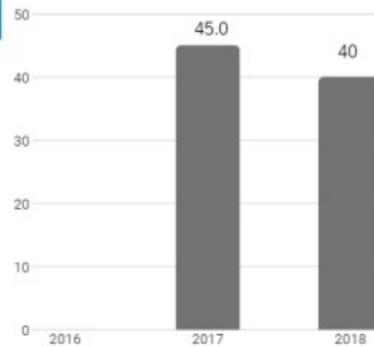
Strategy: Promote parental awareness about bullying.

The MCH Program continues to utilize community outreach events as opportunities to engage parents and families on a variety of priorities, including bullying prevention. The MCH Program also utilized online newspaper and social media advertisements to promote parental awareness regarding bullying prevention strategies, focusing on educating parents on signs of bullying as well as activities that parents can participate in to address bullying with their children. The MCH Program utilizes information and educational material available through the HRSA stopbullying.gov website

ESM 9.1: Percent of schools that have implemented evidence programs to address bullying.

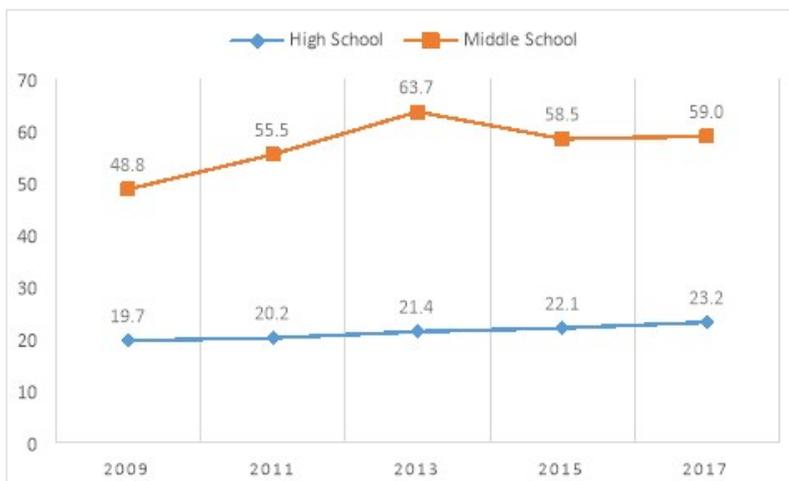
ESM 9.1

PERCENT OF SCHOOLS THAT HAVE IMPLEMENTED EVIDENCED BASED PROGRAMS TO ADDRESS BULLYING



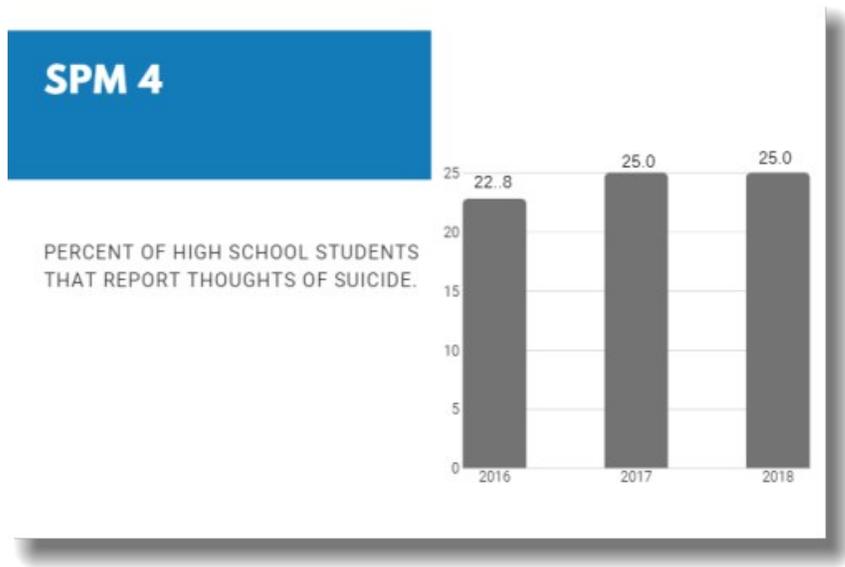
There are a total of 20 public school campuses across all school levels throughout the CNMI. In 2017, 9 (45 %) of the 20 schools reported utilizing an evidence based curriculum to address bullying prevention. For 2018, 8 of the 20 schools reported to be currently utilizing an evidence based curriculum to address bullying prevention. Of the 20 schools that were surveyed, 8 (40%) reported that they were currently utilizing an evidence based curriculum, 9 (45%) reported that they were not currently utilizing an evidence based curriculum, and 3 (15%) schools did not respond. Two of the 9 that reported no current use of a curriculum stated that they had just placed an order for the Second Step curriculum and will be working towards implementing that program in the next coming school year. Additionally, 3 of the 9 who reported no current use indicated interest in implementing a curriculum to support bullying prevention efforts. Three of the schools were unresponsive to the survey.

Figure 10. CNMI Youth Risk Behavior Survey Results on the percentage of Middle and High School Students who reported being bullied on school property, years 2009 - 2017.



Data Source: CNMI Youth Risk Behavior Survey (YRBS)

A review of CNMI YRBS results beginning in the year 2009 through 2017 illustrates a gradual increase on the percentage of high school aged teens reporting being bullied, increasing from 19.7 percent in 2009 up to 23.2 percent in 2017. For middle school students, the percentages are more than double what is being reported by high school students. In 2009, 48.8 percent of middle school aged children reported being bullied. In 2013 this number rose to 63.7 percent of middle school children reporting being bullied with a slight decrease in the subsequent 2015 and 2017 reporting years to 58.5 and 59.0 percent respectively.



The CNMI utilizes the bi-annual Youth Risk Behavior Survey (YRBS) to report on this measure. The most recent YRBS completed was in 2017. Therefore, the CNMI is reporting on this measure utilizing the 2017 YRBS results, which is the most recent available YRBS survey data on thoughts of suicide among high school aged children. Twenty-five percent (481) of high school teens (1,922) in the CNMI reported thoughts of suicide.

Strategy: Increase the number of students trained in peer to peer support programs.

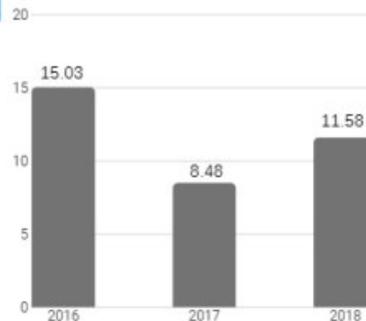
The CNMI Systems of Care (SOC) program and the newly funded Garrett Lee Smith (GLS) Youth Suicide Prevention Program are initiatives under the CNMI Community Guidance Center, the designated state behavioral/mental health agency that focuses on prevention and treatment of youth issues relating to social emotional disturbances and suicide ideation. The SOC promotes training and capacity building among school youth on the Natural Helpers model, a peer support model focused on training students to learn and respond effectively when fellow students experience a wide range of difficulties and work to connect vulnerable peers to appropriate resources.

Through existing partnership with the Public School System, the MCH Program works to ensure that planned activities, whether parent or student focused, include a component that addresses mental health. During the Public School System sponsored middle school conference, the MCH Program worked to include a component on student mental health as part of the agenda of events. Staff from the SOC and GLS programs were invited, and participated in providing training to both parents and students on mental health and suicide prevention topics.

The MCH Program continues to utilize existing partnerships across systems to address adolescent health priorities. Leveraging partnerships has helped the MCH program address critical adolescent health priorities, allowing for the program to stretch limited program funding in addressing key priorities and activities across health domains.

SPM 5

TEEN BIRTH RATE AMONG 15 TO 17 YEAR OLDS PER 1,000.



There are substantial social and economic costs related to teen births as indicated through long term impacts on teens and their children^[1]. Teen pregnancy significantly contributes to high school drop-out rates and lower educational attainment among teen mothers. The CNMI MCH Program has worked diligently to engage partners such as the Family Planning program and the Public School System in efforts towards teen pregnancy prevention and reduction in teen births among CNMI youth. In 2016, the rate of teen births was 15.03 per 1,000 females ages 15 through 17 years. This rate decreased to 8.48 per 1,000 in 2017. The CNMI experienced a slight increase in 2018 with a rate of 11.58 per 1,000 females ages 15 through 17 years. The data reported for this measure was obtained through birth records from the CNMI Health & Vital Statistics Office (HVSO).

Strategy: Utilize mobile clinic to provide school based adolescent health services.

In 2018 the MCH Program partnered with the Family Planning Program and the HIV/STD Prevention Program to provide 5 teen health clinic outreach events to local high schools in the CNMI. The program was able to utilize the Public Health mobile clinic to bring clinic services on campus. The teen health outreach clinics were made possible through a partnership with the Personal Responsibility Education Program (PREP) administered under the CNMI Public School System, a program with a common goal of reducing teen pregnancies and births among CNMI youth. Through the partnership, school based adolescent health services were provided at least one time during 2018 to all high schools in the CNMI, including those on the outlying islands of Tinian and Rota. The Public School System currently utilizes a sexual health curriculum in middle, junior, and high schools. Integrating Family Planning services through the use of the adolescent clinic outreach at local high schools has been a collaborative effort of the MCH Bureau and Public School System for the past couple of years. All adolescents who seek services through Family Planning are encouraged to discuss family planning and reproductive health with their parents and/or legal guardians and are provided with counseling on how to resist attempts in coercion. Avoiding sexual risks and abstinence as the only method that is 100 percent effective at preventing pregnancy and STD's are also discussed with every adolescent.

The CNMI MCH Bureau has been working diligently to try and increase the number of adolescent clinic outreach

days to the local public high schools. Unfortunately, the program did encounter some challenges with individual parents who had concerns over confidentiality, particularly with the fact that teens do not have to obtain parental consent to access Family Planning services funded through Title X. The MCH and Family Planning Programs worked closely with Public School System officials to address the few concerns brought up by parents and had even consulted with the Northern Marianas Protection Advocacy Systems Inc. (NMPASI), a local non-profit advocacy organization for individuals with disabilities to ensure that school based adolescent health services are accessible and accommodations be made when necessary.

Additionally, the MCH Bureau Administrator and Family Planning manager made significant effort to engage parents in conversation regarding evidence based adolescent health services and conducted a brief presentation on adolescent clinic outreach services during a Parent Teacher Organization (PTO) meeting at Saipan Southern High School, a high school on the island of Saipan. The presentation provided an opportunity for MCH and Family Planning to discuss the benefits of confidential adolescent health services and answer questions that parents and school staff had regarding school based adolescent health services.

In September of 2018, the MCH Program partnered with the HIV/STD Prevention Program and Family Planning to conduct a presentation on Sexual Health for students and parents of middle schools throughout the CNMI, including those from the islands of Tinian and Rota. The middle school conference was sponsored by the Public School System and provided an opportunity for Public Health Programs to address misconceptions regarding confidential teen services and to provide evidence backed information regarding teen sexual health to both teens and their parents. Both teens and parents were provided information on how teens can access confidential services and MCH was able to engage parents in conversation regarding the provision of confidential services on campus. Overall, parents of middle school students who attended the conference were in support of efforts of the MCH Program, Family Planning, and the HIV/STD Prevention program providing preventive sexual health services on campus.

Strategy: Improve adolescent health services provided at CHCC clinics.

Addressing confidentiality concerns among teens in accessing reproductive health services remains priority for the CNMI MCH Bureau. In 2017, the MCH Bureau worked to develop policies and provide training on Adolescent Services. The approved policy set guidelines for: confidentiality, mandated reporting, counseling, parental consent, HIV/STD screening, contraception, pregnancy testing and counseling. Training on the policy was provided by the Family Planning program manager and Family Planning Medical Director to clinical staff involved in the program. Personnel from the CHCC billing, records, and business units were also provided information regarding the policy to ensure that billing processes and procedures were aligned and adhered to the policy. The efforts to engage clinic schedulers, registration, billing, and coding staff continued through 2018 and the MCH Bureau continues to provide check-ins and refresher trainings to staff in those units to ensure that adolescent health policies are being adhered to. This is significantly important as there is a high staff turnover rate within these units and therefore continuous opportunity for training is necessary.



^[1] Centers for Disease Control and Prevention (CDC). (2017). About Teen Pregnancy. Retrieved on June 30, 2018 from <https://www.cdc.gov/teenpregnancy/about/index.htm>

Adolescent Health

Adolescent health continues to be a significant component in the collaboration between the CNMI MCH Bureau and the local Public School System. Together, MCH and PSS continue to work together in developing plans and implementing activities to most effectively address the needs of the adolescent population.

Our public school system has direct contact with a vast majority of the adolescent population in the CNMI, making utilizing a school based approach to providing preventive programs an ideal strategy. As a public health strategy, preventing risky behaviors in childhood and adolescence is less challenging when compared to trying to change unhealthy behaviors in adulthood. MCH will continue its efforts towards improving adolescent health by promoting healthy adolescent behaviors and reducing risky behaviors.

Priority Need: Improve adolescent health by promoting healthy adolescent behaviors and reducing risk

National Performance Measure 9: Percent of adolescent, ages 12 through 17, who are bullied or who bully others.

Objective: By 2020, reduce the number of students who report being bullied at school by 12%.

Strategy: Expand the use of bullying prevention programs in public schools.

Research has identified that school based anti-bullying programs are effective in reducing the rates of bullying perpetration and victimization^[1]. The MCH program will work in partnership with the Public School System and coordinate with programs from the CHCC Community Guidance Center, such as the Garrett Lee Smith Youth Suicide Prevention Program and the Systems of Care Program, on strategies to implement, expand, or improve bullying prevention activities. The following will be conducted:

- Meet with public schools that are not currently utilizing bullying prevention curriculums to assess priorities and strategies being utilized.
- Develop a plan for bullying curriculum implementation
- Seek technical assistance and provide training to public school staff on bullying prevention curriculum

Strategy: Increase parent engagement in bullying prevention.

Parents and caregivers are an important component in the prevention, identification, and in addressing bullying behavior. MCH will work to promote awareness among parents regarding strategies for bullying prevention, how to identify bullying, and effective methods for addressing bullying situations. The MCH program will:

- Partner with PTSA groups to provide trainings and presentations on bullying
- Work with the Public School System to disseminate information and other updates via school newsletters, websites, or other effective means
- Identify or develop patient education resources around bullying prevention that can be easily integrated into well-child visits.

State Performance Measure 4: Percent of high school students that report thoughts of suicide.

Objective: By 2020, decrease the percentage of adolescent suicidal ideation by 5%.

Strategy: Increase teen access to mental/behavioral health supports and education.

Partner with the CNMI Public School System's Youth Advisory Panel (YAP) to conduct an annual youth

conference focused on improving teen mental/behavioral health outcomes.

State Performance Measure 5: Birth rate among 15 to 17 year olds.

Objective: By 2020, decrease the teen pregnancy rates by 5%.

Strategy: Increase access to confidential adolescent health services.

Access to youth friendly, confidential, culturally competent reproductive health care services is a critical component for the CNMI's strategy for reducing teen birth rates. The MCH Program will continue to partner with the Title X Family Planning program to expand access to health services for teens. Activities to support this effort include:

- Teen Health Clinic Outreach at local high school campuses
- Partner with the Women's Clinic, Children's Clinic, Rota Health Center, and Tinian Health Center improve confidential teen services through training and teen friendly health information material.

^[1] Gaffney, H., Farrington, D., & Ttofi, M. (2019). Examining the Effectiveness of School Based Bullying Prevention Programs Globally: A Meta-Analysis. *International Journal of Bullying Prevention*, 1:1 pages 14-31. Retrieved on June 25, 2019 from <https://link.springer.com/article/10.1007/s42380-019-0007-4>

Children with Special Health Care Needs

Linked National Outcome Measures

National Outcome Measures	Data Source	Indicator	Linked NPM
NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system	NSCH	Data Not Available or Not Reportable	NPM 11
NOM 18 - Percent of children, ages 3 through 17, with a mental/behavioral condition who receive treatment or counseling	NSCH	Data Not Available or Not Reportable	NPM 11
NOM 19 - Percent of children, ages 0 through 17, in excellent or very good health	NSCH	Data Not Available or Not Reportable	NPM 11
NOM 25 - Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year	NSCH	Data Not Available or Not Reportable	NPM 11

National Performance Measures

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

NPM 11 - Children with Special Health Care Needs

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

State Provided Data			
	2016	2017	2018
Annual Objective			49
Annual Indicator	46.8	46.8	19.6
Numerator	37	37	54
Denominator	79	79	276
Data Source	CYSHCN Survey	CYSHCN Survey	CSHCN Survey
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	20.0	22.0	24.0	26.0	28.0	30.0

Evidence-Based or –Informed Strategy Measures

ESM 11.2 - Percentage of well-child clinics that receive training on care coordination.

Measure Status:		Active				
Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	30.0	45.0	60.0	75.0	80.0	85.0

State Action Plan Table

State Action Plan Table (Northern Mariana Islands) - Children with Special Health Care Needs - Entry 1

Priority Need

Provide a Medical Home for Children Identified as CSHCN

NPM

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

Objectives

By 2020, increase the percentage of children with special healthcare needs that have a medical home by 10%.

Strategies

- Increase awareness of medical homes.

- Increase family engagement activities.

ESMs	Status
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ESM 11.1 - Percent of children with special healthcare needs that receive services that are coordinated, ongoing, and comprehensive.	Inactive
ESM 11.2 - Percentage of well-child clinics that receive training on care coordination.	Active

NOMs

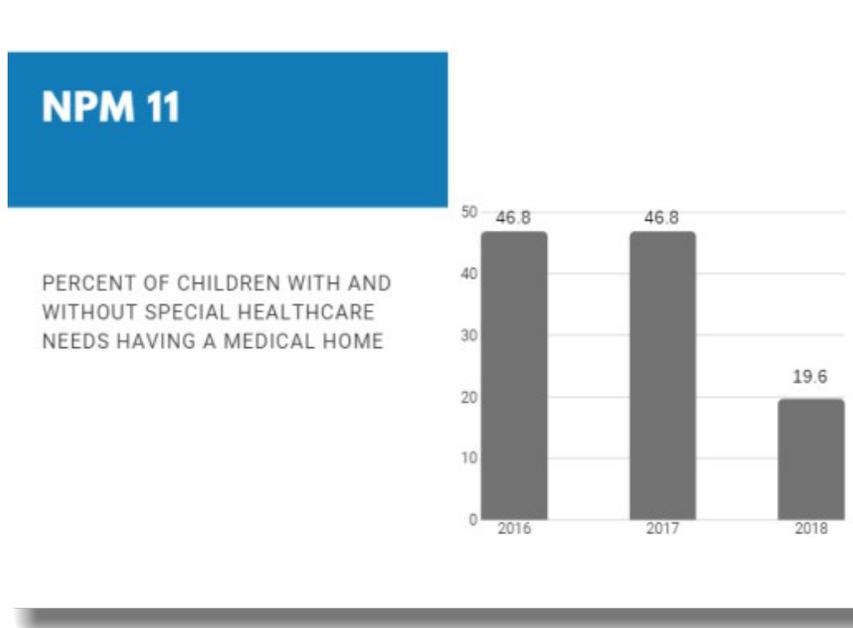
- NOM 17.2 - Percent of children with special health care needs (CSHCN), ages 0 through 17, who receive care in a well-functioning system

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

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

- NOM 25 - Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year

CHILDREN WITH SPECIAL HEALTHCARE NEEDS



In 2018, the MCH CYSHCN Program was able to conduct the bi-annual CYSHCN survey. The survey was disseminated to children enrolled in the Public School System's Early Intervention Services and Special Education Program, which had a total enrollment of 846 children. Survey response rate was 33%, with a total of 276 survey responses returned to the program. The number of families that reported they had a medical home was 54 in 2018, which is an increase from the 37 that reported a medical home in 2016. However, the actual percentage rates in 2018 for families reporting a medical home was 19.6 percent (54) had decrease from what was reported in 2016 (46.8%). The sharp increase in the denominator value in the 2018 is important to note. It had increased almost three-fold (79 vs. 276) due to the survey actually being administered to the entire public school system SPED program and not just the Early Intervention Program as was done in 2016.

In 2018, the MCH Program hired a Child Health Coordinator to oversee the components of the Title V work plan for Children and Youth with Special Healthcare Needs. Part of the work completed by the newly hired Child Health Coordinator was to improve our program's capacity for assessing and reporting on the needs of the CYSHCN population.

Summary of CNMI Children and Youth with Special Healthcare Needs Survey

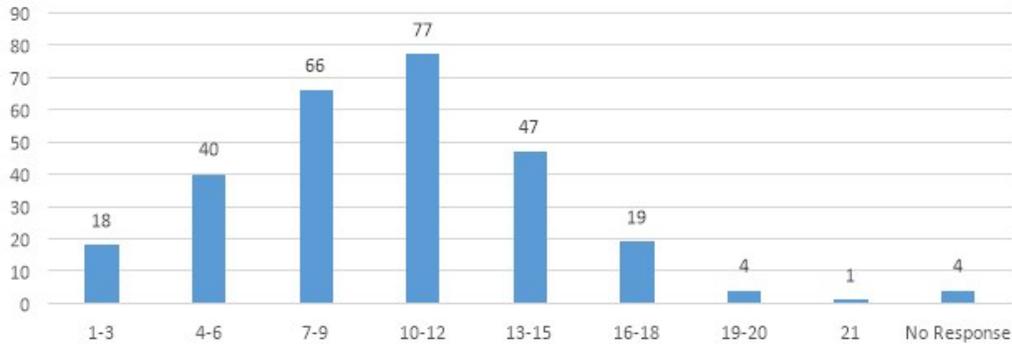
Convenience sampling method was utilized for this survey, which can result in either underrepresentation or overrepresentation of specific groups within the population. Therefore, results reported might not be representative of the entire CYSHCN population of Saipan. The true population of CYSHCN is not known. Efforts to reach out to underrepresented communities and respondents through surveys and outreach activities will continue.

The survey consists of 43 questions. Survey topics included types of disability, health insurance coverage, care coordination, availability of care providers and services, quality of care, and challenges faced in obtaining care. Basic demographic information such as gender, age, ethnicity, and location were collected. Children and youth with

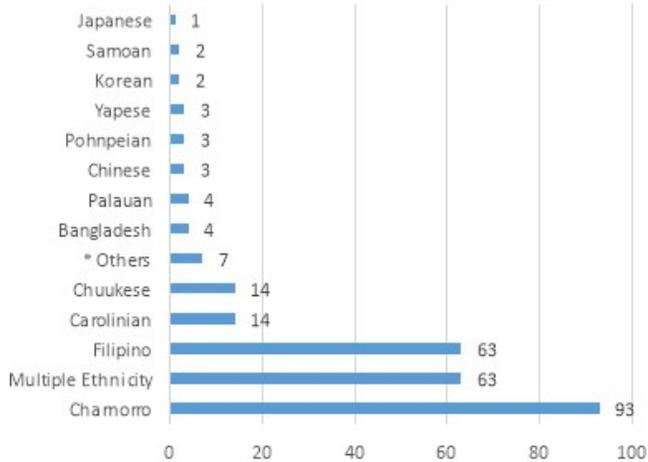
special health care needs is defined as children who have or are at increased risk for chronic physical, developmental, behavioral, or emotional conditions and who require health and related services of a type or amount beyond that required by children generally.

DEMOGRAPHICS

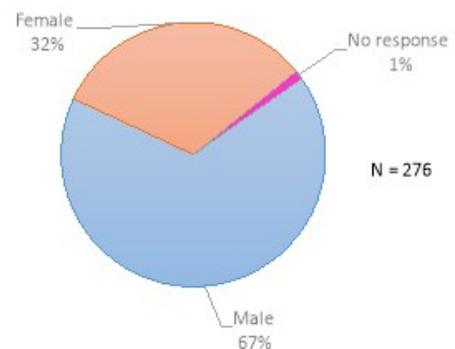
Age Distribution of Children with Special Healthcare Needs (N=276)



Ethnicity of Respondents



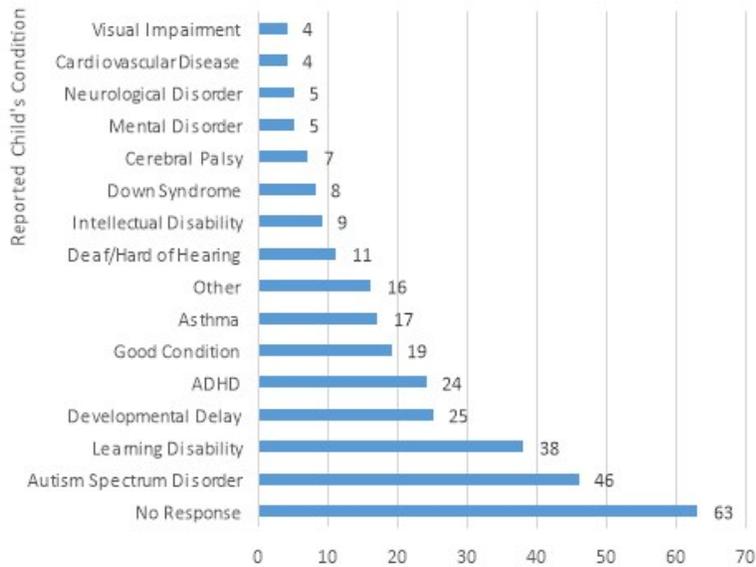
Gender of Respondents



Sixty-seven percent of survey respondents were families who had a CSHCN who was male. Additionally, 33 percent of survey respondents were of Chamorro

ethnic background and 23% reported to be Filipino. Seventeen percent reported to have more than one child with a special healthcare need.

SPECIAL HEALTHCARE NEEDS



The five most frequently reported conditions were:

1. Autism Spectrum Disorder
2. Learning Disability
3. Developmental Delay
4. Attention Deficit Hyperactivity Disorder
5. Asthma

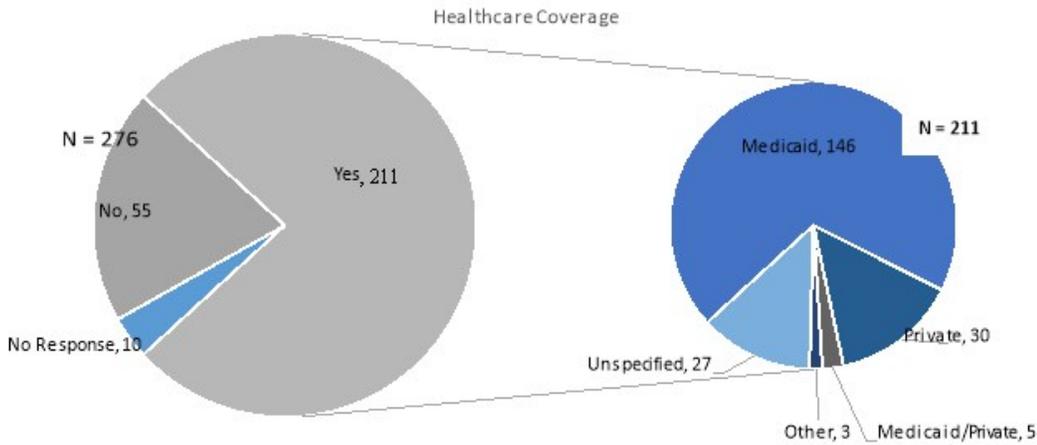
All surveys were distributed to students receiving special education services by SPED instructors. Only 68.5% responded “yes” to the question asking whether or not a respondent had a child with disability. Of these responds, 93% provided information regarding their child’s condition. While 29% responded “no” to having a child with disability, 16.3% of the “no” respondents did provide information on their child’s special healthcare condition. There were some answers to the question that asked respondents to identify their child’s special healthcare condition that led the MCH CYSHCN program to question the level of knowledge or awareness the respondents had regarding their child’s health condition, such as: slow learner, cannot talk, don’t know, short, none, etc. Analysis on responses of these types leads the program to assume that many respondents require additional education around disability and awareness on related services. Furthermore, SPED instructors shared through informal interviews that they have encountered some parents sit through meetings to develop their child’s Individualized Education Plan (IEP) and later go on state that their child does not have an IEP.

“Yes”
Condition Identified – 93%
Receiving SPED or Early Intervention – 55%

Do you have CYSHCN?

“No”
Condition Identified – 16.3%
Receiving SPED or Early Intervention – 29%

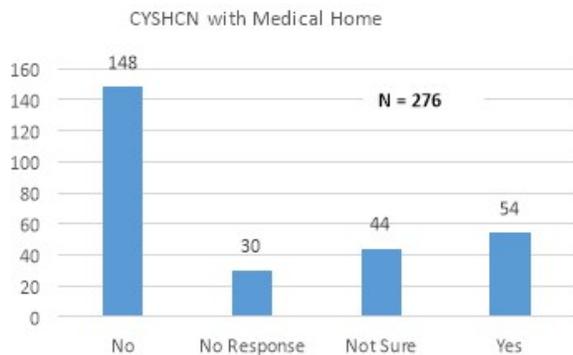
HEALTHCARE COVERAGE



Healthcare coverage is crucial for children with special healthcare needs. High percentage of children in the CNMI depend on Medicaid for their healthcare insurance; 69% of our respondents reported receiving Medicaid coverage. Of those that reported having health coverage, 59.4% reported that their healthcare plan, either Medicaid, Private, or Other (Medicare and Military/VA) insurance covers most of the healthcare costs and 34.8% plan covers off-island treatment/care.

CARE COORDINATION-MEDICAL HOME

Medical home is defined as an approach to providing comprehensive primary care that facilitates partnerships between patients, clinicians, medical staff, and families. A medical home extends beyond the four walls of a clinical practice. It includes specialty care, educational services, family support and more. With care coordination, the child and family work with multiple providers to develop a plan of care and ensure that the child can see a provider when care is needed. Building a medical home in the CNMI is challenging due to limited access to comprehensive, coordinated and continuous care by professionals, especially in specialty care. A total of 19.6% of respondents reported having a medical home. Commonwealth Healthcare Corporation (CHCC) is chosen to be the most widely used facility to receive care when a child with special healthcare needs is sick.



Among Respondents who report having a Medical Home:

- *81% receiving coordinated services
- *74% receiving ongoing services

The 4 most frequently mentioned difficulties accessing health care were the following:



In addition to many respondents being unsure of the availability of the provided services, respondents expressed concerns in the lack of specialty care and a desire to have a reliable resource center for the CYSHCN population. Desire of improved coordination and service system was also commented.

LIMITATIONS

As with most surveys, this survey had limitations that should be noted. First, because respondents were selected from PSS SPED system, results may not be generalizable to the entire CNMI CYSHCN population. Secondly, survey results based on self-reported information are limited by respondent recall capacity and may be susceptible to response bias. Thirdly, the survey response rate was considerably low at 33% due to several factors. Surveys were disseminated not long after the Super Typhoon Yutu, during a time when many families were still struggling with unstable housing situations. Some were still living in temporary shelter settings transferring from one shelter to another while others were and still living in FEMA provided temporary sheltering tents. These were definite challenges to the priority level that families would have placed on completing a voluntary survey. Though 33% response rate produced a sample size that was adequate for analysis of the group as a whole, the statistical reliability of some of the analyses of certain subgroups within the population may have been negatively affected because the number of people included within these subgroups were small. Another limitation to the survey would possibly be that the content of the survey was challenging, which resulted in skipped questions. This may have been related to low literacy levels and/or limited English proficiency of survey responders. Thus, measuring responses was difficult as missing and inconsistent data were frequent throughout the survey. Finally, the biggest challenge to the survey is the lack of awareness and acceptance of disability. Whether it may be intentional or unintentional, respondents who were mostly parents and/or guardians did not recognize their child having a disability despite receiving related services. The stigma of having a disability perhaps be a cause in producing the reluctance of acknowledgment, considering the cultural factor.

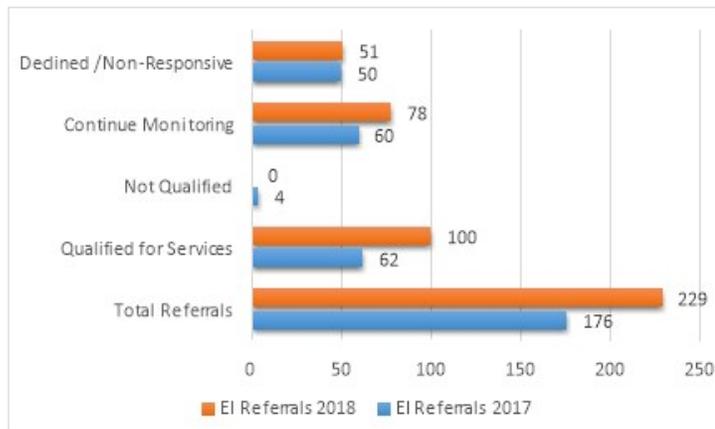
Strategy: Increase child find activities on the islands of Saipan, Tinian, and Rota to increase early identification of children with special healthcare needs.

The CNMI MCH Program continued its focus on early identification of children with special health needs and also worked to improve access to care coordination services for families of children with special healthcare needs. Through Title V block grant funds, the program supports two full time care coordination positions that provide support to families of infants and toddlers enrolled in Early Intervention (EI) Services. The MCH Bureau also has a Newborn Screener/Family Support Coordinator on staff who oversees public health efforts on newborn screening services and family support for children identified as deaf or hard of hearing, those diagnosed with a condition through metabolic screening, and families who are seen through the Shriner's outreach clinic. The CNMI continues to maintain a 99 percent newborn hearing screening rate and is also working to improve the newborn bloodspot screening rates for babies born in the CNMI. Babies who are identified with a presumptive positive screen through newborn screening services are referred to a medical provider for a diagnostic follow-up. Those with a confirmed diagnosis are then referred to the Early Intervention Services for evaluation for enrollment into the program.

The CNMI Part C: Early Intervention Services (EIS) Program is administered under the Public School System and

remains a vital partner for ensuring the children with special healthcare needs and their families receive the necessary services and supports. This partnership is formalized through an existing Interagency Agreement. MCH works diligently in ensuring that all infants who are identified as having a special healthcare need are referred to EIS for evaluation and enrollment, as necessary. Identification is done through newborn screenings services, developmental screening, working with providers and nurses who identify conditions to refer, and in educating the community and families regarding developmental milestones and available screening services for concerns. Title V funds are used to support these activities.

Figure 11. Referrals to the Early Intervention Services Program



Data Source: CNMI Public School System Early Intervention Services Program

In 2018, there was a 23 percent increase in the number of referrals to the Early Intervention Services program. There was a total of 229 referrals, in which 100 infants and toddlers were qualified for enrollment into the program, an increase of 38 percent compared to referrals from the year prior.

A majority of the referrals, 31 percent, were from the CHCC Nursery unit, 30 percent from the CHCC Children’s Clinic, 10 percent were parent self-referrals, and 6 percent were referrals from in patient pediatrics unit. Referrals were also received from the Home Visiting Program, WIC, CHCC NICU, Day Care Centers, and from the Division of Youth Services (DYS) as part of the Child Abuse Prevention and Treatment Act (CAPTA).

Presentations were facilitated by the MCH Program in partnership with staff from the Early Intervention Services Program to the clinical staff of the CHCC Children’s Clinic, NICU and Nursery on the process for referring infants for Early Intervention Services. Additionally, MCH staff travel with staff from the Early Intervention Program to the islands of Tinian and Rota to speak with residents on the outlying islands regarding services available through the Early Intervention Program and also provide a one-day free developmental screening event.

The MCH Program utilized print and online newspaper advertisements to promote community awareness on early childhood developmental milestones and information to the MCH Program and Early Intervention Program for free developmental screening services. The MCHB Community Outreach Worker also distributes milestones information from the CDC’s Learn the Signs. Act Early campaign at community events and also includes them in newborn packets provided to all moms prior to discharge from birth. The MCH Program was able to obtain educational resources and print material through the online CDC Learn the Signs. Act Early website at no cost to the program. Materials were ordered online and sent to the MCH Program via the United States Postal Service (USPS) free of charge.

Strategy: *Partner with the Early Intervention Program and pediatric providers to develop and implement a shared plan of care for CSHCN.*

The MCH Program partnered with the CNMI audiologist and Early Hearing Detection Intervention (EHDI) Program Advisory Group to review shared plan of care templates to be piloted with families who have children identified as having a special healthcare need. The EHDI Advisory group is composed of the CNMI audiologist, a pediatrician from the CHCC Children's Clinic, an early intervention services provider, the newborn screener and family support coordinator, a parent of a child diagnosed as deaf or hard of hearing, and the MCH Bureau Administrator. Together, a review of a couple of samples for a shared plan of care to utilize during a pilot test phase was completed. Concerns were raised by both the pediatrician and parent representative whether an additional form to be completed would really be necessary. Recommendations were made to explore ways in leveraging the existing Individualized Family Support Plan (IFSP) and Individualized Education Program (IEP) plans required by the Public School System. The team is currently working to identify the best possible solution available to address the needs of both medical providers and other community agency providers regarding needs for sharing care information for CSHCN across systems.

Strategy: *Develop and implement standard operating procedures for the CNMI Birth Defects Registry to include processes for referrals to care coordination and early intervention services.*

Currently, all infants identified with a birth defect or identified with a special healthcare need through newborn screening are referred to the MCH Program for Early Intervention Services enrollment evaluation to be scheduled. The MCH Program worked with the Director for the CNMI Health and Vital Statistics Office (HVSO) to develop a draft policy on reporting of birth defects to a birth defects registry as well as describe the referral processes for care coordination and other early intervention services to be initiated. The policy will designate the CNMI HVSO as the program responsible for maintaining the CNMI Birth Defects registry. The policy is currently being reviewed to be finalized.

Strategy: *Provide training to clinical staff on the components of medical home.*

Based on a definition provided by the National Resource Center for Patient/Family-Centered Medical Home through the American Academy of Pediatrics, a medical home is: accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective. In 2018, the MCH Program focused on increasing coordination among medical providers and other service providers and programs, such as newborn screening and providers from the Early Intervention Services program. The MCH Program coordinated in-service presentation of Early Intervention Services (EIS) and referral processes to EIS. Service Coordinators funded through Title V Funds together with Early Intervention Teachers and other services providers were present to provide presentations to staff from the CHCC Children's Clinic, NICU, and Hospital Nursery units.

In addition to this, the MCH Program obtained care coordination training material/curriculum from the National Center for Care Coordination Technical Assistance. Two (2) technical assistance calls were also made with the Project Manager from the Boston Children's Hospital regarding the curriculum and potential strategies for implementing training utilizing it. "Train the Trainer" support is available through the National Center for Care Coordination Technical Assistance.

Children with Special Healthcare Needs

The MCH program will continue to focus its efforts for improving early identification and screening programs for identifying and connecting children with special healthcare needs with early intervention services. Early intervention improves and enhances the development of a child with developmental delays, special needs, or other concerns. For MCH, early identification includes newborn screening programs, developmental screening programs, and increasing awareness on developmental milestones, delays, and other special health needs within the community. Early identification will ensure that families are connected to resources and supports that empower them in taking an active role in the overall care of their children.

Priority Need: Provide a Medical Home for Children Identified as CSHCN.

National Performance Measure 11: Percent of children with and without special healthcare needs, ages 0 through 17, who have a medical home.

Objective: By 2020, increase the number of identified CSHCN provided with a medical home by 10%.

Strategy: Increase awareness of medical homes.

According to the American Academy of Pediatrics, a medical home is an approach for providing comprehensive primary care and should be: accessible, family centered, continuous, comprehensive, coordinated, compassionate, and culturally effective^[1].

As part of efforts for increasing the number of children and youth with special healthcare needs provided with a medical home, the MCH program will work to increase awareness within the community and among families of children and youth with special healthcare needs regarding the benefits of medical homes. The program will also work with the CHCC Children's Clinic staff to strengthen services related to the various attributes identified in the medical home model. For the upcoming year, the following activities will be conducted:

- Facilitate training for Children's Clinic staff to improve service/program attributes related to medical homes.
- Conduct outreach to families of children enrolled in Early Intervention and SPED programs to provide information regarding the benefits of medical homes.

Strategy: Increase family engagement activities.

Families and family engagement are critical components for medical homes. To improve primary care services, the program will prioritize family engagement as part of efforts for increasing the number of children and youth with special healthcare needs with a medical home. The following activities will be conducted to support our strategy:

- Provide training to families on the Institute for Healthcare Improvements "Ask Me 3" initiative. The Ask Me 3 initiative is a patient education strategy which works to improve communication between a healthcare provider and a patient.
- Conduct a survey of parents/caregivers to gather feedback on strengths and areas of opportunity for improvement.
- Develop a plan for addressing areas of opportunity identified through patient feedback survey.

^[1] National Resource Center for Patient/Family Centered Medical Home. (n.d.) What is a Medical Home. Retrieved on June 26, 2019 from <https://medicalhomeinfo.aap.org/overview/Pages/Whatisthemedicalhome.aspx>

Cross-Cutting/Systems Building

Cross-Cutting/Systems Building - Annual Report

No content was entered for the Cross-Cutting/Systems Building - Annual Report in the State Action Plan Narrative by Domain section.

Cross-Cutting/Systems Building - Application Year

No content was entered for the Cross-Cutting/Systems Building - Application in the State Action Plan Narrative by Domain section.

III.F. Public Input

The MCH Program continues to provide an open and collaborative approach with various agencies, families, and other stakeholders to facilitate public input. The public input process involves several efforts including public web postings on social media sites, outreach through email to stakeholders/partners, and participation in advisory committees, workgroups, and partnership meetings. The MCH Bureau also solicited input through Facebook with the profile posting receiving almost 148 views. On Instagram, the public notice announcement received 220 views. Comments were encouraged through emails directly to the MCH Bureau Administrator, social media platforms, and through phone via contact with the MCH Bureau office. A link to the annual block grant report executive summary was also made available on the CHCC MCH Bureau's website.

On a larger scale, the MCH Program participated in annual community events such as the Annual Red Cross Walk-a-Thon and Safe Jamoboree. Since these events are attended by thousands of community members, the MCH Program participated to ensure the community is aware of the program's priorities, services, and goals. The MCH Program hosted the 5th Annual CNMI Women's Health Month in May of 2019, where the program was able to communicate to partner agencies, community members, and other stakeholders regarding the CNMI MCH program's priorities, activities, and strategies for improving health outcomes.

Copies of the draft Annual Report/Application were also provided to management of the Division of Public Health Services, which included the Non-Communicable Disease Bureau, HIV/STD Prevention Program, Immunization Program, and TB/Chest Clinic. Community Advisory Board members and Parent Advisory Panel members were also provided draft copies and encouraged to submit comments to the program. Considering that the annual report/application is a lengthy document at almost 300 pages, the CNMI Title V Program makes available and disseminates an 11 page overview/summary of the annual block grant application/annual report for partners, stakeholders, and the CNMI community as part of the public input process.

The MCH Bureau Administrator held individual meetings with managers of the WIC and Non-Communicable Disease Bureau Programs to discuss data on key measures for infant and child health as well as identify plans for partnerships on improving performance indicators. As a result of these meetings, plans to on improving breastfeeding and women's preventive visit rates were identified and included as part of strategies for 2020 under the Perinatal/Infant and Women's Health domains.

Additionally, MCH program staff presented information during various meetings, including Early Intervention Interagency Coordinating Council meetings, Annual Women's Health Month Planning meetings, NCD Strategic Planning Meeting, Parent Leadership Summit, during Division of Public Health meetings attended by both internal and external agency partners, community members, and parents.

III.G. Technical Assistance

CNMI MCH program staff have taken advantage of training and technical assistance opportunities available through the federal MCH Bureau, Association of Maternal and Child Health Programs (AMCHP), and other national partners. Staff under the MCH Bureau have received/participating in the following technical assistance:

The Children's Safety Network through participation in the Child Safety Collaborative Innovation and Improvement Network (CoIIN). The CNMI CS CoIIN teams consist of the MCH Program, Department of Public Safety and the Public School System. Collaborative efforts around child safety are focused on child passenger safety and interpersonal violence reduction.

The National Center for Fatality Review and Prevention. The CNMI has received technical assistance to support the development of a Fetal and Infant Mortality Review (FIMR) team.

The Association of State and Territorial Health Officials (ASTHO). The CNMI participates in the Increasing Access to Contraception Learning Collaborative coordinated through ASTHO to support our work for implementing Immediate Post- Partum Family Planning Services, increasing access to contraception, and program sustainability issues.

HRSA MCH Title V Pacific Basic Technical Assistance Meeting (April 2018). The CNMI MCH team interacted with other Pacific Island grantees, met with technical assistance centers representatives, and reviewed recommendations for improving block grant application/annual reports.

Design Options for Home Visiting Evaluation (DOHVE). Technical assistance was provided to MCHB staff members on quality improvement initiatives in areas such as increasing program enrollment, participant retention, and performance measures.

In light of our priorities and the activities we have identified for the upcoming year, the CNMI MCH program will submit a TA request to support our work on the following:

Pediatric Care Coordination Curriculum- Technical assistance and support will be requested through Boston Children's Hospital to support our efforts in implementing and building capacity around key medical home functions. This technical assistance will increase the number of children in the CNMI with special healthcare needs who report having a medical home (NPM 11).

Preparedness for MCH Populations- Technical assistance and support will be sought to enhance current territorial emergency preparedness plans to address specific MCH populations and areas of focus. Needs and services specific to Women, Children, including Children with Special Healthcare Needs (CSHCN) during times of disaster response and recovery will need to be identified and clearly articulated into emergency preparedness planning and efforts. The CNMI Title V MCH Program will coordinate with the CHCC Public Health Hospital Emergency Preparedness (PHHEP) office on this effort and will leverage partnerships from other CNMI preparedness and emergency response agencies.

- *Integrating Reproductive Life Planning into Primary Care and Urgent Care settings*: In line with strategies identified to improve health outcomes for women in the CNMI, the MCH program will seek technical assistance for training and consultation in order to effectively integrate reproductive life planning into primary and urgent care settings. Training for providers, workflow diagrams, and protocols will need to be developed.

IV. Title V-Medicaid IAA/MOU

The Title V-Medicaid IAA/MOU is uploaded as a PDF file to this section - [Medicaid MOU.pdf](#)

V. Supporting Documents

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

Supporting Document #01 - [MCHB Organizational Chart 02222019 \(1\).pdf](#)

VI. Organizational Chart

The Organizational Chart is uploaded as a PDF file to this section - [2019.01.14 V14 FINAL CEO ORG CHART.pdf](#)

VII. Appendix

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Form 2
MCH Budget/Expenditure Details

State: Northern Mariana Islands

	FY 20 Application Budgeted	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 463,450	
A. Preventive and Primary Care for Children	\$ 142,676	(30.7%)
B. Children with Special Health Care Needs	\$ 147,455	(31.8%)
C. Title V Administrative Costs	\$ 42,132	(9.1%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 332,263	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 0	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 474,700	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 0	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 474,700	
A. Your State's FY 1989 Maintenance of Effort Amount \$ 395,500		
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	\$ 938,150	
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)	\$ 2,059,790	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 2,997,940	

OTHER FEDERAL FUNDS	FY 20 Application Budgeted
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 65,040
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) Formula Grants	\$ 1,000,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	\$ 248,000
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	\$ 200,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Oral Health	\$ 400,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	\$ 50,000
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Family Professional Partnership/CSHCN	\$ 96,750

	FY 18 Annual Report Budgeted		FY 18 Annual Report Expended	
1. FEDERAL ALLOCATION (Referenced items on the Application Face Sheet [SF-424] apply only to the Application Year)	\$ 458,614		\$ 463,450	
A. Preventive and Primary Care for Children	\$ 137,816	(30.1%)	\$ 139,169	(30%)
B. Children with Special Health Care Needs	\$ 137,972	(30.1%)	\$ 144,619	(31.2%)
C. Title V Administrative Costs	\$ 41,692	(9.1%)	\$ 40,792	(8.9%)
2. Subtotal of Lines 1A-C (This subtotal does not include Pregnant Women and All Others)	\$ 317,480		\$ 324,580	
3. STATE MCH FUNDS (Item 18c of SF-424)	\$ 0		\$ 170,866	
4. LOCAL MCH FUNDS (Item 18d of SF-424)	\$ 0		\$ 0	
5. OTHER FUNDS (Item 18e of SF-424)	\$ 443,825		\$ 434,011	
6. PROGRAM INCOME (Item 18f of SF-424)	\$ 0		\$ 0	
7. TOTAL STATE MATCH (Lines 3 through 6)	\$ 443,825		\$ 604,877	
A. Your State's FY 1989 Maintenance of Effort Amount \$ 395,500				
8. FEDERAL-STATE TITLE V BLOCK GRANT PARTNERSHIP SUBTOTAL (Total lines 1 and 7)	\$ 902,439		\$ 1,068,327	
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)	\$ 1,703,040		\$ 1,574,778	
11. STATE MCH BUDGET/EXPENDITURE GRAND TOTAL (Partnership Subtotal + Other Federal MCH Funds Subtotal)	\$ 2,605,479		\$ 2,643,105	

OTHER FEDERAL FUNDS	FY 18 Annual Report Budgeted	FY 18 Annual Report Expended
Department of Health and Human Services (DHHS) > Centers for Disease Control and Prevention (CDC) > Early Hearing Detection and Intervention (EHDI) State Programs	\$ 65,040	\$ 58,131
Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Adult Medicaid Quality: Improving Maternal and Infant Health Outcomes in Medicaid and CHIP	\$ 100,000	\$ 42,397
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program	\$ 1,000,000	\$ 617,891
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > State Systems Development Initiative (SSDI)	\$ 100,000	\$ 85,511
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Universal Newborn Hearing Screening and Intervention	\$ 250,000	\$ 239,003
Department of Health and Human Services (DHHS) > Office of Population Affairs (OPA) > Title X Family Planning	\$ 188,000	\$ 128,381
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Family Professional Partnership/CSHCN		\$ 63,420
Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Oral Health		\$ 340,044

Form Notes for Form 2:

None

Field Level Notes for Form 2:

1.	Field Name:	3. STATE MCH FUNDS
	Fiscal Year:	2018
	Column Name:	Annual Report Expended
	Field Note:	The MCH Program received Tobacco and Control funds through the Public Law 20-32.
2.	Field Name:	Other Federal Funds, Department of Health and Human Services (DHHS) > Centers for Medicare & Medicaid Services (CMS) > Adult Medicaid Quality: Improving Maternal and Infant Health Outcomes in Medicaid and CHIP
	Fiscal Year:	2018
	Column Name:	Annual Report Expended
	Field Note:	Budget Year: 09/14/2018-09/13/2019
3.	Field Name:	Other Federal Funds, Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > ACA Maternal, Infant and Early Childhood Home Visiting Program
	Fiscal Year:	2018
	Column Name:	Annual Report Expended
	Field Note:	Budget Year: 09/30/2017-09/29/2019
4.	Field Name:	Other Federal Funds, Department of Health and Human Services (DHHS) > Health Resources and Services Administration (HRSA) > Oral Health
	Fiscal Year:	2018
	Column Name:	Annual Report Expended
	Field Note:	Budget Year: 09/01/2018-08/31/2019

Data Alerts: None

Form 3a
Budget and Expenditure Details by Types of Individuals Served
State: Northern Mariana Islands

I. TYPES OF INDIVIDUALS SERVED

IA. Federal MCH Block Grant	FY 20 Application Budgeted	FY 18 Annual Report Expended
1. Pregnant Women	\$ 39,577	\$ 44,675
2. Infants < 1 year	\$ 39,577	\$ 44,676
3. Children 1 through 21 Years	\$ 142,676	\$ 139,169
4. CSHCN	\$ 147,455	\$ 144,619
5. All Others	\$ 52,033	\$ 49,519
Federal Total of Individuals Served	\$ 421,318	\$ 422,658

IB. Non-Federal MCH Block Grant	FY 20 Application Budgeted	FY 18 Annual Report Expended
1. Pregnant Women	\$ 75,964	\$ 61,535
2. Infants < 1 year	\$ 75,964	\$ 61,535
3. Children 1 through 21 Years	\$ 217,180	\$ 216,230
4. CSHCN	\$ 105,592	\$ 94,711
5. All Others	\$ 0	\$ 0
Non-Federal Total of Individuals Served	\$ 474,700	\$ 434,011
Federal State MCH Block Grant Partnership Total	\$ 896,018	\$ 856,669

Form Notes for Form 3a:

None

Field Level Notes for Form 3a:

None

Data Alerts: None

Form 3b
Budget and Expenditure Details by Types of Services
State: Northern Mariana Islands

II. TYPES OF SERVICES

IIA. Federal MCH Block Grant	FY 20 Application Budgeted	FY 18 Annual Report Expended
1. Direct Services	\$ 0	\$ 0
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	\$ 0	\$ 0
2. Enabling Services	\$ 207,252	\$ 249,721
3. Public Health Services and Systems	\$ 256,198	\$ 213,729
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		\$ 0
Hospital Charges (Includes Inpatient and Outpatient Services)		\$ 0
Dental Care (Does Not Include Orthodontic Services)		\$ 0
Durable Medical Equipment and Supplies		\$ 0
Laboratory Services		\$ 0
Direct Services Line 4 Expended Total		\$ 0
Federal Total	\$ 463,450	\$ 463,450

IIB. Non-Federal MCH Block Grant	FY 20 Application Budgeted	FY 18 Annual Report Expended
1. Direct Services	\$ 454,064	\$ 414,976
A. Preventive and Primary Care Services for all Pregnant Women, Mothers, and Infants up to Age One	\$ 131,291	\$ 104,035
B. Preventive and Primary Care Services for Children	\$ 217,180	\$ 216,230
C. Services for CSHCN	\$ 105,593	\$ 94,711
2. Enabling Services	\$ 6,036	\$ 6,036
3. Public Health Services and Systems	\$ 14,600	\$ 12,999
4. Select the types of Non-Federally-supported "Direct Services", as reported in II.B.1. Provide the total amount of Non-Federal MCH Block Grant funds expended for each type of reported service		
Pharmacy		\$ 0
Physician/Office Services		\$ 0
Hospital Charges (Includes Inpatient and Outpatient Services)		\$ 285,583
Dental Care (Does Not Include Orthodontic Services)		\$ 129,393
Durable Medical Equipment and Supplies		\$ 0
Laboratory Services		\$ 0
Direct Services Line 4 Expended Total		\$ 414,976
Non-Federal Total	\$ 474,700	\$ 434,011

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: Northern Mariana Islands

Total Births by Occurrence: 1,262

Data Source Year: 2018

1. Core RUSP Conditions

Program Name	(A) Aggregate Total Number Receiving at Least One Screen	(B) Aggregate Total Number Presumptive Positive Screens	(C) Aggregate Total Number Confirmed Cases	(D) Aggregate Total Number Referred for Treatment
Core RUSP Conditions	1,257 (99.6%)	21	5	5 (100.0%)

Program Name(s)				
3-Hydroxy-3-Methylglutaric Aciduria	3-Methylcrotonyl-Coa Carboxylase Deficiency	Argininosuccinic Aciduria	Biotinidase Deficiency	Carnitine Uptake Defect/Carnitine Transport Defect
Citrullinemia, Type I	Classic Galactosemia	Classic Phenylketonuria	Congenital Adrenal Hyperplasia	Critical Congenital Heart Disease
Cystic Fibrosis	Glutaric Acidemia Type I	Glycogen Storage Disease Type II (Pompe)	Hearing Loss	Holocarboxylase Synthase Deficiency
Homocystinuria	Isovaleric Acidemia	Long-Chain L-3 Hydroxyacyl-Coa Dehydrogenase Deficiency	Maple Syrup Urine Disease	Medium-Chain Acyl-Coa Dehydrogenase Deficiency
Methylmalonic Acidemia (Cobalamin Disorders)	Methylmalonic Acidemia (Methylmalonyl-Coa Mutase)	Mucopolysaccharidosis Type 1	Primary Congenital Hypothyroidism	Propionic Acidemia
S, βeta-Thalassemia	S,C Disease	S,S Disease (Sickle Cell Anemia)	Severe Combined Immunodeficiencies	β-Ketothiolase Deficiency
Trifunctional Protein Deficiency	Tyrosinemia, Type I	Very Long-Chain Acyl-Coa Dehydrogenase Deficiency	X-Linked Adrenoleukodystrophy	

2. Other Newborn Screening Tests

None

3. Screening Programs for Older Children & Women

None

4. Long-Term Follow-Up

The MCH and CSHCN Program have implemented an Inter-Agency Agreement between the CNMI Public School System (PSS) Part C of the DIEA and the Commonwealth Healthcare Corporation to provide services to infants and toddlers birth to three who have been identified as having a disability and who would then be enrolled into the Early Intervention Services (EIS) Program. While enrolled in EIS, services such as speech therapy, special instruction, physical therapy, vision, hearing, and psychological services are rendered and provided to families at no cost. Children identified as having a disability at birth and have surpassed the age of three are transitioned into the Early Childhood Program that provides services to children ages three to five. Children above the age of five are transitioned into the Special Education Program under PSS where they will continue to receive ongoing service coordination.

Form Notes for Form 4:

None

Field Level Notes for Form 4:

1.	Field Name:	Total Births by Occurrence
	Fiscal Year:	2018
	Column Name:	Total Births by Occurrence Notes
	Field Note:	Total number of live births. Data obtained from the CNMI Health & Vital Statistics Office, CY 2018 birth records.
2.	Field Name:	Data Source Year
	Fiscal Year:	2018
	Column Name:	Data Source Year Notes
	Field Note:	CNMI Health and Vital Statistics Office (HVSO), birth records.
3.	Field Name:	Core RUSP Conditions - Receiving At Least One Screen
	Fiscal Year:	2018
	Column Name:	Core RUSP Conditions
	Field Note:	In 2018- 1,257 infants received at least one Newborn Screen. * 1257- received a Newborn Hearing Screen * 527- received a Newborn Metabolic Screen (bloodspot screening)
4.	Field Name:	Core RUSP Conditions - Positive Screen
	Fiscal Year:	2018
	Column Name:	Core RUSP Conditions
	Field Note:	9 presumptive positive through Newborn Hearing Screen 21 presumptive positive through Newborn Bloodspot Screen
5.	Field Name:	Core RUSP Conditions - Confirmed Cases
	Fiscal Year:	2018
	Column Name:	Core RUSP Conditions
	Field Note:	4 confirmed cases through Newborn Hearing Screen 1 confirmed case through Newborn Bloodspot Screen

Data Alerts: None

Form 5
Count of Individuals Served by Title V & Total Percentage of Populations Served by Title V

State: Northern Mariana Islands

Annual Report Year 2018

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

Types Of Individuals Served	(A) Title V Total Served	Primary Source of Coverage				
		(B) Title XIX %	(C) Title XXI %	(D) Private / Other %	(E) None %	(F) Unknown %
1. Pregnant Women	1,238	40.0	0.0	8.0	51.0	1.0
2. Infants < 1 Year of Age	1,262	40.0	0.0	8.0	52.0	0.0
3. Children 1 through 21 Years of Age	4,989	38.0	0.0	8.0	14.0	40.0
3a. Children with Special Health Care Needs	80	0.0	0.0	0.0	0.0	100.0
4. Others	1,093	30.0	0.0	13.0	20.0	37.0
Total	8,582					

Form 5b – Total Percentage of Populations Served by Title V
(Direct, Enabling, and Public Health Services and Systems)

Populations Served by Title V	Reference Data	Used Reference Data?	Denominator	Total % Served	Form 5b Count (Calculated)	Form 5a Count
1. Pregnant Women	782	No	1,238	100	1,238	1,238
2. Infants < 1 Year of Age	770	No	1,262	100	1,262	1,262
3. Children 1 through 21 Years of Age	19,140	No	19,604	69	13,527	4,989
3a. Children with Special Health Care Needs	Not Available	No	968	100	968	80
4. Others	32,353	No	31,625	20	6,325	1,093

Form Notes for Form 5:

None

Field Level Notes for Form 5a:

1.	Field Name:	Pregnant Women Total Served
	Fiscal Year:	2018
	Field Note:	Number of pregnant women served is based on the total number of women with live births in the CNMI. Title V funds supports direct and enabling services for women who access services through the Commonwealth Healthcare Corporation, which operates the only birthing facility in the CNMI.
2.	Field Name:	Infants Less Than One YearTotal Served
	Fiscal Year:	2018
	Field Note:	Total number of infants less than 1 year served is based on total live births in 2018, those served during well-child visits at the CHCC children's clinic and through dental visit through the Oral Health program/public health dental clinic.
3.	Field Name:	Children 1 through 21 Years of Age
	Fiscal Year:	2018
	Field Note:	Value is based on total number of children ages 1 through 21 years of age served through the CHCC Children's Clinic, Women's Clinic, and Oral Health Program/Public Health Dental Clinic.
4.	Field Name:	Children with Special Health Care Needs
	Fiscal Year:	2018
	Field Note:	Value is based on total number of CSHCN provided service/care coordination services.
5.	Field Name:	Others
	Fiscal Year:	2018
	Field Note:	Value is based on those ages 22 years and above seen through the Women's Clinic and Oral Health/Dental Clinic.

Field Level Notes for Form 5b:

1.	Field Name:	Pregnant Women
	Fiscal Year:	2018
	Field Note:	Denominator value is based on the total number of women with live births in the CNMI for 2018. Numerator value based on the total number of women with live births in the CNMI that occurred at the CHCC hospital. CNMI has only one hospital/birthing center. All deliveries in the CNMI occur at the CHCC hospital.
2.	Field Name:	Infants Less Than One Year
	Fiscal Year:	2018
	Field Note:	Denominator value is based on the CY2018 US Census population estimate. Numerator value is based on the total number of live births in the CNMI in 2018.
3.	Field Name:	Children 1 Through 21 Years of Age
	Fiscal Year:	2018
	Field Note:	Denominator value is based on the CY2018 US Census population estimate. Numerator value is based on the total number of child ages 1 through 21 years of age served by the Commonwealth Healthcare Corporation.
4.	Field Name:	Children With Special Health Care Needs
	Fiscal Year:	2018
	Field Note:	Children with special healthcare needs value is based on the total number of children enrolled in Early Intervention services and SPED programs in the CNMI. The CNMI Title V Block Grant program supports the CNMI healthcare system with workforce capacity building, policies, and data capacity efforts. The CHCC operates the only hospital and all emergency departments in the CNMI.
5.	Field Name:	Others
	Fiscal Year:	2018
	Field Note:	Denominator value based on US Census Estimate for year 2018 of individuals in the CNMI 23 years of age and older. Numerator value is based on the total number of women ages 23 years and above served by the Commonwealth Healthcare Corporation.

Data Alerts:

1.	Pregnant Women, Form 5a Count is greater than or equal to 90% of the Form 5b Count (calculated). Please check that population based services have been included in the 5b Count and not in the 5a Count.
2.	Infants Less Than One Year, Form 5a Count is greater than or equal to 90% of the Form 5b Count (calculated). Please check that population based services have been included in the 5b Count and not in the 5a Count.

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

State: Northern Mariana Islands

Annual Report Year 2018

I. Unduplicated Count by Race/Ethnicity

	(A) Total	(B) Non- Hispanic White	(C) Non- Hispanic Black or African American	(D) Hispanic	(E) Non- Hispanic American Indian or Native Alaskan	(F) Non- Hispanic Asian	(G) Non- Hispanic Native Hawaiian or Other Pacific Islander	(H) Non- Hispanic Multiple Race	(I) Other & Unknown
1. Total Deliveries in State	1,238	16	0	0	0	618	555	28	21
Title V Served	1,238	16	0	0	0	618	555	28	21
Eligible for Title XIX	499	1	0	0	0	23	444	22	9
2. Total Infants in State	1,262	16	0	0	0	634	560	29	23
Title V Served	1,262	16	0	0	0	634	560	29	23
Eligible for Title XIX	506	1	0	0	0	25	448	23	9

Form Notes for Form 6:

None

Field Level Notes for Form 6:

None

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

State: Northern Mariana Islands

A. State MCH Toll-Free Telephone Lines	2020 Application Year	2018 Annual Report Year
1. State MCH Toll-Free "Hotline" Telephone Number	(670) 287-7718	(670) 287-7718
2. State MCH Toll-Free "Hotline" Name	MCH Bureau	MCH Bureau
3. Name of Contact Person for State MCH "Hotline"	Antonio Yarobwemal	Antonio Yarobwemal
4. Contact Person's Telephone Number	(670) 287-7718	(670) 287-7718
5. Number of Calls Received on the State MCH "Hotline"		1,282

B. Other Appropriate Methods	2020 Application Year	2018 Annual Report Year
1. Other Toll-Free "Hotline" Names		
2. Number of Calls on Other Toll-Free "Hotlines"		
3. State Title V Program Website Address	http://www.chcc.gov.mp/index.php/division-of-public-health/maternal-child-health-mch-program	http://www.chcc.gov.mp/index.php/division-of-public-health/maternal-child-health-mch-program
4. Number of Hits to the State Title V Program Website		2,653
5. State Title V Social Media Websites	https://www.facebook.com/mchbcnmi/	https://www.facebook.com/mchbcnmi/
6. Number of Hits to the State Title V Program Social Media Websites		50,757

Form Notes for Form 7:

None

Form 8
State MCH and CSHCN Directors Contact Information

State: Northern Mariana Islands

1. Title V Maternal and Child Health (MCH) Director	
Name	Heather S. Pangelinan
Title	MCH Bureau Administrator
Address 1	PO Box 50049
Address 2	
City/State/Zip	Saipan / MP / 96950
Telephone	(670) 664-8701
Extension	
Email	hsantasmch@gmail.com

2. Title V Children with Special Health Care Needs (CSHCN) Director	
Name	Youn Jung, Danielle, Su
Title	Child Health Coordinator
Address 1	PO Box 50049
Address 2	
City/State/Zip	Saipan / MP / 96950
Telephone	(670) 664-8701
Extension	
Email	dsumch@gmail.com

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: Northern Mariana Islands

Application Year 2020

No.	Priority Need
1.	Improve Women's Health Through Cervical and Breast Cancer and Anemia Screening.
2.	Improve Perinatal/Infant Outcomes Through Early and Adequate Prenatal Care Services and Promoting Breastfeeding and Safe Sleep.
3.	Improve Child Health Through Providing Vaccinations and Screening for Developmental Delays.
4.	Improve Adolescent Health by Promoting Healthy Adolescent Behaviors & Reducing Risk Behavior (i.e. drug & alcohol use, bullying) & poor outcomes (i.e. teen pregnancy, injury, suicide)
5.	Provide a Medical Home for Children Identified as CSHCN
6.	Improve Insurance Status of Children and Pregnant Mothers.
7.	Improve Oral Health of Children & Pregnant Mothers

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.	Women's/Maternal Health: Improve Women's Health Through Cervical and Breast Cancer and Anemia Screening.	New	
2.	Perinatal/Infant Health: Improve Perinatal/Infant Outcomes Through Early and Adequate Prenatal Care Services and Promoting Breastfeeding and Safe Sleep.	New	
3.	Child Health: Improve Child Health Through Providing Vaccinations and Screening for Developmental Delays.	Continued	
4.	Adolescent Health: Improve Adolescent Health by Promoting Healthy Adolescent Behaviors & Reducing Risk Behavior (i.e. drug & alcohol use, bullying) & poor outcomes (i.e. teen pregnancy, injury, suicide).	Continued	
5.	CSHCN: Provide a Medical Home for Children Identified as CSHCN	New	
6.	Cross-cutting: Improve Insurance Status of Children and Pregnant Mothers.	New	
7.	Cross-cutting: Improve Oral Health of Children & Pregnant Mothers	New	
8.	CSHCN: Improve identification of CSHCN Through Screening for Developmental Delays.	New	

Form Notes for Form 9:

None

Field Level Notes for Form 9:

None

Form 10
National Outcome Measures (NOMs)

State: Northern Mariana Islands

Form Notes for Form 10 NPMs, NOMs, SPMs, SOMs, and ESMs.

The CNMI had no maternal deaths in 2018.

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
2017	52.2 %	2.6 %	188	360
2016	41.9 %	2.4 %	173	413
2015	39.7 %	2.4 %	167	421
2014	53.9 %	2.2 %	269	499
2013	46.4 % ⚡	2.1 % ⚡	275 ⚡	593 ⚡
2012	43.6 % ⚡	1.8 % ⚡	319 ⚡	731 ⚡
2011	60.7 % ⚡	4.1 % ⚡	88 ⚡	145 ⚡
2010	48.3 % ⚡	1.9 % ⚡	332 ⚡	687 ⚡

Legends:

- 🚫 Indicator has a numerator <10 and is not reportable
- ⚡ Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	47.5
Numerator	323
Denominator	680
Data Source	CNMI HVSO
Data Source Year	2018

NOM 1 - Notes:

Denominator data is based on the total number of births to resident women. The Numerator value is the total number of births to resident women who received prenatal care during the first trimester of pregnancy.

Data Alerts: None

NOM 2 - Rate of severe maternal morbidity per 10,000 delivery hospitalizations

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

State Provided Data	
	2018
Annual Indicator	261.5
Numerator	33
Denominator	1,262
Data Source	HVSO
Data Source Year	2018

NOM 2 - Notes:

Numerator data is based on Birth Certificate information from the CNMI HVSO on the number of complications associated with labor and delivery.

Data Alerts: None

NOM 3 - Maternal mortality rate per 100,000 live births

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

State Provided Data	
	2018
Annual Indicator	0.0
Numerator	0
Denominator	11,498
Data Source	CNMI HVSO
Data Source Year	2018

NOM 3 - Notes:

There were no Maternal Deaths in 2018 for the CNMI.

Data Alerts:

1.	A value of zero has been entered for the numerator in NOM 3. Please review your data to ensure this is correct.
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NOM 4 - Percent of low birth weight deliveries (<2,500 grams)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	7.6 %	1.4 %	27	356
2016	7.8 %	1.3 %	32	411
2015	7.8 %	1.3 %	33	424
2014	7.6 %	1.2 %	39	516
2013	7.8 %	1.0 %	53	677
2012	6.4 %	0.8 %	54	847
2011	7.3 %	0.8 %	75	1,032
2010	7.2 % ⚡	1.1 % ⚡	42 ⚡	580 ⚡
2009	8.6 %	0.8 %	95	1,107

Legends:

- 🚩 Indicator has a numerator <10 and is not reportable
- ⚡ Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	6.9
Numerator	87
Denominator	1,262
Data Source	CNMI HVSO
Data Source Year	2018

NOM 4 - Notes:

None

Data Alerts: None

NOM 5 - Percent of preterm births (<37 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	7.8 %	1.4 %	28	359
2016	12.1 %	1.6 %	50	412
2015	9.7 %	1.4 %	41	424
2014	9.3 %	1.3 %	48	517
2013	9.8 %	1.2 %	65	665
2012	7.6 %	0.9 %	62	813
2011	6.8 %	0.8 %	70	1,028
2010	7.6 %	0.8 %	78	1,023
2009	8.2 %	0.8 %	90	1,100

Legends:

- Indicator has a numerator <10 and is not reportable
- Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	7.0
Numerator	88
Denominator	1,262
Data Source	CNMI HVSO
Data Source Year	2018

NOM 5 - Notes:

None

Data Alerts: None

NOM 6 - Percent of early term births (37, 38 weeks)

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	33.4 %	2.5 %	120	359
2016	27.2 %	2.2 %	112	412
2015	28.8 %	2.2 %	122	424
2014	28.6 %	2.0 %	148	517
2013	31.1 %	1.8 %	207	665
2012	28.2 %	1.6 %	229	813
2011	28.0 %	1.4 %	288	1,028
2010	22.6 %	1.3 %	231	1,023
2009	28.4 %	1.4 %	312	1,100

Legends:

- 🚩 Indicator has a numerator <10 and is not reportable
- ⚡ Indicator has a numerator <20, a confidence interval width >20% points or >1.2 times the estimate, or >10% missing data and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	32.7
Numerator	413
Denominator	1,262
Data Source	CNMI HVSO
Data Source Year	2018

NOM 6 - Notes:

None

Data Alerts: None

NOM 7 - Percent of non-medically indicated early elective deliveries

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

NOM 7 - Notes:

None

Data Alerts: None

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

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

State Provided Data	
	2018
Annual Indicator	7.1
Numerator	9
Denominator	1,268
Data Source	CNMI HVSO
Data Source Year	2018

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
2017	NR	NR	NR	NR
2016	NR	NR	NR	NR
2015	NR	NR	NR	NR
2014	NR	NR	NR	NR
2013	NR	NR	NR	NR
2012	NR	NR	NR	NR
2011	NR	NR	NR	NR
2010	NR	NR	NR	NR
2009	NR	NR	NR	NR

Legends:

- Indicator has a numerator <10 and is not reportable
- Indicator has a numerator <20 and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	4.8
Numerator	6
Denominator	1,262
Data Source	CNMI HVSO
Data Source Year	2018

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
2017	NR	NR	NR	NR
2016	NR	NR	NR	NR
2015	NR	NR	NR	NR
2014	NR	NR	NR	NR
2013	NR	NR	NR	NR
2012	NR	NR	NR	NR
2011	NR	NR	NR	NR
2010	NR	NR	NR	NR
2009	NR	NR	NR	NR

Legends:

- Indicator has a numerator <10 and is not reportable
- Indicator has a numerator <20 and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	2.4
Numerator	3
Denominator	1,262
Data Source	CNMI HVSO
Data Source Year	2018

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
2017	NR	NR	NR	NR
2016	NR	NR	NR	NR
2015	NR	NR	NR	NR
2014	NR	NR	NR	NR
2013	NR	NR	NR	NR
2012	NR	NR	NR	NR
2011	NR	NR	NR	NR
2010	NR	NR	NR	NR
2009	NR	NR	NR	NR

Legends:

- Indicator has a numerator <10 and is not reportable
- Indicator has a numerator <20 and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	2.4
Numerator	
Denominator	
Data Source	
Data Source Year	

NOM 9.3 - Notes:

None

Data Alerts: None

NOM 9.4 - Preterm-related mortality rate per 100,000 live births

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

NOM 9.4 - Notes:

Data is available through the CNMI Health and Vital Statistics Office (HVSO). However, the numerator value is less than 10 and not reportable.

Data Alerts:

1.	Data has not been entered for NOM 9.4. This outcome measure is linked to the selected NPM 1,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
----	---

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
2017	NR 	NR 	NR 	NR 
2016	NR 	NR 	NR 	NR 
2015	NR 	NR 	NR 	NR 
2014	NR 	NR 	NR 	NR 
2013	NR 	NR 	NR 	NR 
2012	NR 	NR 	NR 	NR 
2011	NR 	NR 	NR 	NR 
2010	NR 	NR 	NR 	NR 
2009	NR 	NR 	NR 	NR 

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

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

NOM 10 - Notes:

No data source. The program will work with the CNMI Health and Vital Statistics Office to add a field on the birth record form to be able to capture this information.

Data Alerts:

1.	Data has not been entered for NOM 10. This outcome measure is linked to the selected NPM 1,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
----	--

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

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

NOM 11 - Notes:

No data source for this measure. The program will work with the CNMI Health and Vital Statistics Office to include a field on the birth record form to be able to capture this information.

Data Alerts:

1.	Data has not been entered for NOM 11. This outcome measure is linked to the selected NPM 1,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
----	--

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

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

NOM 12 - Notes:

None

Data Alerts: None

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

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

NOM 13 - Notes:

None

Data Alerts: None

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

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

State Provided Data	
	2018
Annual Indicator	58.4
Numerator	615
Denominator	1,053
Data Source	Public Health Dental Clinic/Oral Health Prg.
Data Source Year	2018

NOM 14 - Notes:

The MCHB Oral Health Program completed oral health assessments to a total of 1053 students (2nd and 6th grade enrolled in Public Schools). Of the 1053, 615 were reported to have dental caries.

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
2017	NR 	NR 	NR 	NR 
2016	NR 	NR 	NR 	NR 
2015	NR 	NR 	NR 	NR 
2014	NR 	NR 	NR 	NR 
2013	NR 	NR 	NR 	NR 
2012	NR 	NR 	NR 	NR 
2011	NR 	NR 	NR 	NR 
2010	NR 	NR 	NR 	NR 
2009	NR 	NR 	NR 	NR 

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
2017	NR 	NR 	NR 	NR 
2016	NR 	NR 	NR 	NR 
2015	NR 	NR 	NR 	NR 
2014	NR 	NR 	NR 	NR 
2013	NR 	NR 	NR 	NR 
2012	NR 	NR 	NR 	NR 
2011	NR 	NR 	NR 	NR 
2010	NR 	NR 	NR 	NR 
2009	NR 	NR 	NR 	NR 

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
2015_2017	NR 	NR 	NR 	NR 
2014_2016	NR 	NR 	NR 	NR 
2013_2015	NR 	NR 	NR 	NR 
2012_2014	NR 	NR 	NR 	NR 
2011_2013	NR 	NR 	NR 	NR 
2010_2012	NR 	NR 	NR 	NR 
2009_2011	NR 	NR 	NR 	NR 
2008_2010	NR 	NR 	NR 	NR 
2007_2009	NR 	NR 	NR 	NR 

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
2015_2017	NR 	NR 	NR 	NR 
2014_2016	NR 	NR 	NR 	NR 
2013_2015	NR 	NR 	NR 	NR 
2012_2014	NR 	NR 	NR 	NR 
2011_2013	NR 	NR 	NR 	NR 
2010_2012	NR 	NR 	NR 	NR 
2009_2011	NR 	NR 	NR 	NR 
2008_2010	NR 	NR 	NR 	NR 
2007_2009	NR 	NR 	NR 	NR 

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

NOM 16.3 - Notes:

None

Data Alerts: None

NOM 17.1 - Percent of children with special health care needs (CSHCN), ages 0 through 17

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

State Provided Data	
	2018
Annual Indicator	6.4
Numerator	1,052
Denominator	16,484
Data Source	CNMI Public School System SPED and Early Interv,
Data Source Year	2018

NOM 17.1 - Notes:

Numerator value based on PSS SPED enrollment for children ages 3-17 years (N= 968) and children ages 0-2 enrolled in early intervention program (N= 84). Denominator value based on US population est for 0-17 years.

Data Alerts: None

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

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

NOM 17.2 - Notes:

No data source for this measure. The MCH Jurisdictional survey that will be implemented in the CNMI in the year 2020 will capture information on this measure to allow for future reporting.

Data Alerts:

1.	Data has not been entered for NOM 17.2. This outcome measure is linked to the selected NPM 11,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
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NOM 17.3 - Percent of children, ages 3 through 17, diagnosed with an autism spectrum disorder

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

State Provided Data	
	2018
Annual Indicator	1.0
Numerator	140
Denominator	14,204
Data Source	CNMI Public School SPED Enrollment Data
Data Source Year	2018

NOM 17.3 - Notes:

None

Data Alerts: None

NOM 17.4 - Percent of children, ages 3 through 17, diagnosed with Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD)

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

NOM 17.4 - Notes:

No current data source for this measure. The CNMI is currently working with HRSA on the development of a jurisdictional survey which will include gathering data to be able to report on this measure. The survey is estimated to be implemented in the CNMI in 2020.

Data Alerts: None

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

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

NOM 18 - Notes:

No current data source for this measure. CNMI is currently working with HRSA on a jurisdictional survey that will be able to provide data to report on this measure. The survey is estimated to be implemented in the CNMI in 2020.

Data Alerts:

1.	Data has not been entered for NOM 18. This outcome measure is linked to the selected NPM 11,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
----	---

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

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

NOM 19 - Notes:

The CNMI has not current data source for this measure and is currently working with HRSA on the development of a jurisdictional survey as a source of data for this measure. The survey is estimated to be implemented in the CNMI in 2020.

Data Alerts:

1.	Data has not been entered for NOM 19. This outcome measure is linked to the selected NPM 13.2,6,11,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
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NOM 20 - Percent of children, ages 2 through 4, and adolescents, ages 10 through 17, who are obese (BMI at or above the 95th percentile)

Data Source: WIC

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2014	9.0 %	0.7 %	162	1,808
2012	11.3 %	0.7 %	253	2,239
2010	14.1 %	0.8 %	304	2,157

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
2017	16.4 %	0.8 %	508	3,091
2015	16.0 %	0.7 %	493	3,087
2013	15.8 %	0.7 %	478	3,028
2011	13.4 %	0.7 %	435	3,239
2007	14.0 %	0.7 %	365	2,602
2005	16.4 %	0.7 %	478	2,912

Legends:

- 🚫 Indicator has an unweighted denominator <100 and is not reportable
- ⚡ Indicator has a confidence interval width >20% points or >1.2 times the estimate and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	8.6
Numerator	
Denominator	
Data Source	
Data Source Year	

NOM 20 - Notes:

None

Data Alerts: None

NOM 21 - Percent of children, ages 0 through 17, without health insurance

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

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)

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

State Provided Data	
	2018
Annual Indicator	51.5
Numerator	1,157
Denominator	2,247
Data Source	CNMI Immunization Program
Data Source Year	2018

NOM 22.1 - Notes:

None

Data Alerts: None

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

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

State Provided Data	
	2018
Annual Indicator	64.5
Numerator	11,544
Denominator	17,893
Data Source	CNMI Immunization Program
Data Source Year	2018

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

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

State Provided Data	
	2018
Annual Indicator	86.6
Numerator	5,361
Denominator	6,189
Data Source	CNMI Immunization Program
Data Source Year	2018

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

State Provided Data	
	2018
Annual Indicator	96.1
Numerator	5,950
Denominator	6,189
Data Source	CNMI Immunization Program
Data Source Year	2018

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

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

State Provided Data	
	2018
Annual Indicator	95.6
Numerator	5,919
Denominator	6,189
Data Source	CNMI Immunization Program
Data Source Year	2018

NOM 22.5 - Notes:

None

Data Alerts: None

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

Data Source: National Vital Statistics System (NVSS)

Multi-Year Trend				
Year	Annual Indicator	Standard Error	Numerator	Denominator
2017	16.1	2.8	33	2,052
2016	27.4	3.7	56	2,047
2015	28.2	3.8	56	1,988
2014	29.6	3.9	59	1,992
2013	35.6	4.2	71	1,996
2012	33.1	4.1	66	1,996
2011	46.3	4.9	90	1,944
2010	57.0	5.4	112	1,965
2009	49.8	4.9	103	2,069

Legends:

-  Indicator has a numerator <10 and is not reportable
-  Indicator has a numerator <20 and should be interpreted with caution

State Provided Data	
	2018
Annual Indicator	28.8
Numerator	59
Denominator	2,048
Data Source	CNMI HVSO and US Census Population Estimate
Data Source Year	2018

NOM 23 - Notes:

None

Data Alerts: None

NOM 24 - Percent of women who experience postpartum depressive symptoms following a recent live birth

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

NOM 24 - Notes:

The CNMI currently does not have a data source for this measure. However, is currently working with HRSA on the development of an MCH Jurisdictional Survey that will capture data for this measure. Survey is projected to be implemented in the CNMI in 2020.

Data Alerts:

1.	Data has not been entered for NOM 24. This outcome measure is linked to the selected NPM 1,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
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NOM 25 - Percent of children, ages 0 through 17, who were not able to obtain needed health care in the last year

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

NOM 25 - Notes:

The CNMI currently does not have a data source to support reporting on this measure. However, the CNMI is working on an MCH Jurisdictional Survey with HRSA that will capture data to support reporting on this measure. The survey is projected to be implemented in the CNMI in 2020.

Data Alerts:

1.	Data has not been entered for NOM 25. This outcome measure is linked to the selected NPM 11,. Please add a field level note to explain when and how data will be available for tracking this outcome measure.
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**Form 10
National Performance Measures (NPMs)**

State: Northern Mariana Islands

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

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

State Provided Data			
	2016	2017	2018
Annual Objective	19	12	19
Annual Indicator	12.1	18.1	18.7
Numerator	1,464	1,425	1,437
Denominator	12,096	7,863	7,690
Data Source	CNMI Pap Exam Data, US Census Population Estimate	CNMI Pap Exam Data, US Census Population Estimate	CNMI Pap Exam Data, US Census Population Estimate
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	20.0	21.0	22.0	23.0	24.0	25.0

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Numerator data obtained from the CHCC RPMS Database and the Family Planning Program FPAR database. Denominator data from the US Census International Database. Data is for CY 2016. Numerator information does not include data for women who might have had a preventive visit at a private clinic.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Numerator data obtained from the CHCC RPMS Database and the Family Planning Program FPAR database. Denominator data from the 2010 US Census Population Estimator Database. Data is for CY 2017. Numerator information does not include data for women who might have had a preventive visit at a private clinic. Please note a significant decrease in the Census population estimate (denominator) between years 2016 and 2017 by 4,233.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	The CNMI has no current population based data for this NPM. A proxy measure, number of pap exams completed, is used to report on this measure. Numerator data obtained from CNMI Pap Exam Lab Test Data. Denominator data from the 2010 US Census Population Estimator Database. Data is for CY 2017. Please note a significant decrease in the Census population estimate (denominator) compared to year 2016.

NPM 4A - Percent of infants who are ever breastfed

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

State Provided Data			
	2016	2017	2018
Annual Objective	45	94	96
Annual Indicator	95.5	94.7	95.8
Numerator	1,162	1,145	1,209
Denominator	1,217	1,209	1,262
Data Source	CNMI Health and Vital Statistics Office	CNMI Health and Vital Statistics Office	CNMI Health and Vital Statistics Office
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	96.0	97.0	97.0	98.0	98.0	98.0

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Data for this National Performance Measure obtained through the CNMI Health and Vital Statistics Office. The denominator value is based on the total number of live births in the CNMI for CY2018. Numerator value is based on the total number of infants breastfed at discharge after delivery by HVSO.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Data for this National Performance Measure obtained through the CNMI Health and Vital Statistics Office. The denominator value is based on the total number of live births in the CNMI for CY2017. Numerator value is based on the total number of infants breastfed at discharge after delivery by HVSO.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Data for this National Performance Measure obtained through the CNMI Health and Vital Statistics Office. The denominator value is based on the total number of live births in the CNMI for CY2018. Numerator value is based on the total number of infants breastfed at discharge after delivery by HVSO.

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

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

State Provided Data			
	2016	2017	2018
Annual Objective	40	3	4
Annual Indicator	1.7	2.5	2.5
Numerator	9	13	12
Denominator	535	518	486
Data Source	CNMI WIC Program	CNMI WIC Program	CNMI WIC Program
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	4.0	5.0	5.0	6.0	6.0	7.0

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Numerator data source is the CNMI WIC program and represents that number of enrolled 6 month old infants during the reporting year who were exclusively breastfed through 6 months. Denominator data represents the number of 6 month old infants enrolled in WIC during the reporting year.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Numerator data source is the CNMI WIC program and represents that number of enrolled 6 month old infants during the reporting year who were exclusively breastfed through 6 months. Denominator data represents the number of 6 month old infants enrolled in WIC during the reporting year.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Numerator data source is the CNMI WIC program and represents that number of enrolled 6 month old infants during the reporting year who were exclusively breastfed through 6 months. Denominator data represents the number of 6 month old infants enrolled in WIC during the reporting year.

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

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

State Provided Data			
	2016	2017	2018
Annual Objective			11
Annual Indicator	1.8	10.2	12.1
Numerator	103	215	321
Denominator	5,602	2,112	2,656
Data Source	Childrens Clinic Log	CHCC Childrens Clinic and Home Visiting Program	CHCC Childrens Clinic
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	13.0	15.0	17.0	19.0	21.0	22.0

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
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	Column Name:	State Provided Data
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Field Note:
Denominator value based on Census International Database Population Estimator that equals the total number of children ages 9 months through 71 months as indicated for the Northern Mariana Islands. Numerator value is based on the total number of children ages 9 months through 71 months screened with a parent administered developmental screening tool at the CHCC Children's Clinic. Please note that the numerator value does not include children seen at private clinics. However, it is also important to note that a majority of the pediatric providers in the Northern Mariana Islands provide care through the CHCC.

2.	Field Name:	2017
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	Column Name:	State Provided Data
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Field Note:
Denominator value based on Census International Database Population Estimator that equals the total number of children ages 9 months through 35 months as indicated for the Northern Mariana Islands. Numerator value is based on the unduplicated number of children ages 9 months through 35 months screened with a parent administered developmental screening tool at the CHCC Children's Clinic and MIECHV Home Visiting Program. Please note that the numerator value does not include children seen at private clinics. However, it is also important to note that a majority of the pediatric providers in the Northern Mariana Islands provide care through CHCC.

3.	Field Name:	2018
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	Column Name:	State Provided Data
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Field Note:
Numerator is data gathered from the CNMI Home Visting Program and CHCC Children's Clinic. There was a total unduplicated number of children ages 6 through 35 months that had a parent administered developmental screening at least once in 2018. The denominator data is based on the US Census population estimate.

NPM 9 - Percent of adolescents, ages 12 through 17, who are bullied or who bully others

Federally Available Data			
Data Source: Youth Risk Behavior Surveillance System (YRBSS)			
	2016	2017	2018
Annual Objective	75	25	25
Annual Indicator	28.5	28.5	29.4
Numerator	934	934	953
Denominator	3,277	3,277	3,240
Data Source	YRBSS	YRBSS	YRBSS
Data Source Year	2015	2015	2017

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	23.0	23.0	21.0	21.0	19.0	18.0

Field Level Notes for Form 10 NPMs:

None

NPM 11 - Percent of children with and without special health care needs, ages 0 through 17, who have a medical home - Children with Special Health Care Needs

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

State Provided Data			
	2016	2017	2018
Annual Objective			49
Annual Indicator	46.8	46.8	19.6
Numerator	37	37	54
Denominator	79	79	276
Data Source	CYSHCN Survey	CYSHCN Survey	CSHCN Survey
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	20.0	22.0	24.0	26.0	28.0	30.0

Field Level Notes for Form 10 NPMs:

- Field Name:** 2016

Column Name: State Provided Data

Field Note:
Denominator value is based on the total number of surveys completed through the CYSHCN survey. Numerator value is based on the number of families who completed the the CYSHCN survey that responded "yes" on the healthcare services they receive for their child(ren) being coordinated, ongoing, and comprehensive. The survey is conducted every 2 years in the CNMI.
- Field Name:** 2017

Column Name: State Provided Data

Field Note:
Denominator value is based on the total number of surveys completed through the CYSHCN survey. Numerator value is based on the number of families who completed the CYSHCN survey that responded "yes" on the healthcare services they receive for their children being coordinated, ongoing, and comprehensive. The survey is conducted every two years in the CNMI.

NPM 13.2 - Percent of children, ages 1 through 17, who had a preventive dental visit in the past year - Child Health
Federally available Data (FAD) for this measure is not available/reportable.

State Provided Data			
	2016	2017	2018
Annual Objective			13
Annual Indicator	13.6	11.9	12.3
Numerator	2,025	1,900	1,934
Denominator	14,847	16,010	15,719
Data Source	CHCC Public Health Dental Clinic	CHCC Public Health Dental Clinic	CHCC Public Health Dental Clinic
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	14.0	15.0	16.0	17.0	18.0	19.0

Field Level Notes for Form 10 NPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Numerator data is reflective of the un-duplicated number of children ages 1 through 17 that received preventive oral health services through the CHCC Dental Clinic. Denominator information is obtained through the US Census International Database population estimator.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Numerator data is reflective of the un-duplicated number of children ages 1 through 17 that received preventive oral health services through the CHCC Dental Clinic. Denominator information is obtained through the US Census International Database population estimator for all children ages 1 through 17 years in the Northern Mariana Islands. Note that the data does not include visits made to private dental clinic providers in the CNMI. Additionally, the islands of Tinian and Rota have no private dental clinic; services to these outlying islands are provided through outreach by the CHCC dental clinic and thus reflected in the data provided.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Data obtained from the CHCC Dental Clinic/Oral Health Program. A total of 1,934 children ages 1 thru 17 years completed a preventive dental visit in 2018. Denominator data is obtained through the US Census Population Estimate.

**Form 10
State Performance Measures (SPMs)**

State: Northern Mariana Islands

SPM 1 - Percent of women of childbearing age with anemia.

Measure Status:		Active	
State Provided Data			
	2016	2017	2018
Annual Objective		15	10
Annual Indicator	16.4	10.2	14.8
Numerator	42	52	16
Denominator	256	510	108
Data Source	MCH Program Records	CNMI WIC Program	MCH Program Records
Data Source Year	2016	2017	2018
Provisional or Final ?	Provisional	Provisional	Provisional

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	13.0	12.0	12.0	11.0	11.0	10.0

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2017
	Column Name:	State Provided Data

Field Note:

Data Source is the CNMI WIC Program for CY 2017. Denominator value based on the total number of unduplicated women screened for anemia at the WIC clinic. Numerator value represents total number of women who were screened with hemoglobin levels below 12 g/dl. Due to shipment delay of anemia screening supplies, MCH was only able to conduct a minimal amount of screening. The data reported for 2017 for this measure was gathered through anemia screening completed by the CNMI WIC program.

SPM 2 - Percent of deliveries to resident women receiving prenatal care beginning in the first trimester of pregnancy.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		45	47	
Annual Indicator	43.4	45.8	47.5	
Numerator	319	297	323	
Denominator	735	648	680	
Data Source	CNMI HVSO	CNMI HVSO	CNMI HVSO	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	49.0	51.0	53.0	55.0	55.0	60.0

Field Level Notes for Form 10 SPMs:

- Field Name:** 2016

Column Name: State Provided Data

Field Note:
Denominator value based on the total number of resident live births. Numerator value based on the number of resident live births with prenatal care beginning in the first trimester.
- Field Name:** 2017

Column Name: State Provided Data

Field Note:
Denominator value based on the total number of resident live births. Numerator value based on the number of resident live births with prenatal care beginning in the first trimester as completed on the birth certificates.

SPM 3 - Percent of children receiving routine vaccines.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		68	50	
Annual Indicator	42.9	48.9	51.5	
Numerator	949	1,092	1,157	
Denominator	2,214	2,232	2,247	
Data Source	CNMI Immunization Program WEBiz	CNMI Immunization Program WebIz	CNMI Immunization Program WebIz	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	52.0	54.0	56.0	58.0	60.0	62.0

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Numerator value reflects the number of children ages 19 through 35 months who have completed the combined 7 vaccine series. Denominator value obtained from CNMI Immunization database representing the total number of children ages 19 through 35 months who are active in the system.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Numerator value reflects the number of children ages 19 through 35 months who have completed the combined 7 vaccine series. Denominator value obtained from CNMI Immunization database representing the total number of children ages 19 through 35 months who are active in the system.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Numerator value reflects the number of children ages 19 through 35 months who have completed the combined 7 vaccine series. Denominator value obtained from CNMI Immunization database representing the total number of children ages 19 through 35 months who are active in the system.

SPM 4 - Percent of high school students that report thoughts of suicide.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective			20	22
Annual Indicator	22.8	22.8	25	
Numerator	543	543	481	
Denominator	2,385	2,385	1,922	
Data Source	Youth Risk Behavior Survey	Youth Risk Behavior Survey	Youth Risk Behavior Survey	
Data Source Year	2015	2015	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	21.0	21.0	19.0	19.0	18.0	18.0

Field Level Notes for Form 10 SPMs:

- Field Name:** 2016

Column Name: State Provided Data

Field Note:
Data source is the YRBS. The YRBS in the Northern Mariana Islands is conducted every two years. School YR 2016-17 just completed the survey and data will be available in 2018.
- Field Name:** 2017

Column Name: State Provided Data

Field Note:
Data is based on results from the 2017 High School CNMI Youth Risk Behavior Survey.
- Field Name:** 2018

Column Name: State Provided Data

Field Note:
Data is based on results from the 2017 High School CNMI Youth Risk Behavior Survey.

SPM 5 - Birth rate among 15-17 year olds

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective			13	7
Annual Indicator	15	8.5	11.6	
Numerator	14	11	15	
Denominator	931	1,296	1,295	
Data Source	CNMI HVSO	CNMI HVSO	CNMI HVSO	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	7.0	6.0	6.0	5.0	5.0	5.0

Field Level Notes for Form 10 SPMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Numerator value represents number of births to resident mothers ages 15 through 17 years. Denominator value based on US Census population estimate.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Numerator value represents number of births to resident mothers ages 15 through 17 years. Denominator value based on US Census population estimate.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Numerator value represents number of births to resident mothers ages 15 through 17 years. Denominator value based on US Census population estimate.

SPM 6 - Percent of resident children, ages 0 thru 17 years, seen at any CHCC site with continuous health insurance coverage.

Measure Status:				Active		
Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	59.0	61.0	63.0	65.0	67.0	67.0

Field Level Notes for Form 10 SPMs:

None

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

State: Northern Mariana Islands

ESM 1.1 - Percent of women ages 18 thru 44 seen at mobile clinic outreach events.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective			5	5
Annual Indicator	2.9	1.6	3.3	
Numerator	351	124	251	
Denominator	12,096	7,863	7,690	
Data Source	MCH Program Records	MCH Program Records	MCH Program	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	7.0	8.0	10.0	11.0	11.0	12.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Denominator Value based on Census Population Estimate. Numerator value based on the number of women ages 18-44 seen during Mobile clinic events recorded through MCH program records.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Denominator Value based on Census Population Estimate. Numerator value based on the number of women ages 18-44 seen during Mobile clinic events recorded through MCH program records.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Denominator Value based on Census Population Estimate. Numerator value based on the number of women ages 18-44 seen during Mobile clinic events recorded through MCH program records.

ESM 1.2 - Percent of women ages 18 thru 44 seen at the Family Planning Program.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		9	11	
Annual Indicator	7.8	10.4	14.1	
Numerator	948	818	1,085	
Denominator	12,096	7,863	7,690	
Data Source	CNMI Family Planning Program Records	CNMI Family Planning Program Records	CNMI Family Planning Program	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	14.0	14.0	15.0	15.0	16.0	16.0

Field Level Notes for Form 10 ESMs:

- Field Name:** 2017

Column Name: State Provided Data

Field Note:
Denominator data obtained through the US Census Population Estimator. Numerator is based on the total number of unduplicated patients seen through the MCHB Family Planning Program.
- Field Name:** 2018

Column Name: State Provided Data

Field Note:
Denominator data obtained through the US Census Population Estimator. Numerator is based on the total number of unduplicated patients seen through the MCHB Family Planning Program.

ESM 4.2 - Percent of infants enrolled in Home Visiting breastfed through 6 months.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective			53	55
Annual Indicator	51.6	56.5	45.1	
Numerator	33	13	23	
Denominator	64	23	51	
Data Source	MIECHV Home Visiting Program	MIECHV Home Visiting	MIECHV Home Visiting	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	50.0	52.0	54.0	56.0	58.0	60.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Denominator value represents the total number of 6 month old infants receiving home visitation services in 2016. Numerator information represents the number of 6 month old infants receiving home visitation services who were breastfed through 6 months.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	13 out of 23 six month old babies served by the Home Visiting Program in 2017 reported to be breastfed at six months.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	23 out of 51 six month old babies served by the Home Visiting Program in 2018 reported to be breastfed at 6 months.

ESM 6.1 - Percent of children who complete an ASQ screening at the CHCC Children's Clinic during a well-child visit.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		40	55	
Annual Indicator	38.4	53.6	61.2	
Numerator	103	112	170	
Denominator	268	209	278	
Data Source	CHCC RPMS and Childrens Clinic ASQ screening log	CHCC RPMS and Childrens Clinic Log	CHCC RPMS and Childrens Clinic Log	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	63.0	65.0	67.0	69.0	70.0	72.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Denominator value is based on the total number of children ages 6 months thru 71 months seen at the CHCC Children's Clinic for a well child visit in 2016. Numerator value is based on the total number of children ages 6 months thru 71 months seen at the CHCC Children's Clinic in 2016 who had an ASQ completed.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Denominator value is based on the total number of children ages 6 months thru 36 months seen at the CHCC Children's Clinic for a well child visit in 2017. Numerator value is based on the total number of children ages 6 months thru 36 months seen at the CHCC Children's Clinic for a well child visit in 2017 who had an ASQ completed. This measure was revised from the previous year (2016) as indicated in the change in age range being reported on. This change was made to align with the change in NPM 6 as well as so that it is aligned with the CHCC Developmental Screening policy in which ASQs are to be administered to children ages 6 through 36 months.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Denominator value based on the unduplicated number of children ages 6 months to 36 months who complete a well child visit at the CHCC Children's Clinic. The numerator value is the unduplicated number of children ages 6 months thru 36 months who completed and ASQ during a well child visit at the CHCC Children's Clinic.

ESM 9.1 - Percent of schools that have implemented evidence based programs to address bullying.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		15	45	
Annual Indicator	0	45	40	
Numerator	0	9	8	
Denominator	20	20	20	
Data Source	CNMI Public School System	CNMI Public School System	CNMI Public School System	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	50.0	55.0	60.0	65.0	70.0	75.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2018
	Column Name:	State Provided Data

Field Note:

Data was gathered through a phone survey of all public schools in the CNMI.

ESM 11.2 - Percentage of well-child clinics that receive training on care coordination.

Measure Status:				Active		
Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	30.0	45.0	60.0	75.0	80.0	85.0

Field Level Notes for Form 10 ESMs:

None

ESM 13.2.1 - Percent of children from public elementary schools who receive dental sealants through the Public Health School Sealant Program.

Measure Status:		Active		
State Provided Data				
	2016	2017	2018	
Annual Objective		15	16	
Annual Indicator	56.3	55.6	61.8	
Numerator	814	813	910	
Denominator	1,446	1,463	1,472	
Data Source	Public Health Dental Clinic/Oral Health Prg	Public Health Dental Clinic/Oral Health Prg	Public Health Dental Clinic/Oral Health Prg	
Data Source Year	2016	2017	2018	
Provisional or Final ?	Provisional	Provisional	Provisional	

Annual Objectives						
	2019	2020	2021	2022	2023	2024
Annual Objective	65.0	70.0	75.0	80.0	85.0	90.0

Field Level Notes for Form 10 ESMs:

1.	Field Name:	2016
	Column Name:	State Provided Data
	Field Note:	Denominator value is based on the total number of 2nd and 6th grade students enrolled in CNMI Public Schools. Numerator value is based on the total number of 2nd and 6th students enrolled in public schools that receive dental sealants through the Public Health Dental Clinic School Sealant Program.
2.	Field Name:	2017
	Column Name:	State Provided Data
	Field Note:	Denominator value is based on the total number of 2nd and 6th grade students enrolled in CNMI Public Schools. Numerator value is based on the total number of 2nd and 6th students enrolled in public schools that receive dental sealants through the Public Health Dental Clinic School Sealant Program.
3.	Field Name:	2018
	Column Name:	State Provided Data
	Field Note:	Denominator value is based on the total number of 2nd and 6th grade students enrolled in CNMI Public Schools. Numerator value is based on the total number of 2nd and 6th students enrolled in public schools that receive dental sealants through the Public Health Dental Clinic School Sealant Program.

Form 10
State Performance Measure (SPM) Detail Sheets

State: Northern Mariana Islands

SPM 1 - Percent of women of childbearing age with anemia.

Population Domain(s) – Women/Maternal Health

Measure Status:	Active								
Goal:	By 2020, reduce the rate of anemia in reproductive age women by 10%.								
Definition:	<table border="1"> <tr> <td style="background-color: #4F81BD; color: white;">Numerator:</td> <td>Total number of women ages 15 thru 44 years screened for anemia with hemoglobin levels less than 12 g/dl.</td> </tr> <tr> <td style="background-color: #4F81BD; color: white;">Denominator:</td> <td>Total number of women ages 15 thru 44 years screened for anemia.</td> </tr> <tr> <td style="background-color: #4F81BD; color: white;">Unit Type:</td> <td>Percentage</td> </tr> <tr> <td style="background-color: #4F81BD; color: white;">Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Total number of women ages 15 thru 44 years screened for anemia with hemoglobin levels less than 12 g/dl.	Denominator:	Total number of women ages 15 thru 44 years screened for anemia.	Unit Type:	Percentage	Unit Number:	100
Numerator:	Total number of women ages 15 thru 44 years screened for anemia with hemoglobin levels less than 12 g/dl.								
Denominator:	Total number of women ages 15 thru 44 years screened for anemia.								
Unit Type:	Percentage								
Unit Number:	100								
Healthy People 2020 Objective:	<p>Related to Maternal, Infant, and Child Health (MICH) Objective 9.1: Reduce total preterm births.</p> <p>Related to MICH Objective 5: Reduce the rate of maternal mortality.</p> <p>Related to MICH Developmental Objective 16.1: Increase the proportion of women delivering a live birth who discussed preconception health with a health care worker prior to pregnancy.</p>								
Data Sources and Data Issues:	Hospital Records, CNMI HVSO data								
Significance:	Iron deficiency in pregnant women increases the risk for a preterm delivery and low birth weight and subsequently could result in childhood anemia. In the CNMI, Iron deficiency coupled with low prenatal visit rates often time results in complications resulting in preterm births and requiring blood transfusions at delivery. Anemia screening will improve upon the identification, management, and reduction of complications related, including Severe Maternal Morbidity (SMM) and fetal and infant mortality. According to the 2015 CNMI MCH Needs Assessment, almost 70% of deliveries in 2013 received inadequate prenatal care and 6% received no prenatal care at all.								

SPM 2 - Percent of deliveries to resident women receiving prenatal care beginning in the first trimester of pregnancy.

Population Domain(s) – Perinatal/Infant Health

Measure Status:	Active								
Goal:	Increase the number of resident women receiving prenatal care beginning in the first trimester								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Total number of deliveries to resident women who received prenatal care beginning in the first trimester of pregnancy.</td> </tr> <tr> <td>Denominator:</td> <td>Total number of deliveries to resident women.</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Total number of deliveries to resident women who received prenatal care beginning in the first trimester of pregnancy.	Denominator:	Total number of deliveries to resident women.	Unit Type:	Percentage	Unit Number:	100
Numerator:	Total number of deliveries to resident women who received prenatal care beginning in the first trimester of pregnancy.								
Denominator:	Total number of deliveries to resident women.								
Unit Type:	Percentage								
Unit Number:	100								
Healthy People 2020 Objective:	<p>Related to Maternal, Infant, and Child Health (MICH) Objective 5: Reduce the rate of maternal mortality.</p> <p>Related to MICH Objective 8.1: Reduce low birth weight.</p> <p>Related to MICH Objective 8.2: Reduce very low birth weight.</p> <p>Related to MICH Objective 9.1: Reduce total preterm births.</p> <p>Related to MICH Objective 10.1: Increase the proportion of pregnant women who receive prenatal care beginning in the first trimester.</p>								
Data Sources and Data Issues:	CNMI Hospital records, CNMI HVSO data								
Significance:	<p>Early and adequate prenatal care is vital to ensuring a healthy pregnancy. Receiving inadequate prenatal care increases the risk for complications and other adverse outcomes for both mother and baby. Early and adequate prenatal care provides the opportunity for early detection and management of complications which reduces the risk for pre-term labor and babies being born with low birth weight. According to the 2015 CNMI MCH Needs Assessment, almost 70% of deliveries in 2013 received inadequate prenatal care and 6% received no prenatal care at all.</p>								

SPM 3 - Percent of children receiving routine vaccines.
Population Domain(s) – Child Health

Measure Status:	Active								
Goal:	Increase the percentage of children ages 19 through 35 months that receive recommended vaccinations								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Number of children ages 19 through 35 months who complete the combined 7-vaccine series (4:3:1:3:3:1:4)</td> </tr> <tr> <td>Denominator:</td> <td>Number of children ages 19 to 35 months</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Number of children ages 19 through 35 months who complete the combined 7-vaccine series (4:3:1:3:3:1:4)	Denominator:	Number of children ages 19 to 35 months	Unit Type:	Percentage	Unit Number:	100
Numerator:	Number of children ages 19 through 35 months who complete the combined 7-vaccine series (4:3:1:3:3:1:4)								
Denominator:	Number of children ages 19 to 35 months								
Unit Type:	Percentage								
Unit Number:	100								
Healthy People 2020 Objective:	<p>Related to Immunization and Infectious Diseases (IID) Objective 1: Reduce, eliminate, or maintain elimination of cases of vaccine preventable diseases.</p> <p>Related to IID Objective 7: Achieve and maintain effective vaccination coverage levels for universally recommended immunizations among young children.</p>								
Data Sources and Data Issues:	Hospital RPMS data system, CNMI Immunization Program data								
Significance:	Immunizations are a pillar of child health care and one of the most effective ways to protect a child from serious, preventable diseases. However, according to the CNMI MCH 2015 Needs Assessment, the overall coverage rates of immunization in CNMI is low at 73.5% in 2014. While the CNMI Immunization Program provides good coverage on vaccinations during vaccine campaigns such as the yearly influenza or the HPV vaccine, it is not adequately covering the child population.								

SPM 4 - Percent of high school students that report thoughts of suicide.
Population Domain(s) – Adolescent Health

Measure Status:	Active								
Goal:	Decrease the rate of adolescent suicide ideation								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Number of high school students enrolled in Public School System grades 9th through 12th who report thoughts of suicide on the YRBS.</td> </tr> <tr> <td>Denominator:</td> <td>Number of students enrolled in Public School System grades 9th through 12th.</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Number of high school students enrolled in Public School System grades 9th through 12th who report thoughts of suicide on the YRBS.	Denominator:	Number of students enrolled in Public School System grades 9th through 12th.	Unit Type:	Percentage	Unit Number:	100
Numerator:	Number of high school students enrolled in Public School System grades 9th through 12th who report thoughts of suicide on the YRBS.								
Denominator:	Number of students enrolled in Public School System grades 9th through 12th.								
Unit Type:	Percentage								
Unit Number:	100								
Healthy People 2020 Objective:	Related to Mental Health and Mental Disorders (MHMD) Objective 1: Reduce suicide rates								
Data Sources and Data Issues:	Youth Risk Behavior Survey								
Significance:	<p>Nationally, thousands of people die by suicide every year. Many more attempt suicide but do not die. For every suicide death, there are approximately 3 hospitalizations for a suicide attempt, 10 emergency department visits for a suicide attempt, and 33 attempts that do not result in hospitalizations or emergency department visits. According to the National Youth Risk Behavior Survey, suicide thoughts and attempts are higher among high school students than among adults. In the Northern Mariana Islands, 39.8 percent of middle school students and 22.8 percent of high school students reported thoughts of suicide on the 2015 YRBS.</p>								

SPM 5 - Birth rate among 15-17 year olds
Population Domain(s) – Adolescent Health

Measure Status:	Active								
Goal:	Decrease teen births rates among 15-17 year olds								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Total number of births among resident teen ages 15 to 17 years</td> </tr> <tr> <td>Denominator:</td> <td>Total number of female residents ages 15 to 17 years</td> </tr> <tr> <td>Unit Type:</td> <td>Rate</td> </tr> <tr> <td>Unit Number:</td> <td>1,000</td> </tr> </table>	Numerator:	Total number of births among resident teen ages 15 to 17 years	Denominator:	Total number of female residents ages 15 to 17 years	Unit Type:	Rate	Unit Number:	1,000
Numerator:	Total number of births among resident teen ages 15 to 17 years								
Denominator:	Total number of female residents ages 15 to 17 years								
Unit Type:	Rate								
Unit Number:	1,000								
Healthy People 2020 Objective:	<p>Related to Family Planning (FP) Objective FP 7.1: Increase the proportion of sexually experienced females ages 15 to 44 years who received reproductive health services in the past 12 months</p> <p>Related to FP Objective 7.2: Increase the proportion of sexually experienced males ages 15 to 44 who received reproduction health services</p> <p>Related to FP Objective 8: Reduce pregnancies among adolescent females</p> <p>Related to FP Objective 12: Increase the proportion of adolescents who receive formal instruction on reproductive health topics before they were 18 years old</p>								
Data Sources and Data Issues:	CHCC Hospital Records, CNMI HVSO data								
Significance:	Teen births increase health risks to both mother and child including low birth weight, preterm birth, and death in infancy. In addition to health risks, teen births set up a cycle of disadvantages. Teen mothers are less likely to finish high school and their children are more likely to have low school achievement, drop out of high school, and give birth themselves as teens. According to the 2015 CNMI MCH Needs assessment, The CNMI teen birth rate for 2013 was 27.7 births per 1,000 females, which was more than double the national rate.								

SPM 6 - Percent of resident children, ages 0 thru 17 years, seen at any CHCC site with continuous health insurance coverage.

Population Domain(s) – Child Health

Measure Status:	Active								
Goal:	Increase the percentage of children who have continuous health insurance coverage.								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Number of children, ages 0 thru 17 years, seen at CHCC with continuous health insurance coverage.</td> </tr> <tr> <td>Denominator:</td> <td>Number of children, ages 0 thru 17 years seen at CHCC.</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Number of children, ages 0 thru 17 years, seen at CHCC with continuous health insurance coverage.	Denominator:	Number of children, ages 0 thru 17 years seen at CHCC.	Unit Type:	Percentage	Unit Number:	100
Numerator:	Number of children, ages 0 thru 17 years, seen at CHCC with continuous health insurance coverage.								
Denominator:	Number of children, ages 0 thru 17 years seen at CHCC.								
Unit Type:	Percentage								
Unit Number:	100								
Data Sources and Data Issues:	Data will be obtained through the CNMI CHCC RPMS Data System.								
Significance:	Not having insurance or the financial means to pay for medical care is one of the most cited barriers too accessing preventive care for many individuals and families in the CNMI. If children are continuously insured, parents are more likely to seek preventive services for their children.								

Form 10
State Outcome Measure (SOM) Detail Sheets
State: Northern Mariana Islands

No State Outcome Measures were created by the State.

Form 10
Evidence-Based or –Informed Strategy Measures (ESM) Detail Sheets

State: Northern Mariana Islands

ESM 1.1 - Percent of women ages 18 thru 44 seen at mobile clinic outreach events.

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

Measure Status:	Active									
Goal:	By 2020, increase the number of women who a complete a preventive visit by 10%.									
Definition:	<table border="1" style="width: 100%;"> <tr> <td style="width: 25%;">Numerator:</td> <td>Number of women ages 18 through 44 that are seen during a mobile clinic outreach event.</td> </tr> <tr> <td>Denominator:</td> <td>Number of women ages 18 through 44</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>		Numerator:	Number of women ages 18 through 44 that are seen during a mobile clinic outreach event.	Denominator:	Number of women ages 18 through 44	Unit Type:	Percentage	Unit Number:	100
Numerator:	Number of women ages 18 through 44 that are seen during a mobile clinic outreach event.									
Denominator:	Number of women ages 18 through 44									
Unit Type:	Percentage									
Unit Number:	100									
Data Sources and Data Issues:	CHCC RPMS, Electronic Health Record, US Census International Database Population Estimator									
Significance:	<p>Increasing the amount of sites that offer preventive services throughout the CNMI is a strategy towards eliminating barriers to accessing care. Many families in the CNMI either do not own vehicles or face difficulty purchasing fuel. Fuel costs in the CNMI is among the highest in the nation peaking at almost \$5.30 per gallon. The CNMI also lacks a fully functioning public transportation system. Bringing the services to clients through the use of non- traditional sites, youth and village centers, other partner program offices, or through the use of a mobile clinic will help to increase the number of women that obtain preventive care.</p>									

ESM 1.2 - Percent of women ages 18 thru 44 seen at the Family Planning Program.

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

Measure Status:	Active	
Goal:	By 2020, to increase the number of women who complete a preventive health screening by 10%.	
Definition:	Numerator:	Number of women ages 18 thru 44 seen by the Family Planning Program.
	Denominator:	Number of women ages 18 thru 44.
	Unit Type:	Percentage
	Unit Number:	100
Data Sources and Data Issues:	CHCC RPMS	
Significance:	Integrating preventive services within the context of the family planning visit is listed as a recommendation by CDC not only for improving the delivery of quality family planning services, but to improve overall health outcomes for women, men, and their children.	

ESM 4.2 - Percent of infants enrolled in Home Visiting breastfed through 6 months.

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

Measure Status:	Active								
Goal:	By 2020, increase the percent of mothers reporting exclusive breastfeeding by 10%.								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Number of 6 month old infants enrolled in Home Visiting breastfed through 6 months.</td> </tr> <tr> <td>Denominator:</td> <td>Number of 6 month old infants enrolled in Home Visiting.</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Number of 6 month old infants enrolled in Home Visiting breastfed through 6 months.	Denominator:	Number of 6 month old infants enrolled in Home Visiting.	Unit Type:	Percentage	Unit Number:	100
Numerator:	Number of 6 month old infants enrolled in Home Visiting breastfed through 6 months.								
Denominator:	Number of 6 month old infants enrolled in Home Visiting.								
Unit Type:	Percentage								
Unit Number:	100								
Data Sources and Data Issues:	MIECHV Home Visiting Efforts to Outcomes Data System								
Significance:	MCH will work to improve infant/perinatal health outcomes by promoting early and adequate prenatal care services and promoting breastfeeding and safe sleep. Breast milk is the natural first food for babies, provides all the nutrients that infants need, and is linked to many positive health outcomes for both mother and baby. Studies have shown that breast milk promotes sensory and cognitive development and protects against infectious and chronic diseases.								

ESM 6.1 - Percent of children who complete an ASQ screening at the CHCC Children's Clinic during a well-child visit.

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

Measure Status:	Active	
Goal:	By 2020, increase the proportion of young children who are screened, evaluated, and enrolled in special services in a timely manner fro baseline to 25%, 5% each year.	
Definition:	Numerator:	Number of children ages 6 months thru 36 months seen at the CHCC Children's Clinic for a Well Child visit who had an ASQ completed.
	Denominator:	Number of children ages 6 months thru 36 months seen at the CHCC Children's Clinic for a Well Child visit.
	Unit Type:	Percentage
	Unit Number:	100
Data Sources and Data Issues:	CHCC RPMS, Electronic Health Record (EHR), CHCC Children's Clinic ASQ Screening log.	
Significance:	Developmental screening is critical to the early identification of developmental delays and the provision of early intervention services that could improve both short and long-term developmental outcomes of children who may be experiencing delays or have a developmental disability.	

ESM 9.1 - Percent of schools that have implemented evidence based programs to address bullying.
NPM 9 – Percent of adolescents, ages 12 through 17, who are bullied or who bully others

Measure Status:	Active								
Goal:	By 2020, reduce the number of students who report being bullied at school by 10%.								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Number of schools within the CNMI Public School System that have implemented evidenced based programs to address bullying.</td> </tr> <tr> <td>Denominator:</td> <td>Number of schools within the CNMI Public School System.</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Number of schools within the CNMI Public School System that have implemented evidenced based programs to address bullying.	Denominator:	Number of schools within the CNMI Public School System.	Unit Type:	Percentage	Unit Number:	100
Numerator:	Number of schools within the CNMI Public School System that have implemented evidenced based programs to address bullying.								
Denominator:	Number of schools within the CNMI Public School System.								
Unit Type:	Percentage								
Unit Number:	100								
Data Sources and Data Issues:	CNMI Public School System administrative records, Program Records								
Significance:	Studies show that bullying experiences are associated with a number of behavioral, emotional, and physical adjustment problems. Those who bully others tend to exhibit defiant and delinquent behaviors, have poor school performance, more likely to drop- out of school, and more likely to bring weapons to school. Victims report feelings of depression, anxiety, low self-esteem, and isolation; poor school performance; suicidal ideation, and suicide attempts. According to the 2015 CNMI YRBS, 58.5% of middle school students and 22.1% of high school students surveyed reported being bullied in school.								

ESM 11.2 - Percentage of well-child clinics that receive training on care coordination.

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

Measure Status:	Active								
Goal:	To increase the number of well-child clinics throughout the CNMI that receive training on the care coordination- a component of the medical home model.								
Definition:	<table border="1"> <tr> <td>Numerator:</td> <td>Number of clinics that have staff completing training on care coordination</td> </tr> <tr> <td>Denominator:</td> <td>Number of well-child clinics</td> </tr> <tr> <td>Unit Type:</td> <td>Percentage</td> </tr> <tr> <td>Unit Number:</td> <td>100</td> </tr> </table>	Numerator:	Number of clinics that have staff completing training on care coordination	Denominator:	Number of well-child clinics	Unit Type:	Percentage	Unit Number:	100
Numerator:	Number of clinics that have staff completing training on care coordination								
Denominator:	Number of well-child clinics								
Unit Type:	Percentage								
Unit Number:	100								
Data Sources and Data Issues:	MCH Program Records, Sign-in Sheets								
Significance:	As a component of the Medical Home Model, the AAP describes care coordination as "an essential element of a transformed American health care delivery system that emphasizes optimal quality and cost outcomes, addresses family-centered care, and calls for partnership across various settings and communities. High-quality, cost-effective health care requires that the delivery system include elements for the provision of services supporting the coordination of care across settings and professionals."								

ESM 13.2.1 - Percent of children from public elementary schools who receive dental sealants through the Public Health School Sealant Program.

NPM 13.2 – Percent of children, ages 1 through 17, who had a preventive dental visit in the past year

Measure Status:	Active	
Goal:	By 2020, increase the percentage of children ages 1 through 17 years old who had a preventive dental visit by 10%.	
Definition:	Numerator:	Number of 2nd and 6th grade public school students who receive dental sealants.
	Denominator:	Number of children enrolled in 2nd and 6th grade students enrolled in the Public School System.
	Unit Type:	Percentage
	Unit Number:	100
Data Sources and Data Issues:	CHCC RPMS	
Significance:	Studies have shown that poor oral health in children can result in adverse school performance and their success later in life. Children with poor oral health suffer from persistent dental pain, endurance of dental abscesses, inability to chew foods, embarrassment, and distraction from play and learning.	

**Form 11
Other State Data**

State: Northern Mariana Islands

The Form 11 data are available for review via the link below.

[Form 11 Data](#)